

Michael Sampson



Re-Imagining Productive Work with Microsoft Office 365

Core Opportunities for Improving Performance,
Enhancing Collaboration, and Creating Space for Innovation

Reading books by Michael are always a great pleasure because of his cross-platform experience and ability to simplify complex topics due to his real world experience and writing technique. Microsoft has outdone themselves once again by creating another mind boggling, hair pulling out, overwhelming solution by combining technologies to create Office 365. Michael's approach in this book of explaining Office 365 and practical real life scenarios on how to use it are to the point and natural. The Core Opportunities chapters are shared in a way that keep you thinking, reading, and wanting more.

Michael Lotter, Collaboration Solution Architect, CFA Institute

I'm glad to see this book from Michael. Michael has a way of seeing the business productivity layer through the marketing, the technology, and the feature descriptions. Office 365 is about affecting business, and this book provides the map between the capabilities of Office 365 and the real benefits to the business.

Owen Allen, Office 365 Technology Specialist, Microsoft

How do you maximise the return on your investment in Office 365? Michael gives practical advice on leveraging the features of Office 365 to improve productivity. His practical advice is backed by research and real-world end-user experiences to help answer the big question. This book is a must read for anyone interested in office productivity and collaboration.

Steve Knutson, Managing Director, Stratos Technology Partners

Michael again manages to provide a source of inspiration to increase productivity within organisations by using modern technology like Office 365. This new book explains the functional capabilities of Office 365 and talks about the behavioural aspects that are needed to really benefit from it. The comprehensive 'Opportunities Approach' fits right into Michael's view on adoption of productivity software using real-to-life scenarios, a strategy described in his book 'User Adoption Strategies.' When the information and experience in these two books are combined, organisations have a powerful approach to de-mystify the crucial step between the investment in Office 365 and reaching the promised ROI for the business.

Robert Alders, Adoption & Change Management Specialist at Microsoft Services, The Netherlands

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Collaboration, and Creating Space for Innovation

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All screenshots were taken in Microsoft Office 365, using the Business Premium plan. Screenshots were captured on a variety of devices:

- Lenovo X230, Windows 10 Professional, with Microsoft Office 2016 for Windows.
- Lenovo W510, Windows 10 Professional, with Microsoft Office 2016 for Windows.
- Apple MacBook Air 11, Mac OS X 10.11, with Microsoft Office 2016 for Mac.
- Apple iPad Air, with Microsoft Office apps.
- Apple iPhone 6 Plus, with Microsoft Office apps.

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*For Daniel, my son.
A young man of imagination and initiative.
Your creativity across multiple domains inspires and challenges me.*

—MICHAEL SAMPSON

Acknowledgements

This book has been a long time coming, dating back to Microsoft BPOS in 2009 and SharePoint 2010 a year later. It's great to finally have it done and on Office 365 too.

While I personally wrote almost every single word in this book, I have benefited from a cast of supporters around the world, including:

- Robert Alders at Microsoft Netherlands commented in 2013 that my book on scenarios for IBM Connections could have been written on SharePoint or Office 365. I was already thinking in that direction myself, and his prompt was helpful as confirmation.
- In early 2015 Steve Knutson at Stratos Technology Partners in Christchurch looked at the manuscript for another book on Office 365 I haven't published yet and basically said I needed to publish this one first. In his view few people understood the power of Office 365 beyond Exchange Online, and they needed a way to see the possibilities.
- Martin White of Intranet Focus read an early draft of the profiling employee expertise chapter and suggested a number of new directions for it. He then shared a set of excellent research reports from his library. Martin is a great colleague.
- I shared the manuscript with a select group of reviewers around the globe—Owen Allen of Microsoft, Dorje McKinnon of Varja, Bart van Roey of ihop bvba, and Michael Lotter of CFA Institute (Michael founded the SharePoint Saturday movement many years ago). I greatly appreciated their feedback / criticism / re-direction and more. This book is better due to their review comments.
- My family—Katrina, David, Matthew, Philip, Daniel, Timothy, Susanna, Jonathan, Elizabeth (Lily), Joseph, and Joshua—continue to be a huge inspiration for me, and for each I'm extremely grateful. They did, however, have to deal with me again in book writing mode.
- The participants at the Office 365 for Business Meetup group in Christchurch were the first to hear some of the ideas in this book. I appreciated the discussions after each presentation and the sharing of information that happened. Chapter 4 in this book (Storing and Sharing Files) would not have been included had it not been for one particular discussion.

And there's more people besides, but the above is illustrative, not exhaustive. Thanks to everyone who helped get this book done.

Visual Overview of Re-Imagining Productive Work with Microsoft Office 365

O 9	F 15	1 17	2 37
Overview	Foreword	Introducing Office 365	The Opportunities Approach
On the structure and intent of the book, and its place in an overall approach to Office 365	Ruven Gotz shares his perspective on the book, in light of his work with customers at Avanade	A high-level overview of the many capabilities on offer in Office 365, and current market dynamics	Explaining how the work opportunities approach gives a framework for exploring Office 365

Eight Core Opportunities with Office 365

3 51	4 71	5 91	6 111	7 139	8 161	9 182	10 202
Embracing Hands-Off IT	Storing and Sharing Files	Profiling Employee Expertise	Co-Authoring Documents	Managing Meetings	Holding Discussions	Running Team Projects	Thinking Productively
Moving from on-premises servers to cloud services, and hands-off devices	New ways of storing files and documents to simplify collaborative work with colleagues and clients	Discovering who knows what in your firm, and how to communicate with them	Developing documents with other people, getting beyond email and attachments	Improving the design and flow of meetings, an activity people spend a lot of their day involved with	Sharing ideas with other, exploring options, and coming to a conclusion—in new and more effective ways	Coordinating the activity of a project team towards the successful completion of the project	Re-imagining productive work relies on a strong foundation of careful thought, priorities, and focus

It's a Wrap

11 221	A 231
Final Comments and Next Steps	The Three A's
Where to from here on your journey to effective use of Office 365; review of the book, your plan, some workshop options	Two appendices (Detailed Table of Contents, Table of Figures), and About the Author

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Overview

In early 2007 I approached Microsoft Press about writing a book for business users of Microsoft SharePoint. My point-of-view was that while there was an abundance of material available on SharePoint 2007 for IT professionals, there was little to nothing for the people who actually had to use the software to get their work done. *Seamless Teamwork* was the result. It was designed around Roger at Fourth Coffee who was tasked to lead a critical project for his firm, and also to use SharePoint for managing the project. As Roger drove the project toward a successful conclusion, he learned about SharePoint's capabilities and where these could help him in his work. I described *Seamless Teamwork* as a resource to help organisations with user adoption.

One of the ideas I evaluated after the publication of *Seamless Teamwork* was a book on Microsoft Business Productivity Online Services (BPOS), the precursor to Office 365. My driving interest in that book idea was that BPOS made available a whole set of tools—SharePoint being but one of them—for people to communicate, collaborate, and get things done. I foresaw a productivity nightmare for business users who would have to make effective decisions between the various tools. However, the focus of my work took a turn into the area of user adoption more generally, so I discarded the book concept around BPOS.

The Structure of the Book

Much has happened in my world since *Seamless Teamwork* was published, including the writing of five other books. While I have been intensely busy with all of that work, Microsoft has been intensely busy developing Office 365. The same productivity nightmare I saw with BPOS now exists with Office 365, and to a greater degree as Microsoft keeps introducing new innovations. Which brings us to this book.

Two concepts drove the writing of this book: first, helping business users to see the possibilities for improving productivity and performance by using Office 365, and second, helping them to make effective decisions between the various—and frequently overlapping—tools in Office 365. The book is divided into three parts:

- **Overview, Foreword, and Introduction.** Chapter 1 introduces Office 365 and Chapter 2 explains the opportunities approach used in the book. The opportunities approach provides a methodology for analysing the productivity and performance impacts of Office 365.

This book is about helping business users see the possibilities for improving productivity by using Office 365.

- **Eight Core Opportunities.** Chapters 3-10 each explore one of eight work opportunities. Each opportunity looks at an activity that people commonly do in their day-to-day work and explores how the capabilities in Office 365 can be best leveraged to improve performance.
- **Final Comments and Appendices.** Chapter 11 and the two appendices bring the book to a conclusion. Chapter 11 gives some directions for the onwards journey with Office 365.

Throughout the book the emphasis is clearly placed on improving productivity and performance by using Office 365.

A Framework for Making Sense of Microsoft Office 365

To the casual observer Office 365 is merely a new name for the traditional bundle of office productivity applications from Microsoft—such as Word, PowerPoint, Excel, and Outlook. While most Office 365 plans do give users the right to run the latest Office suite on computers and mobile devices, it is the extensive set of online services in Office 365 which complement these productivity applications that truly define the service. Office 365 is much, much more than just a new name for Office. In order to build comprehension about Office 365—to make sense of it all—a foundation of discovery, exploration, and consideration is required. On that foundation we can then construct a productive approach for using what's available.

Through the use of the opportunities approach, this book:

- **Covers the Tools.** Explores most of the tools for business people available in Office 365. This is done through a series of opportunities available to people in firms across the world. The book does not attempt to focus on the setup, configuration, or management tasks in Office 365 done by an IT professional, nor the migration effort required to transition an organisation to Office 365 in the first place.
- **Explores the Research.** There is a wide body of research on the opportunities presented in this book, and where appropriate that research is detailed in each chapter. Not all of the research detailed herein is specific to Office 365, but that's okay as the intent is to show broad and generalisable patterns of productivity.
- **Profiles Other Firms.** Profiles how real firms around the world are already making use of Office 365. While the book presents a set of opportunities to stimulate thinking on what's possible with Office 365, the case studies show what is already happening.

Beyond mastering the features in the tools, there is a much greater requirement to master the human behaviours of productivity.

Hence although there is a degree of supposition with the ideas in the book, this is anchored by current organisational realities. Some of the case study organisations are explicitly named, while others appear anonymously. Those appearing anonymously did not want their corporate identity details shared for a variety of reasons, but the information for all case studies is based on primary and secondary research data.

- **Tackles the Hard Questions.** Tackles the challenge of how to approach Office 365 in a cross-product, cross-category manner. Business people can no longer merely focus on mastering just Outlook or OneNote or Word. A more eclectic approach that leverages the best capabilities of multiple tools is increasingly required in the new world of work.

Reasons for Writing the Book

I wrote this book because I needed a more structured way of explaining Office 365, my early-to-Office 365 clients were struggling with the strategic trade-offs among the tools, and a much broader set of organisations are going to face these same strategic issues as they embrace Office 365. Across these groupings are three common reasons for writing this book:

- **Cultivate Understanding.** New technology offers an incredible array of capabilities that can be used to create new and more productive ways of working. In order to decide how you will embrace Office 365, you first need to know what's possible. This book gives you a fast track to building the required insight and understanding.
- **Decrease Overwhelm.** Office 365 offers many capabilities, and the implications of these quickly become overwhelming. Without a guidebook on how to think about Office 365, many organisations will merely use the new tools in old outdated and increasingly ineffective ways.
- **Advocate for Effective Use.** The mere availability of a broad set of capabilities in Office 365 will not improve productivity. That requires effective adoption, usage, and aligned human disciplines, because the key challenge is to leverage what's available in Office 365 to create and sustain new ways of working.

In order to decide how you will embrace Office 365, you first need to know what's possible. This book gives you a fast track to building the required insight and understanding.

Thus this book explores the possibilities for improving performance with Office 365—for IT managers, business managers, and employees.

An Overall Approach to the Effective Use of Office 365

I have written this book to perform a particular task, and it fits within the first of a four-stage framework for the effective use of Office 365 (see Figure I-1):

- **Understand the Business Opportunity.** Explore the capabilities in Office 365 and what those capabilities could mean for organisations looking to embrace the philosophy and tools on offer. This book looks at eight of these opportunities.
- **Make the Right Decision for Your Business on Office 365.** Examine the pros and cons of moving to Office 365 in general, and look specifically at the decision context for your organisation. In light of where your organisation is heading, does a shift to Office 365 make business sense?
- **Create the Context for Achieving Value with Office 365.** Achieving value with Office 365 requires clear thinking on how to create the best organisational context for its introduction and effective use. Get clear on the purpose of embracing Office 365 and develop competence in building the supporting organisational constructs to drive success.
- **Drive Effective Use to Reap the Benefits of Office 365.** Decide how to introduce Office 365 to your people and how to lead them to competence in the use of the tools aligned with productive behaviours.

Figure I-1. Take a Strategic Approach to the Use of Office 365



Getting value in an organisation from using Office 365 requires clear thinking, the right decisions, and a well-structured approach.

This book fits in the first box, and is thus a pre-decision or pre-acquisition resource to help with clarifying what's actually possible. To view all of the current resources for this framework, see michaelsampson.net/office365success/.

A Few Words on Independent Advice

Let's be very clear about something at the beginning of this book. I'm not vendor aligned. I'm independent—as an analyst, strategist, consultant, and thinker. The intent of my work is to help end-user organisations prosper and do better. I don't serve the vendors as a general principle—be that Microsoft, Jive, IBM, or Huddle. In this specific instance, I haven't written this book for Microsoft. If you spend money with a vendor as a consequence of something you read in this book, I receive no financial kick back (by choice). To state the intent of my work in a different way, although I'm deeply interested in what vendors offer because these offerings create opportunities for end-user organisations, it's what end-user organisations do with the technology that really interests me. With respect to vendors, my “three no's” are:

- I have no business partnership with any vendors.
- I have no financial stakes in vendor companies.
- I receive no commission from product or service sales.

I believe my approach has a huge benefit for you (and one that my current clients greatly value)—you get truly independent advice. Because my firm doesn't implement technology, nor does custom development, my recommendations aren't about driving billable work for the rest of my firm. They are focused on making the best of new technology for you.

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Intended Audience

This book is written for anyone wanting to engage their team members, employees, and organisation in a discussion on effective work patterns powered by Office 365. I see this dividing into three main audiences.

- **IT Managers.** The IT manager or Collaboration Manager in an end-user organisation who is evaluating or introducing Office 365. Their challenge is to create the best organisational context and business environment for using Office 365 productively and is looking for foundational examples on which to base their work.
- **Business Managers.** The business manager or executive in an end-user organisation who is searching for ways to improve the productivity of his or her team, group, or department. They may have heard that Office 365 is coming to their organisation soon,

they may have colleagues in other organisations who are using Office 365, or they may be proactively searching for better ways of working to improve productivity.

- **Employees.** The employee who is hampered at work with outdated, complex, and insufficient productivity tools. He or she is searching for better ways of getting their own work done and of improving work practices across the teams and groups they are involved with. Ultimately, they want to drive their firm towards a better future.

Irrespective of who you are, however, please bring to this book a willingness to suspend judgment, explore applicability, and push into unknown territory. You will need to suspend quick judgment on these ideas because something you consider out of left-field may contain a nugget of possibility for you. Exploring applicability requires consideration of the principles in this book in light of your organisation's work practices and culture. And there is much unknown territory ahead, as we survey many possibilities for productivity.

An Invitation to Discuss Your Work with Office 365

If your firm is currently using Office 365—or considering doing so—please reach out to arrange a discussion on how things are going for you. Let's use this book as a means of starting a conversation. You have three ways of getting in contact with me:

- Fill out the contact form on my website, at michaelsampson.net/contact/.
- Call my phone at +64 21 642 998. You will be calling New Zealand.
- Send me an email. I'm michael@michaelsampson.net.

I look forward to speaking with you.

Michael Sampson
May 2016

Foreword—by Ruven Gotz, Avanade

Ruven Gotz is the Innovation Center Director & Regional Digital Workplace Lead at Avanade in New York. A long-time active contributor in the SharePoint ecosystem, Ruven uses his strategic viewpoint and information architecture bent to create the future for customers. He has been awarded the Microsoft MVP for SharePoint and Office 365 for many years running, and is the author of Practical SharePoint 2010 Information Architecture (Apress, 2012).

I have known Michael since the 20th of December 2010 when we participated in a conference call together, but the first time we met in person was on the 28th of November 2011 at the SHARE conference in Australia. The reason I can give you those details of our conversations and meetings is because Michael has tracked our relationship in CRM since the beginning (and the relationships and connections he's made with over 9,000 people over the past decade).

I think this bit of information is a perfect illustration of why I trust Michael's advice and the approach that he's taken in this book; he **uses** these workplace productivity tools. And he doesn't just use them, he uses them relentlessly and thoroughly and he thinks deeply about how they can provide value, what their pitfalls are and how they could be improved.

When I first met Michael, I was impressed with how detailed his thoughts were on approaches to collaboration. When a lot of us were deep diving into SharePoint as a technology platform, Michael was more concerned with the kinds of leadership, planning and behaviours that are behind successful collaboration initiatives. It all made sense to me when I learned that Michael had spent a lot of time thinking about collaboration going all the way back to his master's thesis. Since then, he has worked extensively with a wide array of collaboration platforms and he had already experienced what many of us were still learning: The platform matters, but it's only a small part of the puzzle. It's a cliché by now that every IT related project is a combination of people, process and technology, but Michael is one of the best at balancing all three of those corners of the triangle.

When a lot of us were deep diving into SharePoint as a technology platform, Michael was more concerned with the kinds of leadership, planning and behaviours that are behind successful collaboration initiatives.

In my opinion, Office 365 and its ever-expanding set of tools from SharePoint to Planner to Delve to Groups and more give us one of the greatest potential leaps forward in Digital Workplace Transformation. I am tremendously excited about the opportunity that it presents. But I also know that it is not magic. The potential will be squandered if organizations just 'switch it on and hope for the best.' In this book,

Michael brings to bear his direct experience with Office 365 as well as his years of thinking about the nature of workplace collaboration. To bolster his thinking and direction, he also brings research and case studies of what others are doing as well as the findings of industry and academic investigators. The result is a comprehensive guide to making choices and making plans.

This book will be a valuable companion as you embark on your Office 365 journey. It will help you to gain an understanding of the technology (warts and all) and the organizational preparation required to achieve a business benefit and therefore a successful outcome.

This book will be a valuable companion as you embark on your Office 365 journey.

Ruven Gotz
Innovation Center Director & Regional Digital Workplace Lead
Avanade

Chapter 1.

Introducing Microsoft Office 365

Results are gained by exploiting opportunities, not by solving problems.

Peter Drucker

Drucker was a great one for cutting through the hype, smoke screens, snake oil, and other forms of obfuscation to drive clarity on what was actually required to move forward in a productive manner. His emphasis on exploiting opportunities instead of solving problems is illustrative of this clarity: solving current and known problems ties you to today's situations, business models, and marketplace challenges. While incremental change may indeed be possible with such a focus, an elevation of the line of vision to opportunities to be exploited gives a wider perspective and an energising sense of possibility, and creates a driving force for transformational change.

Office 365 is a relatively new although rapidly maturing software and services offering from Microsoft. Office 365 can be used to solve some of the problems we face in business today, but the more exciting possibility is to leverage it to exploit the transformational opportunities on the horizon. Driving this sense of where we can use Office 365 to solve problems and exploit opportunities is the purpose of this book, so let's begin with considering the offering itself. Just what is this thing called Office 365?

In this chapter, we will:

1. Explore what exactly Office 365 is and is not.
2. Note the history of Office 365 within Microsoft.
3. Consider Office 365 in light of the wider trends in the IT industry.
4. Outline the main capabilities in Office 365 and look at the research data on how Office 365 is performing in the marketplace.

What is Microsoft Office 365?

Office 365 is a set of online services provided by Microsoft, plus a set of complementary Microsoft software applications to install on computing devices. I start with this one line summary when describing Office 365, but given the actual breadth and depth of the offering, there are many rich details that need to be conveyed in order to adequately answer the question above. In longer form, then, Office 365 is:

- A set of commonly known and widely used online services for productivity, communication, and collaboration, such as Microsoft Exchange (email and calendaring), SharePoint (document collaboration and information sharing), and Skype for Business (real-time communication).
- These online services are provided by Microsoft through dedicated data centres in key locations around the world, including North America, Europe, Singapore, and Australia. Organisations connect to these data centres to consume (or use) the services on offer. This is commonly called a cloud model in the information technology (IT) industry and provides a new business model for IT vendors.
- Office 365 is priced using a subscription model that end users and organisations can obtain on a per user basis per month or year. Microsoft offers targeted subscription strands for different segments of the market, such as educational institutions and their students, business and enterprise customers, and government organisations. There is also a set of plans aimed at individuals.
- A set of new online services that use advanced capabilities like machine intelligence and data analytics to automatically identify and display ideas, documents, conversations, and people that are relevant to the work activities of each individual user. Rather than using these advanced capabilities to display advertising, Microsoft uses these capabilities to keep each person informed about relevant happenings.
- A way of getting access to Microsoft Office applications such as Word, Excel, PowerPoint, OneNote, and Outlook. Many Office 365 plans give users the right to run Office on their devices, such as PCs, Macs, and tablets and mobile phones. The client apps can work with the online services in Office 365 or in isolation.

Office 365 is an alternative approach for getting services and software rather than installing Microsoft servers within an organisation and buying each version of Microsoft Office as it becomes available. There is much going for the widespread use of Office 365. Every firm that uses IT to support and enable the execution of business functions needs a means of delivering that capability to employees, customers, and partners. The big idea of cloud services is to procure that capability from a trusted third-party.

Subscription Plans with Office 365

Microsoft offers a range of subscription plans for Office 365. There are plans for individuals and for use at home, and plans for different types of businesses and organisations.

- **Office 365 Personal.** A subscription plan for any individual who wants the Office applications on their devices. This Personal plan gives the right to install Office on three devices—one PC or Mac, one tablet, and one smartphone. Personal plan subscribers also get 1 TB of online storage, and some calling minutes with Skype.
- **Office 365 Home.** A plan that makes the Office applications and a couple of online services available for a household of up to five people with multiple computers, tablets, and smartphones. Office can be installed on up to five PCs or Macs, five tablets, and five smartphones. Subscribers to the home plan get 1 TB of storage for each person, to a maximum of five people. Each person also gets some calling minutes with Skype.
- **Office 365 Education.** For schools and academic institutions, the Education plans provide a means for students and faculty to access online services and Office applications. The zero cost education plan provides access to online versions of Office for all students and faculty plus other online services including online storage; the some cost plan adds the right to run the Office applications on multiple PCs, Macs, tablets, and smartphones. Schools and academic institutions must meet eligibility criteria.
- **Office 365 Business and Office 365 Enterprise.** Plans for commercially-focused organisations, with the Business plans catering for organisations of up to 300 people, and the Enterprise plans with no user limit. Basically there are three tailored variants for Business and Enterprise organisations: one without the Office applications but with online services, one with the Office applications but no online services, and one with both the Office applications and various online services.
- **Office 365 Nonprofit.** The Business and Enterprise plans above are available at a lower price for organisations with recognised charitable status in their country. The plans that don't include the right to install Office applications on computers and devices are available on a donation basis. Those that do include the Office applications are priced at around one fifth of the comparable Business and Enterprise plans. Nonprofits do not need to make an annual commitment to Office 365; the term is monthly.

There is an Office 365 plan for everyone—individuals, home users, businesses, schools, and non-profits.

For current plans, country-specific pricing, eligibility criteria, payment terms (monthly or annual), as well as availability see the Microsoft Office 365 web site at www.office.com.

Where Did Office 365 Come From?

In the last week of June 2011, Microsoft launched Office 365 to the world at an event in New York. It was both the culmination of much work at Microsoft to engineer a cloud-scale service based on its office productivity tools, plus the starting gun for a perpetual quest to drive innovation and transformation across the tools. While the rest of this book will focus on life AO—After Office 365—there was a current state into which Office 365 was introduced. And it looked quite different to what we have now.

In life BO—Before Office 365—Microsoft and its counterparts were already offering a variety of cloud services. In many ways Microsoft was dragged kicking and screaming into the cloud, with increasingly large players like Google turning Microsoft's historical advantages against them. Here's what we had in the decade before Office 365:

- Google's success with its consumer email service Gmail—introduced in April 2004—led to an experiment in early 2006 with San Jose City College to provide email services for its 10,000 students. Six months later Google introduced Google Apps for Your Domain, a hosted service offering email, calendaring, instant messaging, presence, and voice chat for all organisations at no charge. The key idea was to give organisations a way of getting these services without having to install and manage software or servers on-premises, a competitive thrust that won it many customers and put Microsoft on the back foot. Google has done much with its range of Google Apps services in the intervening years, including changing the pricing model for businesses, but it still offers a comprehensive set of communication and collaboration services at a low price point.
- Microsoft created products such as SharePoint and Exchange for deployment by customers inside their server room or data centre. For customers that didn't want to deploy and manage such equipment themselves, various Microsoft partners introduced hosted versions of these products at a monthly or annual rate, often with an initial setup and configuration charge. MailStreet, for example, offered Exchange as a hosted service—with or without BlackBerry for wireless access—while partners such as myhosting.com offered hosted access to Windows SharePoint Services. Getting Microsoft Office SharePoint Server 2007 on hosted terms was also available from an array of partners.
- The BlackBerry was the device of choice for corporate mobile devices, with wireless email the killer app. A physical keyboard was viewed as an essential part of such a device. Apple released its first iPhone in June 2007, and Google the first version of Android in September 2008. The transformation we have witnessed with the pervasive use of smartphones was just about to begin.

The BlackBerry was the device of choice for corporate mobile devices, with wireless email the killer app.

- Microsoft launched BPOS, short for Business Productivity Online Services in late 2008. BPOS was a set of cloud services based on the 2007 versions of Microsoft SharePoint, Exchange, and Office Communications Server. It offered online versions of Word, Excel, and PowerPoint, among others, but did not confer the right to run Office applications on computers and devices. Organisations and users still had to purchase or license Microsoft Office separately.
- BPOS was a major step for Microsoft, but it was not without its challenges once it hit the market. The 2007 editions of SharePoint, Exchange, and Office Communications Server had been architected for corporate or enterprise deployments, not a multi tenant cloud environment. This led to performance problems as well as a few significant outages. Despite these problems, BPOS garnered between four and five million users from thousands of paying customers, demonstrating to Microsoft executives both the promise and peril of the cloud.
- Microsoft was facing a significant challenge with getting organisations to upgrade to the latest versions of the Office applications, one of Microsoft's two major income streams (the other being Windows). Organisations were holding onto older versions of Office for longer, and either failing to see the value in upgrading to the newer versions of Office or shying away based on the cost, complexity, and employee disruption of doing so every three years. The lengthening years between upgrade cycles was having an impact on Microsoft's cash flow.
- Organisations were evidencing a decreasing appetite for the increasing complexity of on-premises solutions. This was particularly noticeable when in order to upgrade one system a whole set of inter-related systems also had to be upgraded to remain operational. These recursive interdependencies were expensive to manage and very disruptive to the organisation. Various approaches to decreasing the complexity were explored, including appliances that combined hardware and software in a more manageable way.
- There were both opportunistic and survival motivators at play for vendors in the release of cloud services. In opportunistic terms, new vendors were attempting to change the market dynamics and win access to customers who were looking to get away from Microsoft's grip. For Microsoft, the opportunity was to bring customers into an ever-tighter embrace and shore up the revenue streams of its main product lines for years to come, and in a way that decreased the lumpiness of its own cash flow.

BPOS was a set of cloud services based on the 2007 versions of Microsoft SharePoint, Exchange, and Office Communications Server.

Into this mix of dynamics Microsoft introduced Office 365, which has become the market force to be reckoned with.

How Does Office 365 Fit with Wider Trends in the IT Industry?

Office 365 is Microsoft's cloud-delivered set of productivity, communication, and collaboration tools. It is representative of Microsoft's vision for the future of IT, and yet it stands within a wider context of the trends defining the IT industry. When we lift our gaze beyond Office 365 and ask what is going on in the IT industry, there are four big trends that many analysts, vendors, and customer organisations will point to: cloud, mobile, social, and big data.

Figure 1-1. Key Trends in the IT Industry

IT Industry Trend	Office 365 Alignment
Cloud A method of getting access to computing resources that are owned and managed by a trusted third party, with payment on some usage basis. This approach means that organisations don't have to make capital investments in IT assets but can pay on a recurring basis using operating funds. Cloud is an alternative to on-premises approaches for IT service delivery, where an IT department deploys and manages servers in a data centre. For organisations that are not willing to put all of their IT systems and data in the cloud, hybrid models that span both on-premises and cloud are possible.	Office 365 is a cloud-based offering with many individual services, available to organisations under various pay-as-you-go subscription plans. Microsoft offers several approaches to the complementary use of on-premises systems with Office 365, thereby supporting hybrid designs that are relevant to organisations.
Mobile The tailoring of IT systems and applications to work with a new generation of light, small, and highly functional devices, epitomised by the Apple iPad and Apple iPhone. Touch as a primary input method is emphasised, allowing for the design of more natural user interfaces. While laptops and notebooks have been a staple approach for an increasingly mobile workforce, new mobile devices and apps are causing a re-think of how to design systems.	Office 365 supports traditional mobile devices—such as Windows and Mac laptops—as well as newer generations of mobile devices. Office for iPad has been a wild success, and Microsoft also supports the iPhone and Android phones and tablets. A touch-centric version of Microsoft Office for Windows was released in mid-2015, which complement nicely the Microsoft Surface Pro and Surface Book tablet/laptop and other similar devices.

Figure 1-1. Key Trends in the IT Industry (Continued)

IT Industry Trend	Office 365 Alignment
<p>Social</p> <p>Social technologies are based on the belief that employees perform best when they are treated as people, and that by creating the right context and culture, organisations can facilitate the sharing of ideas and insights between employees. Such approaches unlock latent value in the business, provide a method for connecting people regardless of location, and allow the organisation to create a fabric for communication and collaboration between employees.</p> <p>Can also be called social business, social collaboration, enterprise social, social networking, and a few other similar terms.</p>	<p>Office 365 provides many discrete tools to enable the sharing of ideas and insights, including team sites in SharePoint, discussions in Yammer, and employee profiles. Office 365 also offers more general tools that span the different capabilities in the service, such as Office 365 Groups and Office Delve.</p> <p>These discrete and general tools are designed with the idea of bringing people together to create more value for the firm.</p>
<p>Big Data (Analytics)</p> <p>Big data refers to the explosion of data that can be collected within a business on a day-to-day basis and the associated challenge of making sense of what the data actually conveys. Finding trends, analysing sentiment, observing shifts in consumer behaviour, and recommending content based on historical patterns of interest are all potential outcomes of effectively analysing big data, for which new analytical capabilities are required.</p>	<p>Office 365 uses the principles of Big Data and Analytics. For example, Delve—based on the Office Graph—uses machine learning to understand what is happening across a customer organisation, and from this to identify patterns and highlight relevant and related happenings for each individual employee.</p>

In addition to the four big trends above, there are many other ideas percolating in the IT industry that haven't yet reached status as full trends. Office 365 aligns well with at least one of those: wearables. Wearables are computing devices that people wear, which collect and display data. Examples are fitness bands and watches. Such devices can interact with other systems to provide reporting and advanced features. The Microsoft Band, for example, can display notifications for new email messages received in Office 365 and other connected email services.¹ The Apple Watch and other wearables have similar capabilities.

With this overview and wider industry picture in mind, let's now explore Office 365.

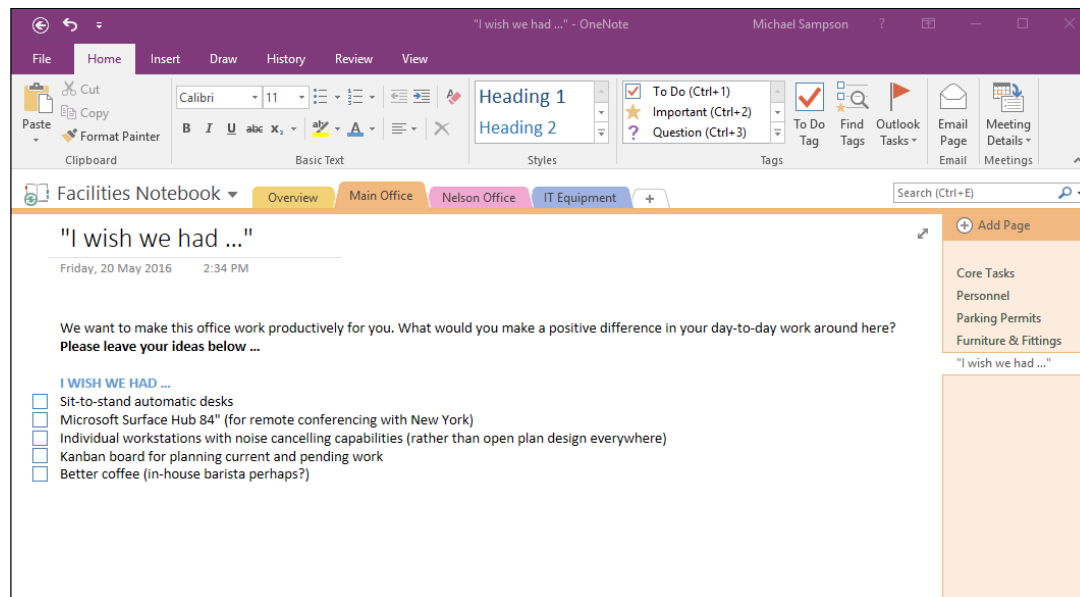
Exploring the Capabilities of Office 365

I wrote earlier that Office 365 is a set of online services provided by Microsoft, plus a set of complementary Microsoft software applications to install on computing devices. Let's take a deeper dive into the broad range of capabilities available in Office 365.

Microsoft Office Client Applications

Many of the Office 365 subscription plans include the right to install Microsoft Office on a computer and other devices. Office 2016 was introduced in late 2015 and includes the standard set of applications—Word, Excel, PowerPoint, OneNote (see Figure 1-2), and Outlook.

Figure 1-2. Office 2016 for Windows



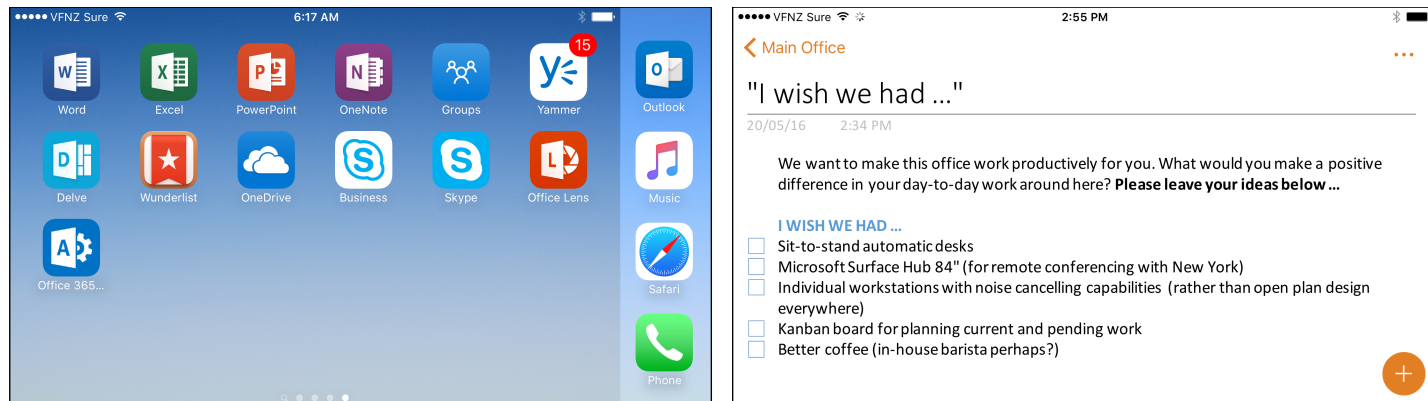
Subscribing to Office 365 gives users the right to install Microsoft Office onto their computers and devices. Different plans within Office 365 allow for a different number of installations. For example, the business and enterprise plans allow for multiple installations and support mobile devices.

In addition to the Office client applications, there are also online versions available for use through a web browser. You can start a Microsoft Word document using Word Online, which is then saved to your OneDrive for Business account. Later you can open that document on your laptop using the full Microsoft Word client to edit and update the document, and still later again work on the file using Word Online. It's the same file, and you can use either Word or Word Online for editing.

Microsoft Office client applications can be installed on multiple types of devices:

- **Computers.** Office is available for computers running Microsoft Windows (various versions), plus Mac OS X. The latest version for both platforms is Office 2016, released in late 2015.
- **Tablets.** Tablets running Windows, Android, and Apple iOS have a suite of Office apps on offer. On an Android tablet, for example, you can install Word, Excel, PowerPoint, Outlook, and OneNote, along with OneDrive, Skype for Business, Yammer, and Delve, among others.
- **Smartphones.** Smartphones running Windows Phone, Android, and Apple iOS support a variety of Office apps. The same list of apps available above for Android tablets are also available for the Apple iPhone (see Figure 1-3).

Figure 1-3. Office on Apple iPhone



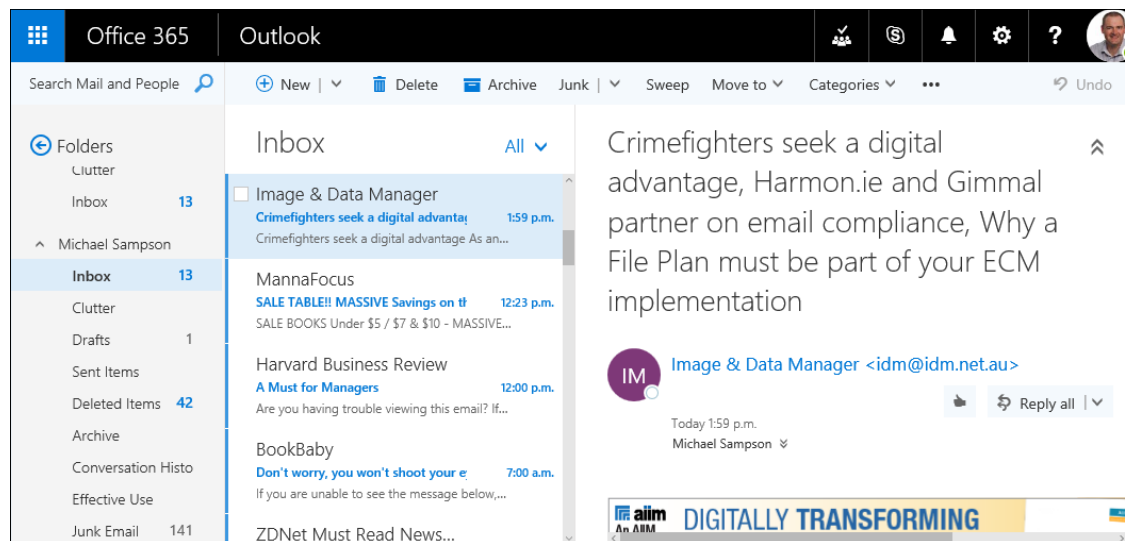
Microsoft Office apps are available from the iTunes store for the iPhone. Use Microsoft Word, Excel, PowerPoint, and other Office apps from wherever you are. Changes made on an iPhone are seamlessly available wherever you can get access to Office, both online and on other devices.

Services for Email and Calendaring

Exchange Online is the Office 365 edition of Microsoft Exchange, the long-running market leader for email and calendaring in businesses of all sizes across the world (see Figure 1-4). Exchange Online offers:

- ❶ **Email and Calendaring.** Users rely on Exchange for sending and receiving email messages and coordinating meetings and events in personal and shared calendars. Capabilities in Microsoft Outlook support Exchange message rules, colour coding, and much more.
- ❷ **Security and Compliance.** IT departments and organisations rely on the security and compliance capabilities in Exchange Online for protecting against malware, virus, spam, and other threats. Compliance capabilities include archiving options, email encryption, legal holds, and more.

Figure 1-4. Exchange Online for Email and Calendaring



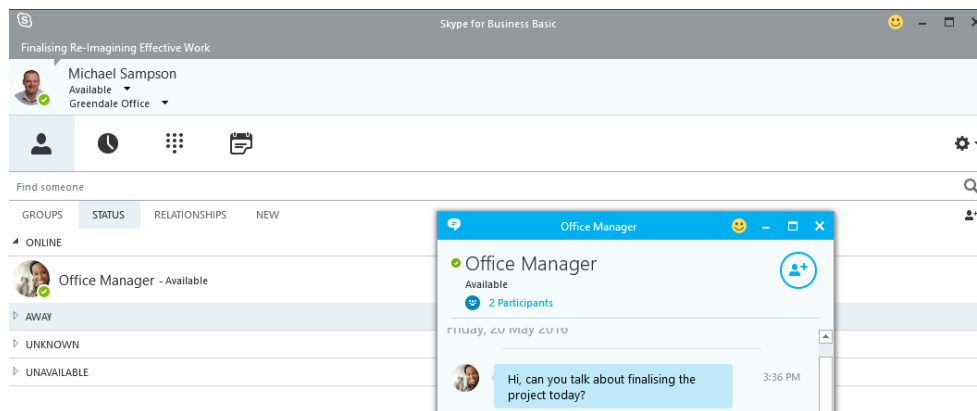
Exchange Online provides email and calendaring services for Office 365 subscribers. Exchange Server, the on-premises edition, has been the market leader in businesses of all sizes across the world for many years, and its power is now available as a cloud service from Microsoft.

Services for Real-Time Interaction

Skype for Business provides a set of capabilities for real-time interaction between people: instant messaging, one-to-one calling, group calling, and online meetings with desktop and application sharing—across computers and devices. These capabilities are underpinned by presence and availability, showing whether someone is available to be contacted. Skype for Business offers:

- **Instant Messaging.** For sending real-time messages between people or groups of people in group chats. Supports sharing of files within an instant messaging thread. Provides a good way of checking to see if someone is available to talk, and can provide a backchannel for conversation during other meetings.
- **Calls, Conferences, and Online Meetings.** Skype for Business supports voice calling between two or more people, plus online meetings with video, desktop and application sharing, and integrated instant messaging. See Figure 1-5.
- **Presence and Availability.** A presence indicator in Skype for Business says whether someone is online or not, regardless of their location, device, and method of connecting to the network. Availability is a nuanced indicator of whether they are available for interaction now or not.

Figure 1-5. Skype for Business



Skype for Business provides business-grade instant messaging, voice and video calling, and online meeting capabilities.

Services for Team, Group, and Organisational Collaboration

Office 365 is all about productivity for individuals and collaboration for teams, groups, and the whole organisation. Numerous explicit and implicit capabilities in Office 365 support collaboration between people. These include:

- **OneDrive for Business.** A service for storing business-related documents and files that are under the control of an individual. Files can be shared with other people in the firm in a controlled way, for viewing only or to facilitate collaborative work. Files can also be shared with external parties. Files and documents can be synchronised between devices, allowing access anywhere and anytime.
- **SharePoint Team Sites.** SharePoint is an incredible offering with an almost endless range of capabilities. For teams it provides a shared place to work together through sharing files and documents, discussions, project plans, calendar items, lists, and many other tools.
- **Office 365 Groups.** A relatively new way in Office 365 for creating a shared place for teams to work together. Office 365 Groups work across various Office 365 applications, including Outlook and SharePoint, and give people easy ways of sharing ideas, calendar items, and documents.
- **Yammer.** A powerful service for sharing updates on what's happening, finding people with shared interests, creating groups, and holding discussions. Yammer provides many options for bringing people together across an organisation, and even people outside the organisation.
- **Office 365 Planner.** A new service in Office 365 for visually planning projects, using a Kanban-style interface. Tasks can be assigned to individuals, contain related conversations, and have files attached for reference. The status of a task can be changed by dragging and dropping it between the vertical columns of the project.
- **Microsoft OneNote.** A software tool for individuals that recreates a paper notebook-based metaphor for dividing pages of information across sections. While OneNote is a great tool for individual use, its collaborative capabilities make it applicable for teams and groups to structure, share, and collaborate on ideas, documents, meetings, and much more. Each OneNote page is a free-form canvas for rich text and media, allowing people with pen-capable devices—such as the Surface Pro 4—to draw with digital ink. It can be used for just capturing, storing, and structuring text, but its capabilities go far beyond a text-only approach.

Numerous explicit and implicit capabilities in Office 365 support collaboration between people.

These services are available from a browser, rich clients, and mobile apps.

Services for Automatically Discovering What's Happening

Whenever people in an organisation use a common platform to work together, there is an opportunity for serendipity. People mostly work in small teams and groups, and it is frequently the case that other people in the same organisation have similar projects, interests, and experiences. Various capabilities in Office 365 support the automatic discovery of what's going on:

- **Office Delve.** Delve works in the background to connect the dots between what you are working on and what other people related or relevant to you are working on (see Figure 1-6). It also provides a profile page for each individual to showcase their latest work. Delve can become a key way for keeping informed of what's going on and creating lightweight ways of sharing updates and interesting findings with other people.
- **Office Graph.** Delve is powered by the Office Graph, a machine learning technology that is constantly analysing the activities people do and looking for the connection points. The Graph receives activity signals from Outlook, SharePoint, and Yammer, among others.

Figure 1-6. Office Delve Creates Connections



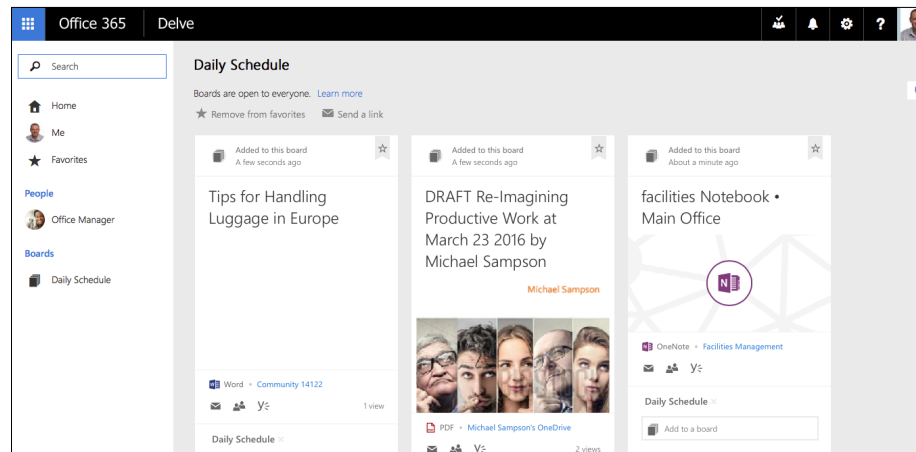
Delve looks at the work each person is doing and builds a profile for them and a network of connections to other people, content, and happenings across Office 365. It's an intelligent agent, constantly working to make each person more effective, connected, and in tune with what's going on.

New Services for Bringing People Together

Microsoft is creating a variety of new services to allow people to come together around shared content. Delve and the Office Graph, for example, power the new Delve Boards capability. And the Video Portal capability provides a video sharing platform:

- ❶ **Delve Boards.** Content shown in Delve can be added to one or more Boards, a way of grouping related documents and other content (see Figure 1-7). Boards can be shared with other people, allowing them to review the collected content as well as contribute their own. You can also choose to follow a Board and therefore get updates via Delve of newly added content. A Board shows related content together but doesn't store it together—the actual content lives in its original location, but is surfaced and displayed in a common location via a Board. Items displayed on a Delve Board respect the access rights set for each item.
- ❷ **Video Portal.** The Video Portal provides a video sharing and discovery service for firms of all sizes, allowing the distribution of video updates from executives, video reviews of recent marketing activities, and video-based e-learning courses for employees, among others. It is basically a Youtube for the enterprise with enterprise-grade management and administration capabilities.

Figure 1-7. Delve Boards



Delve Boards provide a mechanism for easily grouping related content together, regardless of where it is actually stored in Office 365. Boards can be shared with other people, and Boards can be followed so that as new content is added to a Board, interested people can stay informed.

Capabilities for Regulatory Compliance

Organisations are subject to the legal framework of the country or countries in which they operate, and based on the nature of the firm's business, there are often additional industry-specific regulations that define acceptable behaviour. Some of these laws and behaviours require the collection and storage of certain types of information. As a set of services to enable many forms of productivity and collaboration between people, Office 365 has its fair share of capabilities to support regulatory compliance. An exhaustive treatment of this topic is beyond the scope of this book, but some of the highlights are:

- **Archiving.** Various types of messages and content can be archived in Office 365, creating a secured collection of content to show what did and didn't happen over time. Authorised individuals can access the archive under particular circumstances to carry out compliance duties.
- **Encryption.** Emails sent through Exchange can be automatically encrypted based on policy to enforce high security for particular types of content. For example, if personally identifiable information such as a Social Security Number (in the United States) or a credit card number is sent through email, a rule can be set up in Exchange so that such messages are automatically encrypted.
- **Legal Holds.** There are several ways of putting specific content under legal hold, which prevents someone from deleting a message, as well as preventing the system from automatically deleting messages under record retention rules. The newer approach—the In-Place Hold—supports legal holds based on time (a time-based duration from when a message was received or created) and query (a search construct that looks for specific terms, phrases, and other content items). Exchange mailboxes can also be placed on indefinite hold.
- **e-Discovery.** In order to ascertain the extent of possible wrongdoing across all employees (or a subset therefore), an e-discovery search will look for potential violations in messages and other content. Office 365 supports a variety of e-discovery capabilities across content stored in Exchange Online, SharePoint Online, and other Office 365 tools.
- **Data Loss Protection (DLP).** Office 365 offers rights management capabilities to secure emails and documents to prevent disclosure to unauthorised individuals.

Office 365 has its fair share of capabilities to support regulatory compliance.

Organisations investigating the use of Office 365 need to carry out their own due diligence on the regulatory compliance capabilities in Office 365 and determine whether what is offered is sufficient for their situation. If the standard capabilities are not sufficient, there are specialist add-on compliance services available from third-party cloud vendors to supplement the capabilities offered in Office 365.

What's Happening with Office 365 in the Market?

Customers and industry analysts are fairly positive on the momentum around Office 365. Let's look at the in-market evidence.

Research Data on Office 365 Usage and Adoption

It is hard to get an exact reading on the state of the adoption of Office 365, but the following data points over the past year or so paint a compelling picture of strong upward momentum:

- **Okta in March 2015.** Okta provides identity management services for on-premises applications and cloud-based services. In analysing the data on what applications its customers were using, it noted that Google Apps was more popular until October 2014, at which point Office 365 took over. By March it was one of the most highly used services among Okta's customers,² and by the end of April 2015 it was in first place.³
- **BitGlass in March 2015.** BitGlass provides security capabilities for cloud services. In analysing its data on customers, BitGlass says that while Google Apps had twice the market share of Office 365 in 2014 (Google Apps at 16% compared with Office 365 at 8%), it dropped on its own count and lost the lead to Office 365 in 2015 (Google Apps at 13% compared with Office 365 at 29%).⁴
- **Microsoft in June 2015.** During a SharePoint conference in June, Microsoft's keynote speaker said that 70% of Fortune 500 companies had purchased Office 365 in the previous 12 months, and that Office 365 was Microsoft's fastest growing commercial product ever.⁵
- **BitGlass in August 2015.** BitGlass reported that adoption of Office 365 by enterprise customers grew by 300% from 2014 to 2015, and that just over one quarter of enterprise customers are making use of Office 365.⁶
- **Microsoft in November 2015.** Microsoft said it had 60 million commercial monthly active users in November,⁷ which was up from "nearly 50 million" less than six months earlier.⁸ At the end of December, Microsoft stated it had 20.6 million consumer users.⁹
- **Microsoft in March 2016.** For the quarter ended March 2016, Microsoft noted it had 70 million commercial monthly active users, and 22 million consumer users.¹⁰

70% of Fortune 500 companies had purchased Office 365 in the previous 12 months, and that Office 365 was Microsoft's fastest growing commercial product ever.

Industry Analysts on Office 365

Industry analysts pay attention to what's happening with vendors and products and give independent advice to customers on what they should be doing as a result. Here's a collection of analyst reactions to Office 365:

- **Forrester in June 2014.** Forrester's Enterprise Social Software Platforms Wave for 2014 put Microsoft Office 365 with Yammer in the Leaders wave, awarding Microsoft the strongest rating for strategy and the fifth highest rating for the strength of the current offering.¹¹ It also had one of the largest market presence indicators of vendors covered in the Wave.
- **Gartner in October 2015.** The Gartner Magic Quadrant for Social Software in the Workplace puts Microsoft in the top of the Leaders quadrant, and Microsoft has been in the Leaders quadrant for seven years running.¹² Microsoft receives the highest rankings for both ability to execute and completeness of vision, the two axes of comparison.
- **Real Story Group in January 2016.** The Real Story Group's annual briefing on the Enterprise Collaboration and Social Software Technology marketplace maps vendors in a 3x3 matrix, with product development and vendor evolution the two axes. Office 365 is positioned as rapid under product development, and on the line between overhaul and turbulence for vendor evolution.¹³
- **Constellation Research in April 2016.** Alan Lepofsky, VP and Principal Analyst in the Future of Work practice at Constellation Research, writes: *"Office 365 represents much more than just Microsoft shifting their on-premises collaboration tools to the cloud. Instead, it has served as the catalyst for Microsoft to focus and deliver on their mission of reinventing productivity. Rather than just create web based versions of Office and Exchange, Microsoft has evolved their collaboration platform to include products like Delve, Sway and Planner. They have architected their backend with Microsoft Graph and Office 365 Groups. They are bringing together the power of Windows OS, Bing search, Cortana personal assistant and their cognitive developer services (artificial intelligence APIs like vision, speech, knowledge search) to empower a new breed of personal productivity and team collaboration applications."*¹⁴

In Gartner's 2015 Magic Quadrant, Microsoft receives the highest rankings for both ability to execute and completeness of vision. Microsoft has been in the Leader's quadrant for 7 years.

In summary, industry analysts have an overall positive reaction to Office 365, noting the marketplace momentum Microsoft is achieving plus the ongoing development and maturation of the service offering.

Customers Embracing Office 365

Many organisations are switching to Office 365, with a historical emphasis on moving from Exchange on-premises to Exchange Online (for email and calendaring):

- **Rencore Market Survey (January 2016).** Rencore is a Sweden-based Microsoft business partner, delivering tools for analysing how SharePoint and Office 365 are used by organisations. It surveyed 1,000 SharePoint professionals in late 2015 to discover how their organisations were actually using SharePoint. One key finding was that while many organisations have moved to Office 365, the primary reason for doing so was to embrace Exchange Online (one workload, rather than a widespread embrace). Fewer have embraced the SharePoint capabilities on offer, preferring SharePoint on-premises or hybrid approaches.¹⁵
- **Exchange and Office First, Other Capabilities Second (April 2016).** In a set of customer interviews I did in April 2016 with predominantly United States-based businesses and universities, many had focused their initial migration efforts to Office 365 around Exchange Online and Office licensing. Many interviewees noted, however, that once their organisations were onboard with Exchange Online, additional capabilities were introduced to staff from the Office 365 stack. The most commonly noted capabilities were SharePoint Online and OneDrive for Business, with Skype for Business a trailing candidate. While interviewees were generally very positive about the performance of Exchange Online, they were less satisfied with the performance of the other capabilities.
- **Office Blogs Profiles New Customer Stories.** Microsoft's Office Blogs frequently profiles new customers who have embraced Office 365 and related tools, generally with a high-ranking staff member from the customer writing a guest post on their usage of Office 365. In April 2016, for example, new customer stories included Indivior, Atkins, Jabil, and Mott MacDonald, among others. See blogs.office.com for the most recent customer stories.

While many organisations have moved to Office 365, the primary reason for doing so was to embrace Exchange Online.

Microsoft is doing its best to encourage customers to shift beyond the Exchange focus and take advantage of the additional capabilities in Office 365. The case studies presented on Office Blogs, for example, frequently profile the use of capabilities beyond Exchange Online.

Summary

In this introductory chapter we have reviewed the history and origins of Office 365, which date back to mid-2011 specifically, but whose seeds were being planted many years prior. Office 365 is doing very well in the market after such a short lifecycle, and Microsoft is innovating quickly and fiercely to keep the momentum going. We concluded our cursory look at Office 365 by looking at the market adoption trends, analyst positions, and customer uptake.

Based on the history and current state of Office 365 explored in this chapter, the next chapter introduces the opportunity-based approach for evaluating the applicability and value of Office 365 for organisations that we will be following in this book.

Office 365 is doing very well in the market after such a short lifecycle, and Microsoft is innovating quickly and fiercely to keep the momentum going.

¹ For more on wearables and the current and possible interaction with productivity, communication, and collaboration systems, see the article *Collaboration Systems and Wearables* on my website, at michaelsampson.net/2015/04/22/wearables/.

² Julie Bort, *Everyone is talking about how Microsoft Office 365 is suddenly beating Google Apps*, Business Insider, March 2015, at www.businessinsider.com.au/how-office-365-is-beating-google-apps-2015-3.

³ Julie Bort, *Here's more proof that companies are jumping on Microsoft Office 365 like crazy*, Business Insider, April 2015, at www.businessinsider.com/chart-shows-the-rise-of-office-365-2015-4.

⁴ Julie Bort, *Everyone is talking about how Microsoft Office 365 is suddenly beating Google Apps*, Business Insider, March 2015, at www.businessinsider.com.au/how-office-365-is-beating-google-apps-2015-3.

⁵ Veronique Palmer, *Office 365 Adoption Stats from Microsoft*, June 2015, at veroniquepalmer.com/2015/06/17/office-365-adoption-stats-from-microsoft/. You can watch Mark's keynote from the SPBIZ conference online, at spbiz.conferencehosts.com/confs/2015-1/spbiz100/ConfPages/SessionRoom.aspx.

⁶ David Roe, *Enterprise Adoption of O365 Jumps 300%*, CMSWire, August 2015, at www.cmswire.com/information-management/enterprise-adoption-of-o365-jumps-300/.

⁷ *Today at Connect()*—introducing the Microsoft Graph, November 2015, at blogs.office.com/2015/11/18/today-at-connect-introducing-the-microsoft-graph/.

⁸ Julie Bort, *Here's more proof that companies are jumping on Microsoft Office 365 like crazy*, Business Insider, April 2015, at www.businessinsider.com/chart-shows-the-rise-of-office-365-2015-4.

⁹ Microsoft Investor Relations, *Earnings Release FY16 Q2*, Microsoft, January 2016, at www.microsoft.com/investor/EarningsAndFinancials/Earnings/PressReleaseAndWebcast/FY16/Q2/default.aspx.

¹⁰ Sam Mattera, *6 Must-Read Quotes from Microsoft's Earnings Call*, The Motley Fool, May 2016, at www.fool.com/investing/general/2016/05/03/6-must-read-quotes-from-microsofts-earnings-call.aspx.

¹¹ Michael Porter, *Forrester Ranks Office 365 + Yammer Tops in Strategy*, Proficient, June 2014, at blogs.perficient.com/microsoft/2014/06/forrester-ranks-office-365-yammer-tops-in-strategy/.

¹² Bryan Goode, *Gartner recognizes Microsoft as a Leader in the 2015 Magic Quadrant for Social Software in the Workplace for seven years running!*, Office Blogs, October 2015, at blogs.office.com/2015/10/28/gartner-recognizes-microsoft-as-a-leader-in-the-2015-magic-quadrant-for-social-software-in-the-workplace-for-seven-years-running/.

¹³ Kashyap Kompella, *Enterprise Collaboration and Social Software Market in 2016*, Real Story Group Blog, January 2016, at www.realstorygroup.com/Blog/2933-Enterprise-Collaboration-and-Social-Software-Market-in-2016.

¹⁴ For more on Alan Lepofsky's work at Constellation Research, see www.constellationr.com/users/alan-lepofsky.

¹⁵ David Roe, *Getting to the Bottom of SharePoint Use*, CMSWire, January 2016, at www.cmswire.com/information-management/getting-to-the-bottom-of-sharepoint-use/.

Chapter 2.

The Opportunities Approach

Around 94% of the possible improvements belong to the system—the responsibility of management.

Edward Deming

In Chapter 1 we explored the many services, features, and capabilities available in Microsoft Office 365. There is much available, and we only scraped the surface. In light of what we learned in Chapter 1 about Office 365, how should we think about using these capabilities in our work? This chapter focuses on how to explore the applicability of Office 365.

In this chapter, we will:

1. Review the significant changes occurring in businesses and organisations.
2. Think about how to best evaluate the applicability of the capabilities in Office 365.
3. Consider the many pathways available to improve performance in work activities.
4. Briefly review eight core work activities that can be improved through Office 365, which are the focus of this book.
5. Look at how to apply the approach of this book in your work.

The Changing Landscape for Businesses and Organisations

The last ten years have ushered in a number of significant changes for organisations.

- **The Relentless Drive for Innovation.** Innovation has become a strategic differentiator for winning in the market. Organisations need to create new products and services quickly to address unmet and unfulfilled customer needs. The rules of competition have been rewritten, though, since organisations that previously only had to worry about their competitor down the road now have to worry about international players with local delivery capabilities. One key enabler for innovation is the ability to unlearn old ways of creating products and services in order to learn newly crafted and more effective ways of doing so. A related enabler is being able to get new employees up to speed quickly with the way the organisation currently works and connect them to other employees with specialist knowledge.
- **The Changing Nature of Work.** Power in organisations is shifting from managers to workers. The command-and-control design of the firm is giving way to more collaborative forms of working together, where people need to truly listen to each other, make joint plans, and execute together.
- **The Always-On, Highly Connected Workforce.** The widespread adoption of laptops started the transition away from a desk-bound, partially connected workforce, but the exploding adoption of smartphones and lightweight tablets has taken it to a new level. Current devices support multiple near-ubiquitous wireless networks and feature in-built video cameras for face-to-face-like interaction. People who carry a laptop, smartphone, or tablet with them have everything they need for connecting with other people—down the hall or around the world. When combined with ever faster broadband and mobile networks, you have a potent combination allowing the re-thinking of decisions on organisational design and business relationships.
- **The Rise of Social Networks.** Social networks on the public internet—including Twitter, Facebook, and LinkedIn—have created massive sources of new data on consumer sentiment, purchasing preferences, and brand loyalty. These have introduced new opportunities for organisations to engage directly with their customers, prospects, and even potential business partners. Social networks have had a second impact too: they have demonstrated other approaches for collaborating beyond a flurry of email messages and educated tens (or hundreds) of millions of employees on the possibilities of a

Social networks have demonstrated other approaches for collaborating beyond a flurry of email messages and educated millions of employees on the possibilities of a new way to work.

new way to work. The concepts of working openly, sharing more freely, and creating explicit social connections, among others, are being demanded more often in the business world.

- **The Changing Background of New Graduates.** New graduates joining the workforce have a different background in how they have worked with fellow students and kept up with friends. Twitter, Facebook, Google+, LinkedIn, and a host of other social networking services have set the scene. Open sharing and the possibility of serendipity are key expectations. Email doesn't cut it for this group—email is “for old people”—and top graduates in high demand will shop around for more progressive employers.¹ Organisations that have embraced the philosophy of social networking in business and provide suitable tools to boot have a big advantage. While I don't advocate unnecessary pampering to new graduates, there is something to be said for evaluating new ways of working, especially when current ways are groaning under their own weight of ineffectiveness.
- **The Need to Know What We Know.** As organisations grow larger, more diverse, and more geographically distributed, the ability to personally know everyone disappears. This carries with it tremendous negative implications. These include being unable to tap the expertise of employees, recreating the proverbial wheel (although it's more common to have to recreate knowledge, methodologies, and approaches in today's world), and unnecessary duplication of effort. The latter can occur by hiring new employees for skills your organisation actually already has, or by outsourcing specific competencies to consulting firms for actions that could be taken internally if only one knew who to talk to. Lew Platt, a former CEO of HP once said that HP could be three times more profitable if only HP knew what HP knows.
- **The Aging of the Workforce and the Coming Exodus of Skilled Managers.** Workers of many years standing are approaching the age of retirement, and organisations face the exodus of skilled managers. These managers and their many years of experience about “how we do things around here” are about to walk out of the door. Organisational leaders are waking up to the challenge of how to capture and retain what people know so it can be used for the good of the organisation even after they've left. Previous attempts with formal knowledge management systems demanded knowledge capture as a separate, artificial activity to the flow of work, and largely failed. That approach is not an option, and what's needed is a new way of helping employees do great work and capture or structure what is known for wider organisational benefit.

As organisations grow larger, more diverse, and more geographically distributed, the ability to personally know everyone disappears.

One implication of these changes is that the tools we use on a day-to-day basis to get work done are insufficient to the new demands. Ten years ago the best approach for rapid communication and collaboration was email, with wireless email services on a BlackBerry for those that required real-time updates. We got a lot done with those tools, but the world has changed and it's time to move on.

Opportunities to Re-Imagine Productive Work

Microsoft's ongoing investments in making Office 365 full of capability and rich with features in an easy to acquire, easy to get started model creates a significant opportunity for organisations to re-think the tools their people use to get work done each day. Microsoft's major investment strand of creating capability should be met head-on with an organisational response of informed action. The major question for organisations and those responsible for workforce productivity, then, is in light of what is available in Office 365, how should we best embrace the best of what's available?

In answering this major question, there are a set of guiding principles to point us toward a general approach, if not a direct answer:

In light of what is available in Office 365, how should we best embrace the best of what's available?

- Current work activities rely on a set of currently available tools. For instance, many information workers carry out much of their day-to-day workflow using Outlook, Word, Excel, and PowerPoint, and a file share. Most communication is between known parties who are explicitly working together on a project or other initiative.
- Newly available tools—as well as updates to current tools—can be used to improve current work activities. For instance, Word Online in Office 365 allows multiple people to work on a document at the same time, replacing the use of email for distributing a document for input and review by other people.
- Newly available tools can be used to re-think current work activities. For instance, Yammer in Office 365 brings an openness to information sharing and the asking of questions that can be used to re-think current organisational activities like ideation, help desk support, and finding expertise.
- Work activities can be improved in many ways, and new tools are only one part of the improvement toolkit. For instance, what people believe about engaging employees and colleagues, managing staff, making a contribution, and even what productivity looks like will limit or leverage the tools that are available.
- Improving work activities can deliver short-term value, which is achieved through immediate improvements that can be almost guaranteed to drive a specific result. For instance, switching from using Outlook to distribute a Word document for review to using Word Online for real-time co-authoring can cut time-to-document completion in half.

- The achievement of specific short-term outcomes may also contribute to the achievement of longer-term strategic outcomes. For example, as people migrate to working on documents together using Word Online, the competence and capability for collaborative working increases, which is often part of a strategic mandate to improve organisational culture. However, note that achieving value over the longer term is an imprecise science, with a lack of direct routes, the presence of uncertainty, and the need for many aligned activities to work together.

In order to embrace these guiding principles in service of answering the major question above for organisations, this book must be designed in a particular way. There is a standard approach for books on software tools like Office 365, and a less commonly used approach.

- **Tool First.** The standard approach is to start with the tools—and look at what the tool, capability, or feature does, and then contemplate where such capabilities might be useful in day-to-day work life. While such an approach has some merit, it is often derided as a way of showing solutions in search of problems.
- **Opportunity First.** The less common approach is to start with the work activities that people do in their day-to-day work life. Daily work activities is an organising principle that is immediately identifiable to most people, and most work activities have multiple opportunities for improvement.

The two approaches are compared in Figure 2-1 below. We will be taking the second of these two options in this book.

Figure 2-1. Comparing Two Approaches for Analysing New Tools

Analysis Dimension	Tool First	Opportunity First
Language	Specialised and technical	General work and business
Perception by users	Threatening to people who are not technology-savvy	Aligned with the activities they do regularly
Anchoring point	The product or service on offer from the vendor	The daily or regular work activities people carry out
Design reference	Tools searching for places to be useful	Work activities analysed for improvement opportunities

By analysing the impact of new tools within the context of how work gets done, opportunities for improving work activities and processes are easier to spot.

Improving Performance

Throughout this book we will be looking at Office 365 through an improvement lens—how the effective use of Office 365 can improve work activities, workflow, and how things get done. The word “improvement” carries with it a range of nuance, and improvements can happen across a number of dimensions. Let’s review some of those:

- **Better.** A general, generic, and basically meaningless term to describe an improvement. A good immediate follow-on question is “in what way is it better?” This will usually bring to the front one of the following dimensions, adding weight to the actual improvement.
- **Simpler.** Signals the removal of extraneous steps or tasks from an activity, or the elimination of complexity. For example, consider manual and automatic vehicles; for a driver, the latter is simpler because there are fewer steps involved in driving. Note, however, that there are some situations where an automatic vehicle is more difficult than a manual vehicle, including hill work and when pulling a heavy trailer (since a manual vehicle gives the driver much more control). If these difficult activities are an irregular experience for a driver, the mechanics of an automatic vehicle makes their usual drive simpler. If these are daily realities for a driver, however, he or she would get a simpler drive with a manual vehicle.
- **Faster.** A metric rooted in a time-based view of the world. When something is faster it means that less time is required to complete the steps in an activity. This can result from simplification or, in an automated process, the result of greater processing power that completes a given process in less time. There is nothing wrong with an activity being done faster, as long as the activity is still correctly goal-aligned. There is a problem, however, when activities that no longer need to be done are sped up (see *More Effective* below).
- **Cheaper.** Fewer resources have to be spent or invested to achieve a particular outcome, whether the resources are time, money, or energy. For example, it is cheaper in monetary terms to travel in economy class compared with first class. You get to the same place (achieve the same outcome), and in monetary terms it has cost you less. Of course there are other dimensions beyond money that are important when selecting a travel class, such as comfort and expected treatment.
- **More Efficient.** An improvement creates efficiency when the ratio between inputs and outputs is positively changed. For example, distributing one page of information to 1,000 people via email is much more efficient than using letters—email requires no printing, no envelopes, no assembly time, no postage, and no time delay in delivery. Something can be made more efficient by reducing input (less time, effort, energy, or cost), increasing output (more widgets), or a combination of both (fewer resources and more widgets).

- **More Effective.** Effectiveness refers to the degree to which something meets a goal or aligns with a desired outcome. While efficiency is concerned with doing things right, effectiveness focuses on doing the right things. As long as a system, process or activity enables the right outcome to be achieved, efficiency is important. If the right outcome is not being achieved, however, the pursuit of greater efficiency is wasted effort (since the outcome achieved is not valued).
- **Attractive.** An improvement can increase the attractiveness quotient of an object, system, or process. Attractiveness acts to pull a person toward something; it creates an emotional response within the person, increasing the likelihood of them purchasing a product, becoming engaged in an activity, or more broadly just using the object, system, or process. With being an emotional measure, however, attractiveness is hard to quantify in advance.
- **Challenging.** A qualitative way of describing when something creates an increased inner drive within a person to complete an activity, process, or some other objective. Making a process or activity more challenging—increasing its difficulty level—can push some people to do a whole lot more. The challenge is what inspires and motivates their participation. The high difficulty level of the activity sets them apart from others who lack the same discipline, strength, and perseverance, and even sometimes just plain craziness. In choosing to make an activity more challenging and more difficult, the improvement is in increased engagement and participation from some people. Making things more challenging is often done in the sports field, but is also embraced for luxury and high-end goods. The challenge, for example, of purchasing a first class ticket on a long-haul flight rather than an economy class ticket is set high in financial terms.
- **Beautiful.** A qualitative improvement to the physical attributes or emotional allure of an object, product, or service. To increase the beauty of a dress, for example, a finer fabric may be selected, or a more flattering cut used. Apple crafts beautiful phones, music players, tablets, and computers, using apparent engineering magic to create something unbelievable that looks and feels stunning. Of course, beauty is in the eye of the beholder, and what one person calls beautiful another will call ugly. There are times when that's the point though—driving an extreme gulf between supporters and opponents.

A final observation—improving something in one dimension is unlikely to have an across-the-board improvement. When an improvement in one area increases, it is likely that another will decrease. There are times when this trade-off is a problem, and can indeed cause an overall decrease that takes away from the product, service, or situation. However, embracing the trade-offs between metrics—and ranking one or two as more important than the others—can become the very thing that someone is known for. For example, engineering and construction firms always have to think about health and safety, but the inclusion of rigorous health and safety processes come at a cost to efficiency. Does the firm skimp and save on health and safety processes and therefore send fewer people home in one piece each night, or

does it give up some efficiency to ensure everyone gets to go home at the end of the day? Decisions of this nature become defining values for people, organisations, and even nations.

Eight Core Opportunities with Office 365

In this book we are going to explore eight core opportunities to evaluate the value Office 365 can bring to people at work every day. The intent is to look at the common work activities that people already do on a regular basis—or should be doing on a regular basis to drive productivity—and analyse how Office 365 can help with working smarter. The eight opportunities we are going to explore are:

1. Embracing hands-off IT.
2. Storing and sharing files.
3. Profiling employee expertise.
4. Co-authoring documents.
5. Managing meetings.
6. Holding discussions.
7. Running team projects.
8. Thinking productively.

The order of these opportunities is important. The earlier opportunities emphasise the beginning moves—the small changes in behaviour—that can collectively aggregate to major change over time. As people become comfortable with the earlier opportunities in Office 365, it lays the foundation for embracing the more advanced concepts.

Let's briefly touch on each of these opportunities before devoting a chapter to each one.

The earlier opportunities emphasise the beginning moves—the small changes in behaviour—that can collectively aggregate to major change over time.

Embracing Hands-Off IT (Chapter 3)

Cloud services offer a new approach for providing IT capabilities for organisations, eliminating the need for IT departments to manage and maintain on-premises infrastructure. Office 365 provides a range of capabilities to enable hands-off IT services for IT professionals, as well as capabilities to support a more hands-off computing device model for end users. We explore this in Chapter 3.

Storing and Sharing Files (Chapter 4)

People use documents, presentations, spreadsheets, and other types of files for capturing ideas, communicating concepts, and making decisions. Getting access to their files and sharing them with other people is a core need for people—especially in light of the increasing number and diversity of devices on which people regularly use in their work. In Chapter 4 we look at the capabilities in Office 365 for storing and sharing files.

Profiling Employee Expertise (Chapter 5)

As organisations get larger it becomes challenging to know the best people to engage with on particular topics. This task is simplified when people have an accessible set of skills and abilities. In Chapter 5 we look at the capabilities in Office 365 which people can use to profile their expertise.

Co-Authoring Documents (Chapter 6)

Working on a document with other people is a common work activity in organisational life. Document co-authoring encompasses a range of activities from the initial planning, drafting, writing, editing, and through to the final polishing. In Chapter 6, we look at how Office 365 provides new ways to support document co-authoring (defined loosely to include “documents” beyond Microsoft Word).

Document co-authoring encompasses a range of activities from the initial planning, drafting, writing, editing, and through to the final polishing.

Managing Meetings (Chapter 7)

When people meet to discuss ideas, explore possibilities, make decisions, and otherwise communicate “in the now,” we usually say they are having a meeting. Like working on documents together, attending meetings is a very common way of spending your day in organisations—

and therefore making meetings productive and effective is critically important. In Chapter 7 we look at how Office 365 supports a range of meeting activities.

Holding Discussions (Chapter 8)

When teams or groups discuss ideas, challenges, problems, and opportunities, with the view to exploring the boundaries of what's known, they are engaging in the process of discussion. Discussions provide a way of bringing many people's experience, understanding, and preferences to bear on an issue of common interest. In Chapter 8 we look at the capabilities in Office 365 for supporting discussions and examine how to use discussions effectively.

Running Team Projects (Chapter 9)

When people work on a project together—an initiative with a particular outcome, a set membership, and a definite end signal—there's a lot of moving parts to coordinate across the team. There are documents to create. Discussions to have. Decisions to make. Other people to interview for information. Meetings to hold. It can get chaotic very quickly, and such chaos doesn't usually contribute to delivering a great final outcome. In Chapter 9 we explore how to use Office 365 to support teams running a project, and reducing the chaos in the process.

Thinking Productively (Chapter 10)

Any attempt to re-imagine productivity always comes back to the specific actions people take. Hence, making time to think productively is the core foundation for every individual, answering questions that focus on strengths, opportunities, and the best contribution. In Chapter 10 we look at the capabilities in Office 365 to support this reflective activity.

Making time to think productively is the core foundation for every individual, answering questions that focus on strengths, opportunities, and the best contribution.

Many Advanced Opportunities

While not the focus of this book, there are many advanced opportunities that can build on the core opportunities explored in this volume. For example, advanced opportunities for using Office 365 include:

- Distributing team and organisational updates.
- Structuring ideation.
- Making decisions.
- Sharing experiential learning.
- Building efficient workflows.
- Discovering expertise.
- Achieving individual coherence.
- Exploring beyond your role.
- ... and many others.

Exploring the Work Activities

For each of these work activities, we want to look at the opportunity available with Office 365 to improve performance and re-imagine productive work. In doing so, we will investigate each of the activities with a common structure, as follows:

- **The Big Idea.** An introduction to the work activity and a blue sky consideration of how work activities can be improved. This introductory section looks at the possibilities for the particular work activity.
- **Research Findings.** A review of the applicable research findings on the improvement opportunity for the work activity, but done so looking broadly across many products and services in the category, not solely findings from Office 365 customers. If the improvement is real, this should be evidenced by findings across the category, not one sole product.
- **Office 365 Capabilities.** A list of the capabilities offered in Office 365 to improve the work activity and an explanation and description of each capability. Where Microsoft has publicly stated a pending change to specific Office 365 capabilities, these are noted too.
- **Analysis and Evaluation of these Capabilities.** There are pros and cons for each of the capabilities offered in Office 365, and this section analyses what is good and bad about what's on offer. There is a lot to like in Office 365 land, but it's not a perfect offering—and it is important to be forewarned before pushing ahead into unknown territory.
- **Case Studies.** An insight into what firms are doing today aligned with the work activity under investigation. The case studies review the experiences and findings from real-world firms already active in embracing improvement.
- **Behavioural Aspects.** Improving a work activity is partially done through improved technology and partially through better human behaviour. In this section we review the behavioural aspects that need to be done effectively in order for the technology to have any effect.
- **Improving Performance.** In light of the investigation into the work activity, what is the opportunity to improve performance? What does improved performance look like? How significant is the improvement likely to be? We draw the analysis together and provide a summary perspective.

What are the behavioural aspects that need to be done effectively in order for the technology to have any effect?

By taking this approach to investigating the opportunities available in Office 365, you can choose the appropriate ones that make sense for your organisation.

Making These Opportunities Work for Your Organisation

In laying out the list of work activities above, the intent is to provide clear insight into the opportunities for how Office 365 can be used to re-imagine productivity. Equally, the intent is not to dictate that you must move ahead with all eight activities. These activities are options that may have applicability within your organisation, or they may not. If an activity is contextually relevant to your organisation, push ahead with it. If not, move on and keep searching.

There are three steps in making the work activity approach work for your organisation:

1. **What Work is Done Today?** Select the work activities from this book that best align with the common work activities of your organisation. You should have a sense of this based on your prior observations, but if not, start talking to people.
2. **How is Work Done Today?** Develop an understanding of the routines and technologies that are used today in carrying out these work activities across your organisation. For example, shadow a couple of teams and watch how they run their projects. Or talk to a team manager about how he or she manages meetings.
3. **How Could Work Be Done Better?** Look for new technology that could be applied to the work activity and evaluate the differences that could be made to the way the activity is carried out today. There are many options in Office 365, and you are more than likely to find new ways to re-imagine productivity.

If an activity is contextually relevant to your organisation, push ahead with it. If not, move on and keep searching.

In closing, the list of work activities in this book are illustrative and not exhaustive. They have been chosen to show an approach for exploring how to re-imagine productivity, so if the common work activities in your organisation don't fit neatly within the construction of this book then that's fine. Apply the thinking and approach championed in this book within your organisation and move ahead in new and interesting ways.

Summary

In this chapter we have reviewed the recent changes facing organisations across the world that challenge the status quo in how people get work done individually and with others. The key conclusion from that review was that the tools we use on a day-to-day basis to get our work done and collaborate are insufficient to the demands now presenting themselves. It's time to re-imagine productivity.

We then turned our attention to how to explore the possibilities offered by Office 365, comparing two approaches for doing so. The selected approach in this book is to start with a set of enduring work activities that many people enact in their work on a day-to-day basis, and within each work activity to explore where and how Office 365 supports the re-imagining of productivity and collaboration. From here we dive into the eight illustrative core opportunities, devoting a chapter to each one.

There's much to do. Let's get going.

The tools we use on a day-to-day basis to get our work done and collaborate are insufficient to the demands now presenting themselves.

¹ That “email is for old people” is a common idea among the younger generation, reflected in the much higher use among this demographic of text messages, Facebook, and other newer tools. That young people take into consideration the tools available for working together at a prospective employer is a concept I have heard from numerous clients.

Chapter 3.

Embracing Hands-Off IT

We have survived because we've been successful at keeping our costs under control, but we also understand that you can't cut costs at the expense of customer satisfaction and employee effectiveness.¹

Kari Hänninen, Finnair

Providing the hardware and software through which people can work together and get work done is one of the fundamental tasks of the IT group in any organisation. The contours for this decision are changing thanks to cloud services such as Office 365 and Microsoft Azure, as well as improvements to broadband and other fast networks. The decision to build and manage internal infrastructure should no longer be the default choice nor is it the only option.

In this chapter, we will:

1. Look at the big idea of hands-off IT in terms of cloud services and self-provisioning and disposable devices.
2. Build a picture of the research findings on hands-off IT.
3. Investigate the capabilities on offer in Office 365 and Microsoft Azure to support a hands-off IT approach.
4. Evaluate the pros and cons of using Office 365 and Microsoft Azure.
5. Review some of the organisations using Office 365 and Azure to support a hands-off IT approach, and how these offerings can improve performance.

The Big Idea

Every firm that uses IT to support and enable the execution of business functions needs a means of delivering that capability to employees, customers, and partners. The big idea of hands-off IT is to procure that capability from a trusted third-party.

Idea 1. From On-Premises to Cloud Services

The most common way of delivering IT capability to employees, customers, and partners has been through an on-premises model. Under this approach, the IT function of the firm—a team, department, or division depending on the size of the firm—has purchased hardware, licensed software, and created an internal IT environment under their control. This on-premises model required expertise within the firm to manage the resulting hardware and software infrastructure, plus some degree of adherence to the vendor's maintenance releases and upgrade path over time. As new versions of software were released, each firm had to go through a migration process to move from an old version to a new version, if indeed a migration made sense. When hardware broke, became obsolete, or was no longer sufficiently powered to run newer versions of software, new hardware had to be procured and introduced carefully into the environment. Many months of planning were required prior to building a new environment, and equally many months of planning were required to carry out each major migration.

Many months of planning were required prior to building a new environment, as well as in advance of each major migration.

An alternative approach to providing an IT capability for work processes has been developing over the past 10-15 years under the guise of various terms, with “cloud services” being the current preference:

- **Delivers IT Capability as a Service or Utility.** What is acquired from the cloud services provider is a specific capability—such as email services, a set of collaboration services, a service for managing documents, or a set volume of data processing services. In reality this is the ultimate end of the on-premises model as well, but the service is acquired indirectly as a consequence of directly acquiring hardware and software to deliver the particular service.² With cloud services, the details of how the service is actually delivered is opaque.
- **Removes Maintenance and Upgrade Duties from the Firm.** The cloud provider is responsible for all maintenance and upgrades to the IT capability on offer; the firm itself doesn't have to deal with any of those tasks. The firm has some level of expectation—usually dealt with through a contractual service level agreement—that the capability will be robust, almost always available, and kept in a good state of upkeep.

- **Upgrades are Delivered Invisibly.** As the cloud provider adds new features and capabilities to their cloud service, these are rolled out to customers without the customer having to take any action. The days of maintaining servers and software are gone. However, the invisible delivery of upgrades does not mean they are without effect or impact, and there are times when capabilities that are being used by customers are discontinued by the cloud provider, which causes some consternation. And secondly, some cloud providers give customers a degree of control over when upgrades are rolled out to their users.
- **Utilises a Pay-as-You-Go Subscription Model.** Similar to an electricity model, cloud services are usually priced on a pay-as-you-go model, with the firm paying for the actual capability used. This may be metered on a per-user basis, or per-minute, or per-data volume, or a mixture of the above. Clarity on the fee-levying basis for the firm is important, and the trigger for levying extra charges should be transparent.
- **Enables Elastic Demand Patterns.** When a firm employs more people, it is simple to add new employees to the services they require for carrying out their work. The cloud provider invisibly deals with the details of making that happen, and the firm doesn't have to acquire and provision new hardware to handle the increased load. When employees leave, the firm can retire licenses to stop paying for users who are no longer active.
- **Hands Future Control to the Cloud Provider.** The cloud provider has both ownership of the service roadmap plus control over roll-out of new capabilities to subscribers. Customers may be given some insight into the roadmap and have some ability to input their ideas and preferences for the cloud provider to consider. Nevertheless, the roadmap is owned by the cloud provider, and whether they choose to roll out new features, remain the same, or discontinue particular aspects is up to them.
- **Eliminates the Migration Headache.** With the cloud provider taking responsibility for upgrading their services for the benefit of many customers, the challenge of migrating from one version of software to a newer version is greatly reduced and perhaps even eliminated entirely. In designing upgraded services it is incumbent on the cloud provider to consider how to provide an easy path for customers to move their data from current services.

Cloud services are usually priced on a pay-as-you-go model, with the firm paying for the actual capability used.

The weight of evidence and practice has increasingly been swinging to the side of the new approach over the past 5 years or so.

Idea 2. From Hands-On to Hands-Off Devices

While cloud services provide IT capability to enable the execution of business functions, the other side of the equation is that employees need a way to access these IT capabilities that are appropriate for their work. The most common model in recent years for the delivery of this access was for the IT group to coordinate the purchasing and provisioning of desktops, laptops, and mobile devices. Some firms developed elaborate mechanisms for ordering a computer or device for a new employee. Many firms would roll out waves of end-user computing upgrades every few years in line with general hardware refresh cycles, new operating systems, and improving but increasingly resource-demanding software applications. Once acquired, the new computer or device would need to be made ready to access the firm's IT systems, and this ranged from a manual process in smaller organisations to an almost completely automated one in larger firms or those with greater IT process maturity.

With the rise of cloud services—and particularly those like Office 365 which offer a wide portfolio of capabilities within the overall service—the need for an IT group to pre-configure a device before handing it to an employee is decreasing. Computers and devices connected to cloud services enable a more hands-off way of accessing IT capabilities:

- **Requires Only Username and Password.** As long as the user knows their username and password, they can get access to their cloud services. Some devices have the concept of being joined to a particular service via username and password, which kicks off a series of activities to link the two together. The idealised expression of this simplicity has to be Google's ChromeBooks, which require only a username and password to get access to both the device and the user's complete array of Google cloud services. Large enterprises will generally add another layer of security on such devices, though—regardless of the device type—using two-factor authentication to decrease the likelihood of a security compromise.
- **May Not Install Any Software on the Device.** A user may only require a modern web browser to access their cloud services, and thus as long as the devices they are using have a supported browser, no other software as such has to be installed on their computers and mobile devices. When combined with just a username and password, this provides a very lightweight and easily supported devices environment.
- **Delivers a Self-Updating Experience.** As new features and capabilities are added to the cloud service, any installed applications on end-user devices are updated automatically. The rise of app stores for mobile devices has given users experience with self-updating applications, and this concept carries across to cloud services too.

Computers and devices connected to cloud services enable a more hands-off way of accessing IT capabilities.

- **Simplifies the Device Migration Challenge.** When a user has to switch from one computer or device to another, the most time-consuming part of the migration is getting all of their data to copy across correctly and fully to the new computer or device. Devices connected to cloud services greatly simplify this migration challenge, as both the applications required by the user and all of their data can be pushed to the new device. In its perfect realisation, connecting a new computer or device to a cloud service automatically brings back everything the user requires to do their work, making the device itself almost irrelevant.
- **Coordinates the User's State of Work Across Devices.** In carrying out their work, users have documents being worked on, browser pages being read, and email messages being composed. When the cloud service tracks what is happening across each of the user's computers or devices, a cross-device coordination is possible. The user can quickly get to the document on their tablet that they started on their laptop. A browser page being read on a mobile phone can be accessed quickly on a tablet. An email message started on a laptop can be completed and sent from the user's mobile phone. All devices become mere conduits to the cloud service, and the user is able to work across whatever devices are appropriate in a seamless way.
- **Standardises the User Experience.** Accessing applications and associated data in common ways across devices standardises and simplifies the user experience. The user doesn't have to remember different approaches on different computers, nor think too hard about where to find a particular file. The latter is just where it should be. Clearly different types of devices offer different capabilities, and while these can be leveraged appropriately for the device on hand, there is a consistent user experience wherever possible.
- **Enables Quick Recovery After Losing a Device.** People are losing computers and mobile devices all the time—in airports, hotels, conference facilities, and even office locations. They either leave them behind accidentally or an opportunistic third-party takes it for themselves. With cloud services, people can get back to productivity quickly; a new device can be purchased, connected to the cloud service, and the user still has access to their applications and data. Although the initial device itself is lost, that lost device can often be remotely disabled to prevent the information on the device from being accessed.

In its perfect realisation, connecting a new computer or device to a cloud service automatically brings back everything the user requires to do their work, making the device itself almost irrelevant.

In summary, as we have explored above, there is a lot of value for organisations in the combination of these two ideas of hands-off IT.

Research Findings

The concept of hands-off IT has been a growing focus over the past decade. Let's review some of the relevant research findings about this approach to delivering IT capabilities:

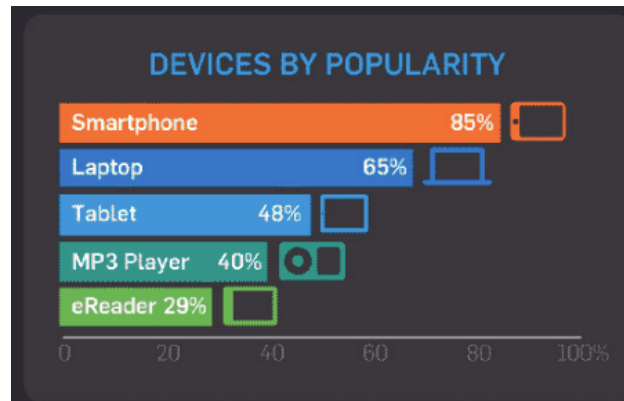
- **Managing On-Premises Servers is Expensive.** Organisations pay a high price for managing servers under an on-premises model. In a comparison between Hosted Exchange and Exchange Server on-premises, for example, Osterman Research concluded: *"Hosted Exchange will result in a 72% cost savings compared to on-premises Exchange for 100 seats, and a 56% reduction in the cost of ownership for a 1,000-seat organization. It is also important to note that much of the cost savings for Hosted Exchange comes from the significant IT labor cost savings available when using a Hosted model the labor component for 100 seats represents 72% of the cost of ownership for an on-premises Exchange deployment; for 1,000 seats, labor represents 69% of the cost of ownership."*³
- **Inter-Version Migration Takes a Lot of Time.** When vendors release new versions of on-premises servers, IT administrators need to understand, plan, deploy, and migrate from the current version to the new version. If the vendor has changed the architecture of the offering, these changes have to be taken into consideration. While there is no standardised data on migration times, it can take months to years depending on the size of the firm.⁴
- **Effective Management of Devices Reduces Costs.** Industry analyst firms peg the annual cost of a desktop PC at around £2000 per desktop and note that effective management practices can reduce this to £1200 per desktop and £1500 per laptop per year.⁵ Those are savings of 40% and 25% respectively. Desktop computing delivered as a cloud service can result in savings of up to 30% due to reduced IT labour costs among other factors. The net conclusion is that there are cost savings available to any organisation that can introduce greater maturity in IT processes around desktop management.
- **Variability in Desktops and Devices is More Expensive.** The less variability in the devices used by users generally leads to a lower cost profile for the organisation.⁶ Standardisation, in other words, is more likely to introduce efficiencies, reduce costs, and simplify the end user computing environment from an IT management and administration point of view.
- **BYOD Costs and Flexibility.** Organisations embracing the bring-your-own-device (BYOD) concept—where users can choose the devices they want to use based on personal preference, or even use personally-owned devices for work purposes—are being pushed

The less variability in the devices used by users generally leads to a lower cost profile for the organisation.

toward the high variability end of the cost continuum. This is due to greater variability in types of devices. However, any higher IT costs incurred need to be offset against the productivity benefits gained by users due to being able to use the devices they feel comfortable using. There are also ways of proactively managing a BYOD deployment to reduce IT costs.

- **People Have an Increasing Number of Devices.** The proliferation of new types of mobile devices in recent years has resulted in many people carrying two, three, and sometimes more devices. Research by Sophos in 2013, for example, found that the average gadget user carried 2.9 devices, with smartphones and laptops the two primary devices (see Figure 3-1). In early October 2014, there were officially more mobile devices in the world than people, and half of the world's population doesn't have a mobile device at all.⁷

Figure 3-1. Devices by Popularity (2013)



Research by Sophos in 2013 found that people carry an average of 2.9 devices, with smartphones and laptops in first and second place by popularity, followed by tablets in third place.

- **Small Businesses Struggle with Desktop Management.** Small businesses without any IT management processes face very high costs for managing computers and devices. It is not uncommon for the initial configuration costs for an IT consultant to install applications and migrate data to a new device to be more expensive than the device itself. Based on discussions with small business owners, some have found that applications and data in cloud services can reduce these costs by more than half.

The above research findings illustrate a range of conclusions regarding hands-off IT for servers and devices.

Office 365 Capability

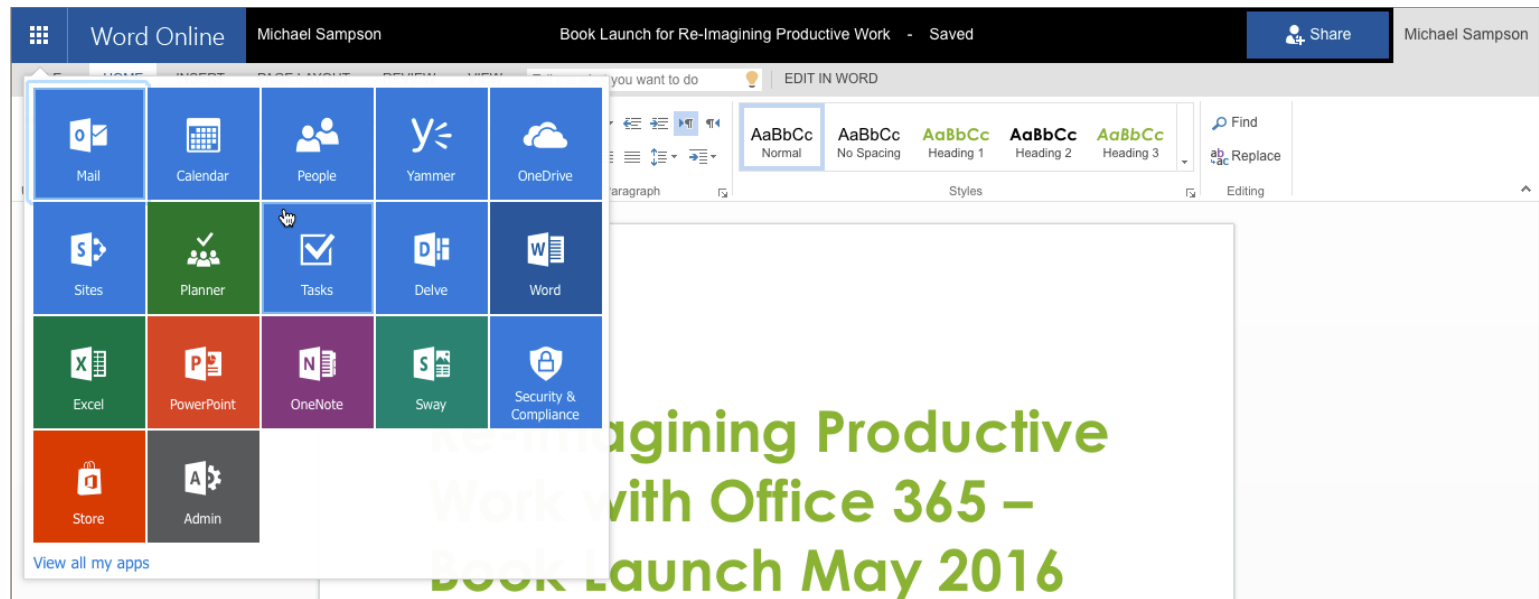
Office 365 offers a plethora of capabilities to meet the demands of hands-off IT, both for cloud services and hands-off devices. Let's look at what is on offer:

- **Exchange Online, SharePoint Online, Skype for Business, Yammer, Delve, and More.** Office 365 offers access to email and calendaring (Exchange Online), team collaboration and business communications capabilities (SharePoint Online), and real-time interaction services with telephony, conference calling, and online meetings (Skype for Business). Other services support new types of collaboration (Yammer) and discovery of insights across an organisation (Delve). All of these services are provided out of Office 365 data centres and don't require an organisation to deploy any on-premises servers (although suitable network access is definitely required).
- **OneDrive for Business.** A place for users to store, access, and share their files with people inside the firm and beyond its walls. Users can access their files through a web browser or use the OneDrive for Business synchronisation client to create local copies of their files and documents on a computer or device. Changes are automatically synchronised between Office 365 and the local device.
- **Office Online.** Microsoft Office has been a long-running success for Microsoft, with hundreds of millions of people turning to Office every day. Office Online is a browser-based edition of the Office applications—Word, Excel, PowerPoint, and OneNote, for example. Users get access to a set of curated capabilities in the online versions; they are not as fully-featured as the desktop editions.
- **Azure Active Directory.** Azure Active Directory (Azure AD) provides the identity management and authorisation capabilities for Office 365. Microsoft Azure is a complementary cloud service to Office 365, and the Active Directory capability for Office 365 is powered from Azure. While not an Office 365 service element directly, a subscription to most of the Office 365 plans also gives a subscription to Azure AD.
- **Cloud Only and Hybrid Scenarios.** An organisation can elect to go “all in” on Office 365, using only the cloud services as provided through the service. Alternatively, they can elect to embrace a hybrid approach, where on-premises hardware and software running Exchange Server or SharePoint Server, for example, work in partnership with the equivalent Office 365 services. This allows, for example, an organisation to retain sensitive data on its own SharePoint servers while still using SharePoint Online for some tasks.

Office 365 offers a plethora of capabilities to meet the demands of hands-off IT.

- **Monthly or Annual Pricing Plans.** Office 365 is provided on a subscription basis with month-by-month and annual pricing plans available. For example, Office 365 Enterprise E3, a common plan for enterprise customers, is US\$21 per month per employee, while the more feature-rich E5 plan with integrated business telephony services is US\$35 per month.
- **Office 365 App Launcher.** When accessing Office 365 through a web browser, the App Launcher shows a table of tiles representing the applications and services the user has access to in Office 365 (see Figure 3-2). The user can change the placement of tiles in the App Launcher, and whatever layout they choose is shown consistently across devices and browsers.

Figure 3-2. The Office 365 App Launcher



The App Launcher in Office 365 shows all of the applications you have access to, and this application matrix layout is consistent across computers and web browsers.





- **Office Client Applications.** Depending on the plan chosen, an individual can install the latest version of Microsoft Office client applications—such as Word, Excel, PowerPoint, OneNote, and Outlook—on their computers and devices. The personal Office 365 plans allow only one or two installations per user, while the business and enterprise plans allow multiple installations on computers and mobile devices such as tablets and smartphones.
- **Device Management through Microsoft Azure.** Office 365 does not offer device management capabilities directly, but for organisations that want a cloud-based device management service, these are offered through Microsoft Azure. See Microsoft Intune, part of the Microsoft Enterprise Mobility Suite.

Office 365 supports a wide range of devices, including computers, tablets, smartphones, and even smartwatches and other wearables. Everyone will have one device, most people will have two, and some will have all four:


- **Computer.** Any desktop or laptop computer with a supported Web browser will be able to access Office 365. The user opens their browser, heads to office.com and logs in with their access credentials. For users with Windows or Mac desktops or laptops, they will also be able to install any Office applications that are available with their Office 365 subscription. On Windows 10, users can add their Office 365 account to the Work Access pane of Account Settings to tie the device to the service.
- **Tablet.** Lightweight tablets like the iPad Air, Surface Pro 3 and 4, and Android tablets, and lightweight but large tablets like the iPad Pro can be used with Office 365. With the Surface Pro 4 running Windows 10, users connect as above. For other devices users need to download at least one Office app from the respective app store and sign in.
- **Smartphone.** Phones running Windows Mobile, Apple iOS, and Android all support Office 365, with browser access a standard feature. The different phone platforms also support the installation of Office applications, although there are some dependencies on operating system version. Phone screen size also matters from an experience perspective, so the bigger the screen the better.
- **Smartwatch.** The new wave of smartwatches and wearables—such as the Apple Watch, Android Wear devices, and the Microsoft Band—can integrate with Office 365 applications for alerts, notifications, and even the writing of an email reply. For example, Microsoft offers numerous apps for the Apple Watch, including Microsoft Outlook. Apple Watch users can read and reply to email messages in Outlook for Apple Watch, as well as Archive, Delete, Mark Unread, and Flag. Upcoming meetings are also displayed from the Outlook calendar.

Roadmap Intent

Microsoft has signalled current efforts on a number of fronts related to embracing hands-off IT, including:




-  **New Home Page Experience for Users.** In early April 2016 Microsoft started to roll out a new home page experience for Office 365 users, consisting of a three-part design with a search box, access to online Office 365 applications, and a list of the user's most recent online documents.⁸ The new design is responsive, allowing for more consistent access across devices, provides quick access to the latest versions of desktop and mobile applications, and offers tool tips to encourage exploration of new capabilities and adoption into a user's workflow. The new home page experience will roll out over "a couple of months," which should translate into April through July 2016. For future versions, Microsoft is evaluating approaches for how administrators can personalise the home page experience for their user population, and whether to give administrators the ability to override a user's choice of their home page.
-  **Reports on Usage for Administrators.** Microsoft is rolling out and planning a series of updates for reporting on user activity and usage data. This includes discrete data points such as email activity, Office ProPlus activations and usage, sharing of files in SharePoint and OneDrive for Business, and more. Of course, the challenge for administrators in any organisation will be how to make use of the extreme volume of data about user activity. Without appropriate tools to analyse trends, highlight potential problems, and discover bad practices, administrators will drown in the resulting sea of data. The Office 365 Reporting Dashboard will eventually help with this, but it will take time for it to be good enough.
-  **Compliance Administrator Role.** Many organisations operate under compliance regulations, and getting access to the compliance capabilities in Office 365 previous required the high-level Office 365 administrator role for compliance officers. Microsoft is strengthening its compliance capabilities, with specific roles for compliance administrators: *"With the new Compliance Administrator role you can grant people access to important compliance and security features in Office 365. The Compliance Administrator can perform tasks in the Compliance Center such as manage data loss prevention policies, device management policies, and view auditing reports."* Some of this work has already been completed; more is on the way.
-  **Hybrid Designs with On-Premises Servers and Cloud Services.** Microsoft has a unique capability among its competitors to support all-in on-premises infrastructures, all-in cloud services, or some degree of happy medium between the two. Microsoft continues to invest in building servers that organisations can deploy inside, cloud services that they can rely on outside, and many ways of integrating Exchange, SharePoint, Skype for Business, and other capabilities across both on-premises and cloud infrastructure.

The new home page experience will roll out over April to July 2016.

 **Multi-Tenant Designs.** Microsoft's general guidance is for a one-to-one relationship between organisations and Office 365 tenants: one organisation, one tenant. This design works fine for organisations predominantly located in a single geographical region with staff traveling to other geographies on a regular basis. What it doesn't suit well is the large multi-geography organisation that faces very different legal and regulatory conditions across its operational footprint, and who would prefer to localise bandwidth use instead of hauling all data traffic to a region on the far side of the world and back again. Microsoft currently supports a multi-tenant design under some conditions, but is working to improve its ability to support an organisation with multiple tenants in a more seamless and fluid way.

Analysis and Evaluation

We have considered the big idea of hands-off IT, looked at the research findings, and analysed the capabilities offered through Office 365. Let's now consider the pros and cons of Office 365:

-  **Fast Onramp to Incredible Capability at Monthly Pricing.** The breadth and depth of capability available through Office 365 is breathtaking. And if you ignore the migration challenge of getting from your current environment to Office 365, the fact that you can acquire such capability today and pay on a monthly basis is equally breathtaking. It changes the rules of engagement for IT in organisations of all sizes, and in particular allows smaller organisation access to capabilities that were previously out of reach.
-  **Supports the Devices People Are Using.** Microsoft supports its own devices and operating systems with Office 365, but is also quick to provide robust and ever-maturing support for non-Microsoft devices and operating systems. For example, there is good support for the Apple Mac with Microsoft Office for Mac as well as Safari as a supported browser, and the various Office 365 apps for Apple iOS on the iPad and iPhone are generally better than their Windows Phone counterparts. Support for users with Android devices is also very good. Microsoft is taking great pains to support the devices people are using, even when those are not from Microsoft nor running Windows.
-  **Offers Flexible Methods of Access.** Users can carry out probably 80% of the tasks they need to do with only a web browser, enabling a very lightweight deployment model. However, the tight integration with Microsoft Office applications gives flexibility for users to work with Office 365 on computers or devices as makes most sense in light of their work.

The breadth and depth of capability available through Office 365 is breathtaking.

- ✓ **Microsoft is Updating Office 365 Frequently.** As a cloud delivered service, Microsoft is able to update Office 365 as often as it wants without having to get IT administrators within a firm to test and deploy the updates on their own hardware. Office 365 gives a direct connection between Microsoft and its end users, and Microsoft has taken advantage of this fact to deliver an ongoing stream of updates.⁹
- ✓ **The Last Great Migration.** While it remains to be seen, shifting from on-premises Microsoft servers to the equivalent services in Office 365 could be the last great migration that Microsoft customers need to go through. Migration projects have been costly and disruptive to organisations, and assuming Microsoft plays nicely with the evolving capabilities in Office 365, the need to migrate as such may be mitigated entirely.
- ✗ **Organisations with Office 365 Pay More to Microsoft.** In a presentation to Wall Street in 2015, Microsoft noted that organisations with Office 365 result in between 1.2 and 1.8 times the revenue compared to those licensing Microsoft products in the traditional way.¹⁰ This is due in large measure to the inability of firms to delay an upgrade cycle with Office 365, as is possible with on-premises software. This reality of paying higher fees to Microsoft needs to be considered in light of the other costs that are no longer incurred internally—such as data centre fees, hardware acquisition and maintenance, and software maintenance costs.
- ✗ **Office 365 Has Outages.** Office 365 has suffered through a spate of outages in recent years, and the widespread usage of Office 365 across the world means they are publicly known and widely felt. For example, a configuration issue in Azure Active Directory in early December 2015 pushed Office 365 offline for half a day, affecting users across Europe.¹¹ Other recent outages included a 9-hour outage of Exchange Online in North America in June 2014; a 13-hour outage of Exchange Online in the United Kingdom in June 2015, which affected the UK Parliament (which they were not chuffed about), and another multi-hour outage in July 2015 across North America and Latin America. In general, Office 365 is a robust service with high uptime, but it's not perfect. Of course, on-premises solutions have outages too (unscheduled downtime), but while Office 365 should be the epitome of uptime perfection, it's not there yet.
- ✗ **Some Hands-On Still Required.** While the provision of IT capabilities as service offerings in Office 365 eliminate many of the tasks historically carried out by in-house IT professionals, there is a new set of tasks required with Office 365. The high rate of change of both major and minor capabilities require that someone inside the firm manage the roll-out of these capabilities to staff, and at times to disallow the use of new capabilities that don't align with business priorities.

Organisations with Office 365 pay Microsoft between 1.2 and 1.8 times the licensing fees compared to those licensing products in the traditional way.

- ✖ **Downloading Software Isn't Seamless Enough.** While users have a single log in to Office 365, there are multiple software products to install on any new device, and these are installed in separate steps. There should be a more integrated experience for users when setting up a new device, deemphasising the historical segregation between Microsoft products. In addition, the numbering scheme for Office itself (Office 2010, Office 2013, Office 2016) makes less sense going forward; if the latest version is always the one that's available, the suffix numbering should be dropped. On the other hand, the use of version numbering may remain essential in order to allow third-party ISVs to clearly signal which version of Office is supported by their add-in tools.

What Firms Are Doing

Many firms are moving to Office 365 and reaping benefits from doing so. Let's review some of the experiences:

- **University in the United States (70,000 mailboxes).** Migrated 70,000 mailboxes for staff, students, and other functions from Exchange 2003 and a non-Microsoft email solution to Office 365. The university used third-party migration tools to shift data from the two on-premises email solutions to Office 365, and the migration was completed in 90 days. Staff have been particularly pleased with getting a larger Exchange mailbox (from 8GB to 50GB per person), and having a single campus-wide solution has allowed new collaboration opportunities, such as meeting scheduling using free-busy capabilities. The university experienced some issues with staff using the older Office 2010 version, but upgrading to Office 2013 seemed to resolve those issues.
- **Automotive Firm.** An automotive firm with separate operations in North America and Europe re-integrated and the entire newly merged firm migrated to Office 365. The shift to Office 365 replaced the use of Notes/Domino in Europe and Exchange Server in North America. The decision for Office 365 was based on removing the need to renegotiate multiple contracts with different vendors, simplifying the firm's global messaging and collaboration infrastructure, and getting access to new services such as instant messaging and presence. The firm expects to upgrade in the next few years from the Enterprise E1 plan which provides the online services but no licenses for the Office suite to Enterprise E3 which includes the rights for both.

The decision for Office 365 was based on removing the need to renegotiate multiple contracts with different vendors, simplifying the firm's global messaging and collaboration infrastructure, and getting access to new services such as instant messaging and presence.

- **Cushman & Wakefield (43,000 employees).** As a fast growing player in the global property management market, Cushman & Wakefield moved its 43,000 employees across 400 offices and 60 countries to Office 365.¹² The firm selected Office 365 to support its rapid growth (it doubled in size through acquisitions in 18 months), provide an integrated management experience across multiple products, and to enable a shift in the firm's culture to better foster teamwork, mobile productivity, and knowledge sharing across the firm. Capabilities in use include OneDrive for Business, Skype for Business Online, Exchange Online, and the Office products. The firm estimates it can bring a new acquisition into the practice 30% faster due to Office 365.
- **Law Firm in the United States.** A small legal practice in the United States shifted from Exchange 2007 to Exchange Online, and was able to turn off a whole rack of on-premises servers after doing so. One of the drivers for the shift was the high cost of purchasing disaster recovery and continuity services for the on-premises Exchange Servers, an issue which became much less significant after moving to Exchange Online. However, what should have been a simple two month migration took a challenging seven months, due to the tens of thousands of Public Folders used with Exchange 2007 that had to be migrated to Exchange Online. The Microsoft business partner hired to execute the migration project did not have sufficient experience with the migration of Public Folders, and after attempting a number of migration strategies, ultimately recommended the purchase and use of a third-party migration product. Legal staff have been largely oblivious to the migration; what they have experienced is the arrival of new capabilities (such as OneDrive for Business), and single sign-on using their Office 365 credentials to other web-based services that historically required a separate username and password.
- **Health Insurance Firm.** A health insurance firm migrated from IBM Notes and Domino, IBM Connections, and IBM Sametime to Office 365. The initial focus was to shift away from IBM Notes and Domino for email and calendaring, and the firm engaged a Microsoft business partner and used migration tools from Quest Software (now owned by Dell) for the migration to Exchange Online. The current focus is to use SharePoint Online for team collaboration, integrate the intranet with Office 365, retire the old Notes applications that are still in use, and migrate content out of IBM Connections into a new home in Office 365 (generally Yammer or SharePoint Online). Much of the content in Notes applications and IBM Connections is of questionable future value, so the Office 365 team is working to classify which content to move and which to archive. Since the firm is a regulated organisation, the mobile support in Office 365 is insufficient for its requirements, and identifying a workable solution to control access to applications and data on personally-owned devices is top-of-mind.

Legal staff have been largely oblivious to the migration; what they have experienced is the arrival of new capabilities (such as OneDrive for Business), and single sign-on using their Office 365 credentials to other web-based services.

Behavioural Aspects

Getting value from a hands-off IT strategy requires merging good technology with good human behaviours. The two go together and create a context for gaining value. Here are the key behavioural aspects to get right with hands-off IT:

- ★ **Transforming the IT Professional to a Cloud Professional.** A move away from on-premises hardware and software to cloud-based solutions requires a transformation of the IT professional. The job role changes from installing, administering, and maintaining systems to focusing on vendor selection, cloud procurement, and administration of cloud systems. One of the most important elements of the role is leading users to effective use of newly available tools. See Figure 3-3.

Figure 3-3. Transforming the IT Professional

Category	New Task	Description
Vendor Selection and Cloud Procurement	Selecting which vendors to work with, including cloud providers and business partners	Identifying business requirements and how cloud services can meet those requirements. Selecting business partners to help with the transformation, and deciding whether to work with a larger or smaller partner company.
Administration of Cloud Systems	Setting up users, groups, and security settings in the cloud system	Managing user access privileges and user licensing rights. Creating and managing appropriate groups for communication, security, and management purposes.
Security Policies	Perform due diligence on the security policies at the hosted provider	What security policies are in place covering personnel (who is hired), physical access to servers, and access to customer data?
Change Management	Understand how changes are introduced to the hosted services	What change management processes are followed by the hosted provider, and how regularly are end-user impacting changes rolled out?
Effective Use	Championing the effective use of newly available capabilities in the cloud service	Working with end users to champion for new ways of working that are appropriate to their work. Demonstrating what's possible and helping with the development of competence in the new tools.

A hands-off IT approach introduces a range of new tasks for the IT professional.

- ★ **Transforming the IT Professional (Redux).** Organisations that go all-in with Office 365 may be able to largely eliminate on-premises hardware and software for Microsoft tools, thus seeing the transformation above for IT professionals. However, many organisations are electing to test the waters first, taking a hybrid strategy with some on-premises hardware and software complemented with some cloud-based services. This half way approach has validity for organisations concerned about data security, data sovereignty, loss of control, and cloud reliability. A hybrid strategy can also be a first step into cloud services, allowing an organisation to evaluate the reality of cloud services for their work. Regardless of motivation and duration, however, is the implication that an IT professional will need to manage two worlds at the same time—on-premises for some, cloud for some, and the intersection between the two. Depending on how these two worlds are configured, this will add a layer of complexity and cost to the provision of IT services.
- ★ **Deciding What To Do Internally and What To Do in the Cloud.** Organisations can remain fully on-premises, go all-in with cloud services, or find a middle road leveraging the best of both approaches (the hybrid strategy). What makes sense on the middle road will change over time as Microsoft adds new capabilities to on-premises alone, cloud alone, and the intersection of both. There is ongoing work involved in staying up-to-date with what is available and pending, and deciding what makes best sense for a given firm.
- ★ **Deciding What To Do with Microsoft and What To Do with Third-Party.** While Office 365 provides a tremendous array of capabilities in an overall service, individual elements of what's on offer can be greatly improved through third-party offerings. Deciding when to rely on Microsoft alone versus embracing capabilities from complementary vendors is part of the new responsibilities for a cloud professional. It is worthwhile looking at third-party vendors in the areas of service reliability, backup and recovery, SharePoint content optimisation, delegated administration, workflow, and others.
- ★ **Walking the Fine Line Between Now and Next.** Microsoft is rapidly innovating the capabilities available in Office 365, with over 450 updates released from August 2014 to August 2015.⁴³ IT professionals will need to continually adapt their skills to handle both the current release of capabilities plus what is scheduled to come next. They will also have to champion the development of adaptive skills among employees to cope with end-user software and capabilities that change more rapidly than every three years.
- ★ **Selecting the Best Tool for the Task.** Office 365 offers a plethora of capabilities to support collaboration and productivity. In many ways it is an overwhelming set of possibilities, as the remainder of this book will attest. Providing users with the capability to identify the best tool for the task at hand, plus the competence to use that single tool or collection of multiple tools in an effective way, will become essential for success.

IT professionals will need to continually adapt their skills to handle both the current release of capabilities plus what is scheduled to come next.

On Improving Performance

A hands-off approach to delivering IT services and managing end-user devices offers a few key ways of improving performance. Three of these are:

- **Simpler Access to IT Services.** The days of having to build out and manage internal IT infrastructure in order to deliver IT capabilities to staff have gone. Organisations now have a valid alternative to on-premises servers with cloud services such as Office 365, enabling a lightweight internal IT approach to procuring and getting access to a vast array of IT service capabilities. Generally speaking, only large organisations could previously afford the internal expertise to build and manage a complex IT infrastructure to deliver Exchange, SharePoint, and Lync (now Skype for Business), as well as the archiving and compliance capabilities appropriate to their business requirements. Office 365 makes all of these capabilities—and much more besides—available for a low monthly rate per employee.
- **Efficiency in Supporting End-User Devices.** End-user provisioning of new devices reduces the IT management expense for organisations. Administrators do not need to install software and migrate data between devices because applications and data will flow almost seamlessly from Office 365 to a newly connected device. As long as the end user knows their username and password, they can get access to their applications and data from wherever.
- **Attractiveness of Using Favourite Devices.** Many people have a strong preference for a particular type of computer, tablet, or smartphone. Since Microsoft offers strong support (albeit not perfect) across the major types of devices on offer today, people can elect to use their tools of choice and still be productive and make a contribution at work. While there are clear variations in how the Office applications work on Windows, Mac, and Android devices, once someone has committed to a particular set of devices those variations become less important. People can use the devices they would prefer to use instead of being forced to use a particular type of device based on organisational policy.

Only large organisations could previously afford the internal expertise to build and manage a complex IT infrastructure to deliver Exchange, SharePoint, and Lync (now Skype for Business), as well as the archiving and compliance capabilities appropriate to their business requirements.

Simpler, more efficient, and more attractive. That's a good set of performance indicators that Office 365 can address.

Summary

Cloud services like Office 365 provide new ways of delivering IT capability within organisations, covering core services required for collaboration and productivity (among others), and a simpler way of provisioning and managing the devices people use for getting their work done. In this chapter we have looked at the concept of hands-off IT and reviewed the capabilities offered in Office 365 to support core service delivery and an improved devices model.

In Chapter 4 we look at the opportunity available with new ways of storing and sharing files. Office 365 offers numerous ways of re-thinking how documents are stored and shared, and we investigate and evaluate what's on offer.

Cloud services like Office 365 provide new ways of delivering IT capability within organisations.

¹ See *Finnair takes to the cloud with Office 365*, Office Blogs, September 2014, at <https://blogs.office.com/2014/09/23/finnair-takes-cloud-office-365/>. Kari is Finnair's Architect in Corporate Information Management.

² In an attempt to show apparent cognitive alignment or infrastructure continuity, there are some attempts to re-badge the on-premises model as a "private cloud."

³ Osterman Research, *The Case for Hosted Exchange*, May 2013, at www.ostermanresearch.com/whitepapers/download184.htm.

⁴ Migration timeframes depend on the size of the firm and the complexity of the migration. Some examples of migration:

- Instron migrated from SharePoint 2010 to Office 365 in 2014. The migration of data would have taken 9 months if done manually, but it took only two months with Dell's migration tools for SharePoint. See software.dell.com/documents/instron-cuts-sharepoint-migration-time-more-than-70-case-study-73835.pdf. A migration from SharePoint 2010 to SharePoint 2013 on-premises is likely to have had the same dynamics.
- vNext migrated from SharePoint 2010 to SharePoint Online in 2014, migrating 400 SharePoint site collections in 10 days using AvePoint's migration tools. In perhaps the ultimate understatement, the vNext spokesperson said it "would have taken us longer" to do the migration without the use of AvePoint. See www.avepoint.com/assets/pdf/case_study/Case_Study_vNext.pdf.

⁵ See Richard Blanford, *How can I slash the cost of my desktop infrastructure?*, TechRadar Pro, June 2014, at www.techradar.com/news/internet/cloud-services/how-can-i-slash-the-cost-of-my-desktop-infrastructure--1253405. Gartner has been analysing desktop management strategies for many years and has always noted that better management leads to lower costs. For example, in March 2008 Gartner talked about a 42% possible reduction in annual desktop costs through better management; see www.gartner.com/newsroom/id/636308. Gartner's conclusion was almost exactly the same two years later in its November 2010 report providing the 2011 update on desktop total cost of ownership; see www.ens-inc.com/FileLibrary/4dbaec4b-11e7-4693-9cdd-3c64a36e82e5/.

⁶ Alan Cohen makes some good comments to this effect in the Quora thread, *What would be the average cost of managing a single user desktop PC in a large corporation or organisation?* from December 2011. See www.quora.com/What-would-be-the-average-cost-of-managing-a-single-user-desktop-PC-in-a-large-corporation-or-organisation.

⁷ See my blog post on this topic, *Increased Number and Diversity of Commonly Used Devices*, March 2016, at michaelsampson.net/2016/03/18/moredevices/.

⁸ Office 365 Team, *Introducing a new home page experience for Office 365 users*, Office Blogs, April 2016, at blogs.office.com/2016/04/13/introducing-a-new-home-page-experience-for-office-365-users/.

⁹ While there is a set of positive outcomes that result from being able to update services quickly, it is not without its share of problems. See my blog post, *Office 365 in 2016 - More Stability?* from January 2016, at michaelsampson.net/2016/01/07/office365stability/. Make sure you read Tony's article too, as referenced in my blog post.

¹⁰ See Gregg Keizer, *Pssst! Office 365 customers pay Microsoft up to 80% more over long haul*, Network World, May 2015, at www.networkworld.com/article/2919586/microsoft-subnet/pssst-office-365-customers-pay-microsoft-up-to-80-more-over-long-haul.html.

¹¹ See James Titcomb, *Microsoft Office 365 goes down for users in many countries across Europe*, The Telegraph, December 2015, at www.telegraph.co.uk/technology/microsoft/12030984/Microsoft-Office-365-goes-down-for-users-in-many-countries.html. There have been other outages over the years, but hopefully the frequency and severity will trend downward. If you can't handle any downtime, proceed with caution.

¹² Robert Franch, *New Opportunities for Real Estate on a Global Scale, Supported by Office 365*, Office Blogs, April 2016, at blogs.office.com/2016/04/14/new-opportunities-for-real-estate-on-a-global-scale-supported-by-office-365/.

¹³ Arpan Shah, *Managing Office 365 Updates*, Office Blog, August 2015, at blogs.office.com/2015/08/12/managing-office-365-updates/. See also Tony Redmond's article, *Frenetic pace of change continues in Office 365*, WindowsITPro, August 2015, at windowsitpro.com/blog/frenetic-pace-change-continues-office-365.

Chapter 4.

Storing and Sharing Files

Why do employees use cloud-based solutions like Dropbox, Box and SugarSync to sync and share files? As well over 100 million Dropbox customers have learned, it's because these services make it a cinch to move files from a computer to a tablet to a smartphone to another computer and back again. And it's a much better solution than email for sharing a bucket of files with others.¹

Ted Schadler, Forrester

While business processes run on systems that capture, analyse, and report on structured data—think databases, order processing, financial systems, and enterprise resource planning—a lot of the work that people do centres around files and documents. Those documents may have a presentation structure, such as headings and sub-headings, but the vast majority represent unstructured data that is intended for human communication rather than system analytics. Documents of many types are key to people working together, being productive, and enabling connections with colleagues across an organisation. Documents capture an idea, express a concept, request funding, argue a case, analyse a market, record meeting minutes, and much more besides. Providing people with ways to store and access individual and organisational files is an essential building block of productive work.

In this chapter, we will:

1. Think about new ways of storing and sharing files.
2. Look at the capabilities in Office 365 to support new ways of storing and sharing files.
3. Evaluate the offerings in Office 365 for storing and sharing files, and review some organisations that have embraced these offerings in their work.
4. Consider the behavioural aspects of storing and sharing files in new ways.

The Big Idea

Virtually all computer users have files and documents they need to access on a regular basis. Some of the files are their own—created as part of their work and stored on a file server or their local computer. Other files are received from colleagues and co-workers as part of a request for input; these too need to be stored somewhere and re-shared with the original person or shared to a wider group of people. Some files are core documents for a business process—applications for a loan, an RFP for a new piece of work, a contract for services. Still other files are only for reference: what's the policy on leave? What hotel chains can I use when traveling on business? How do I get a new lightweight computer?

In the days before the proliferation of tablets and smart mobile devices, files and documents were mainly stored on file servers and accessed from office-based computers. If you wanted access to your files and documents, you needed to log in to your computer in the office and all would be well. Some leading organisations had more clever ways of facilitating this too, such as remote access or roaming desktops, but these were not without their complexities and hassles.

Providing a simpler but secure approach to storing and sharing files is the big idea behind enterprise file synchronisation and sharing services (EFSS). The word “enterprise” in that phrase is key, since tools of this nature are a response to the burgeoning use of consumer-oriented file synchronisation and sharing services, of which SugarSync and Dropbox were early examples.

The main capabilities of enterprise file synchronisation and sharing services are:

- **Synchronisation to Devices.** Users can select which of their files and folders should be present on a particular device, and a copy is synchronised to the device. The user can access the synchronised copy from the device, and any changes made to those files and folders are seamlessly updated across all of their devices. Users can have different files and folders present on the various devices they use in order to fit how the device is used for work activities.
- **Device Independent Work.** EFSS capabilities eliminate the dependence on a particular device and allow people to seamlessly move between various devices and remain productive while doing so. Whichever device you are using at the moment has full access in a secure way to the files and documents you need for carrying out your work. This has become a critical capability where people commonly have multiple devices of differing capabilities (e.g., screen size, input methods, on-device storage).

Users can select which of their files and folders should be present on a particular device, and a copy is synchronised to the device.

- **Location Independent Work.** EFSS services eliminate the need for people to be in a particular location to get work done; you don't have to go to an office building to work on your desktop computer anymore. As long as you have one of your devices available, you can work from anywhere—a home office, a local café, a co-working facility, a hotel room, or an airplane seat at 30,000 ft. This capability has become critical in an age of hyper-mobility, freelancing, and global teams.
- **Extend Access to External Parties.** Individuals and teams that regularly work with people external to their own organisation need ways of securely sharing files and documents related to a common initiative or project. EFSS services offer these capabilities by enabling users to invite external people to a shared document or folder, providing viewing or editing rights to certain documents. When the initiative is finished, access for the external parties can be revoked.
- **Getting Beyond Email for Sharing Files.** Instead of using email for distributing files to co-workers and collaborators, EFSS services enable the file or the folder in which it is resident to be shared for common access by all. Multiple distributed copies don't have to be tracked, because everyone has access to the master copy. For people who work with large files—basically anything over 20MB—EFSS services provide a much more streamlined way of distributing and accessing these files.
- **Key Enabler of Disposable Devices.** Losing a device disrupts work and causes great inconvenience. While some people would be happy to lose their laptop—especially those struggling to work with sluggish and outdated equipment—losing a laptop that contains unique corporate data that's stored nowhere else is a career-limiting move. But if a laptop is lost and full access to the data is readily available through EFSS capabilities, it's not such of a problem. Just get a new device, sign in to your account, and you are ready to go again.
- **IT Retains Oversight.** While both consumer and enterprise file sync and sharing services offer the capabilities above, the distinguishing characteristic of enterprise services is the ongoing oversight held by the organisation through IT controls. When an employee leaves the organisation, their access rights to the file repository can be revoked. Policies can be established about who can invite external people to share files and folders. Encryption can be mandated and enforced for stored content. Where the files are stored can be controlled.

You can work from anywhere—a home office, a local café, a co-working facility, a hotel room, or an airplane seat at 30,000 ft.

There is a lot of value to be gained by individuals, teams, and organisations through storing and sharing files in new ways, as we have explored above.

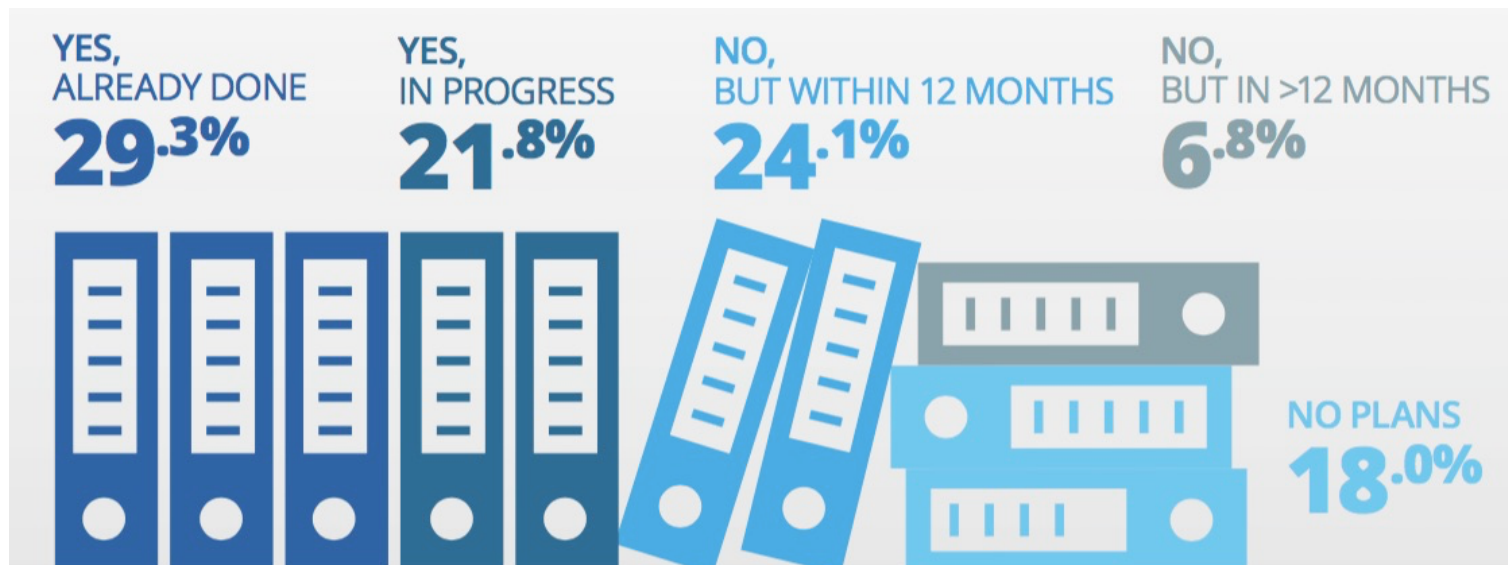
Research Findings

Let's look at some of the research findings that surround the opportunity to re-imagine productivity through new ways of storing and sharing files:

- **People Have More Devices.** While different research studies come to different conclusions about the precise number of devices per individual, the general trend is that people have more devices that they use interchangeably during the day.² Laptops, tablets, smartphones, and even smartwatches for an increasing number of people make up the day-to-day digital toolbox. These devices are best used when they are a simple conduit to common information, not a container of unique information. The Word document edited on a laptop is also accessed and edited on a smartphone, as is the PowerPoint presentation displayed from iPad after being edited on the train on a smartphone. The data is the same; the devices are proliferating.
- **Market Dynamics in Enterprise File Synchronisation and Sharing.** Many vendors have offered enterprise-oriented file sync and share services of varying maturity since the early to mid 2000s. Gartner's first report on the EFSS market was in February 2013, followed by Magic Quadrants in July 2014 and 2015.³ There is a growing expectation—even among EFSS vendors themselves—that the EFSS market as a standalone market segment will disappear by 2018, due to the inclusion of EFSS capabilities into wider product offerings.⁴
- **Growing Use of Cloud Storage.** Research by 451 Group shows an increasing use of cloud storage among mid-sized and large organisations for both public and private cloud offerings. Usage numbers grew from 3% in 2011 to 8% in 2012 and 14% in 2013, with a further 15% planning on implementing cloud storage before 2016.⁵
- **Concern Over Consumer Services.** An Osterman Research study in August 2015 documented a range of concerns held by IT administrators regarding the use of consumer-oriented file synchronisation and sharing services.⁶ 75% of IT administrators are concerned by the use of employee-managed services (with 10.6% very concerned). Security and data governance are the two highest ranked reasons for replacing consumer-oriented services with enterprise capabilities. Almost four out of five organisations are actively banning or limiting the use of consumer-oriented services or planning on doing so, and more than half of the organisations in the study had a formal IT policy to replace consumer services (see Figure 4-1).

Multiple devices are best used when they are a simple conduit to common information, not a container of unique information.

Figure 4-1. Plans to Replace Consumer File Sync and Share Services



The vast majority of organisations have plans to replace consumer file sync and share services due to security and governance concerns, among others.

- **Identity Theft Online.** While running a Google AdWords campaign, a competitor to Dropbox stumbled across a security hole in how users were making use of Dropbox. While the issue was speedily resolved by Dropbox, the realisation provided fodder for a blog post, along with this comment on identity theft and fraud: *"The most recent U.S. Federal Trade Commission survey on consumer fraud found that more than 10% of adult Americans still fall victim to fraud each year. Another survey by the home security firm Friedland found that 78% of burglars use publicly available social media status updates to gain intelligence on their targets. A third survey by research firm Coleman Parks found that 67% of consumers between the ages 18-35 and 59% between 35 and 44 don't care about online privacy. And it gets worse. A recent article by the London Evening Standard states that 70% of frauds are now cyber crimes. And according to a Fiberlink survey, more than 50% of people reported uploading sensitive data to cloud services like Dropbox and iCloud."*⁷

In summary, there appears to be a clear need for better ways of storing and sharing files, but consumer grade services aren't good enough.

Office 365 Capability

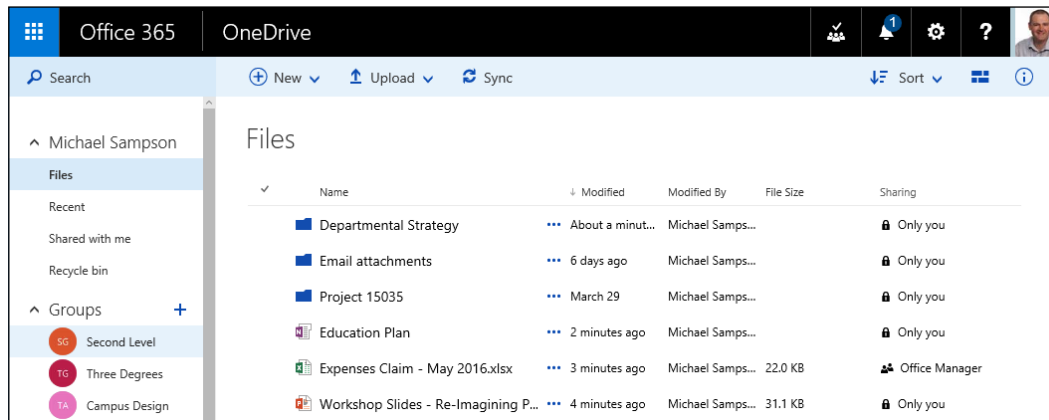
There are a few key tools in Office 365 to support new ways of storing and sharing files, with OneDrive for Business, SharePoint document libraries, and Office 365 Groups the three main players. Let's look at each one, and also briefly review the other options as well.

OneDrive for Business

OneDrive for Business is a maturing tool in Office 365 that allows users to store their files in the cloud, access them from multiple devices, and work collaboratively with other people (see Figure 4-2). Its main capabilities are:

- **Unlimited Storage Allowance.** Practically speaking, Office 365 business and enterprise plans provide unlimited data storage per user. As long as they have five or more users, customers with premium plans get 5 TB per user automatically, and even higher storage limits on an as-requested basis.⁸ Since OneDrive for Business storage is for a user's personal or individual business documents, and thus complements the storage allocation in SharePoint document libraries, that's a lot more storage than most people will ever use.

Figure 4-2. OneDrive for Business



OneDrive for Business provides an online repository for users to store their personal business-related files and documents. It is intended to be a replacement for My Documents.

- **Online and Offline Access.** Microsoft offers a OneDrive for Business app which synchronises content to a local computer, giving users the opportunity to work with documents when they are not connected to a network. Changes to documents and files will be synchronised back to Office 365 when a network connection is re-established. The latest sync app removes many of the limitations that were in place with the previous sync app, including raising the maximum number of files that can be synchronised in OneDrive for Business and increasing the maximum file size from 2 GB to 10 GB.⁹ The new sync app is also more reliable than the previous one.
- **Selective Sync.** The ability to select which files and folders you want to synchronise to a particular computer or mobile device, rather than having to synchronise everything or nothing, is a recently added capability in the new versions of the sync app for OneDrive for Business. Selective sync is available for most recent versions of Windows PCs, Mac OS X computers, and iOS and Android mobile devices. Support for Windows 10 Mobile devices is forthcoming in 2016. The app handles selective sync differently depending on the device. For example, selective sync works only for files on iOS devices, not for folders.
- **Sharing Links for Internal and External Sharing.** Documents stored in OneDrive for Business can be shared with other people via a sharing link, with the user having control over whether others can only view a document or edit it too. Rights to view or edit a document can be revoked at any time. Users can also choose whether others have to be within their organisation or can work external to it. Administrators have the ability to either whitelist or blacklist specific sharing domains.
- **Different from OneDrive.** While they share naming heritage and have overlapping capabilities, OneDrive for Business is quite different to the product known as OneDrive. The latter is a personal file repository in the cloud, owned by an individual. It is intended for personal files and photos and access to OneDrive is via a Microsoft account—which an individual sets up for themselves. OneDrive for Business, on the other hand, is provided by virtue of having an Office 365 subscription, is controlled by the IT administrator for a business, organisation, or school, and access to it is dependent on having a username and password issued by the business, organisation, or school. Once a user finishes employment at the organisation, their access to OneDrive for Business should be terminated.

Microsoft offers a OneDrive for Business app which synchronises content to a local computer, giving users the opportunity to work with documents when they are not connected to a network.

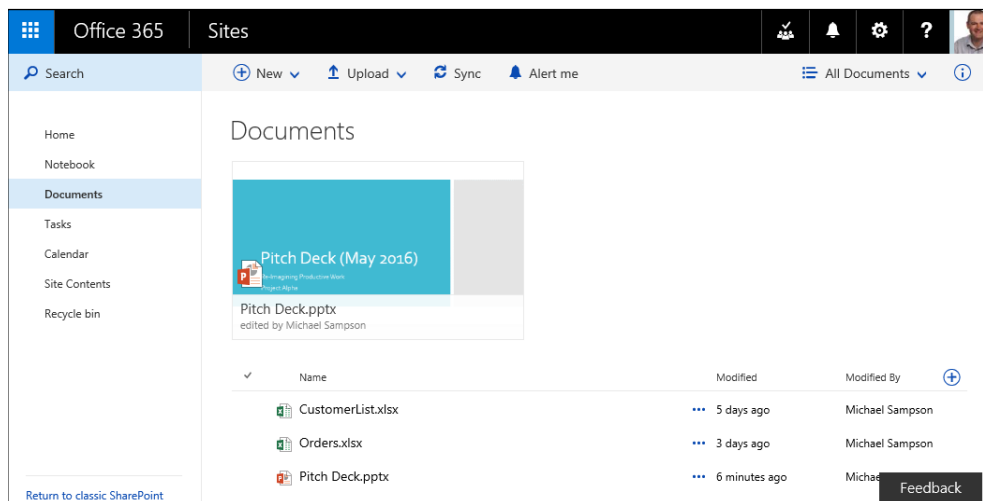
OneDrive for Business is a maturing offering. Microsoft is playing a long game with this service, and has a lot more planned for future versions.

SharePoint Document Library

SharePoint has been the mainstay approach of storing and sharing files for Microsoft-aligned organisations for many years. SharePoint Online in Office 365 offers many capabilities to support both people working together and organisational requirements around document management, records retention, compliance, and workflow, among others. It's an incredible and expansive platform, but for this chapter, let's look solely at its capabilities for storing and sharing files.

- **SharePoint Sites and the Document Library.** In SharePoint terminology, a site is a structured grouping of one or more of the tools available in SharePoint, such as the document library, announcements list, and discussion list. The site wraps those tools together, and access is granted to the site for one or more people. A document library is one of the standard tools in SharePoint used for storing and sharing files. Within a document library, files can be put into folders (or not), and can be tagged with metadata. Document libraries can display information about each file in its views, of which there can be multiple. See Figure 4-3.

Figure 4-3. SharePoint Document Library



A document library provides a place for storing files within a SharePoint site. Once in a document library, files can be shared among the people with access to the site (and document library) for viewing or editing. SharePoint document libraries have a new look for 2016.

- **Synchronising SharePoint Document Libraries.** Team sites provide a great place for storing files and accessing them via a web browser. Microsoft offers the ability to synchronise SharePoint document libraries to Windows computers through the older OneDrive for Business sync client, and has indicated that these capabilities will be added into the Next Generation sync client by the end of 2016. For mobile devices running iOS, Android, and Windows, synchronisation of SharePoint document libraries will be supported during 2016.
- **Access to Templates.** One of the beautiful things about a SharePoint document library is its ability to give access to common document templates right within the library. When someone is creating a new document, they can choose to base it on one of the templates that is published into the document library. This allows them to leverage prior organisational work around common document, presentation, and spreadsheet formats. These templates have to be added to the document library by an administrator, and new versions of the template can be added and spread around the organisation as required.
- **Alerts on Changes to Documents.** Document libraries—in addition to other types of lists that can be added to a SharePoint site—have standard capabilities for alerting users on new and changed documents. For example, a user can request an email alert every time a new document is added to a document library, or whenever one of their documents is changed by someone else. This allows them to remain focused on their current work, and to be alerted as soon as a relevant change is made to a document of interest.
- **Sharing Files with Other People.** Anyone with access to the SharePoint site and document library can get access to the files and documents contained therein, thus providing a simple way for sharing files for both reference and collaboration with others. In addition to access granted to other people by virtue of being a member of the SharePoint site, a user can send a view or edit link to internal or external people directly from the document library or document itself. These capabilities are standard within document libraries, although access to them can be restricted to protect corporate intellectual property.

Microsoft offers the ability to synchronise SharePoint document libraries to Windows computers through the older OneDrive for Business sync client; these capabilities will be added to the Next Generation sync client by the end of 2016.

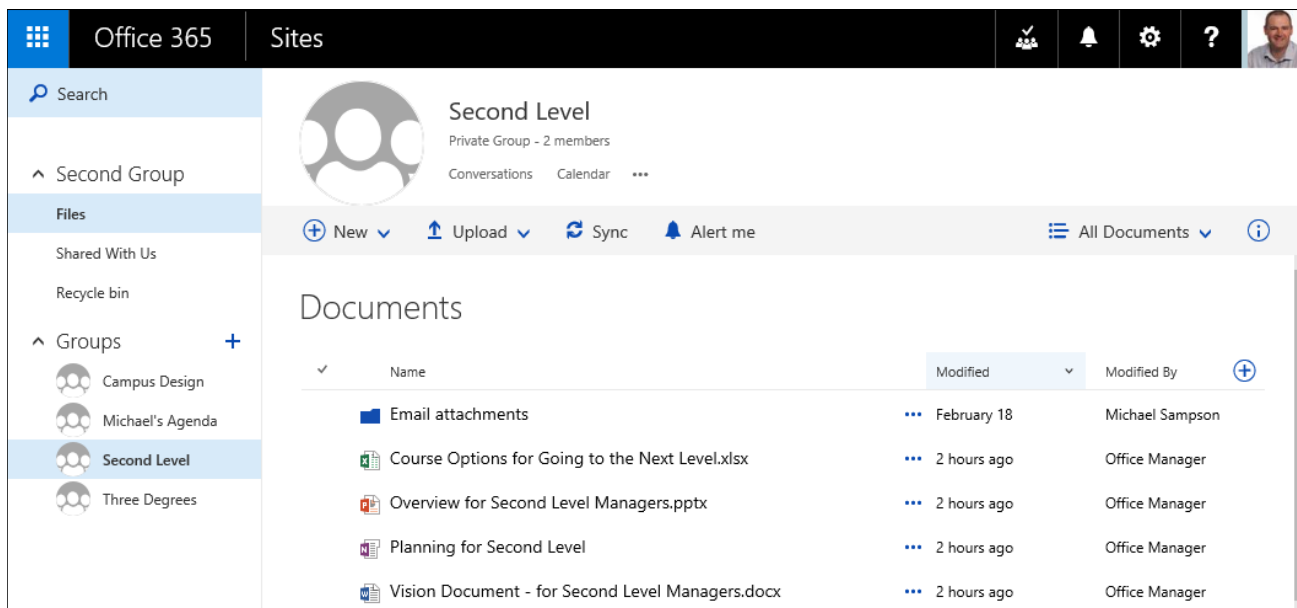
SharePoint document libraries provide a strong set of capabilities for storing and sharing files, and as with OneDrive for Business, more capabilities—particularly better support for local synchronisation to computers and devices—is planned.

Office 365 Groups

The newest of the three options in Office 365 for storing and sharing files is Office 365 Groups. When a group is created, a place for storing files associated with that Group is automatically created as one of the tools—along with conversations, calendar and notebook. Let's review the capabilities of the Files tool in Office 365 Groups:

- ❶ **It's a Basic SharePoint Document Library.** An Office 365 Group creates a common wrapper around multiple discrete tools across the Office 365 portfolio, and the Files tool is a SharePoint document library presented in a way to make it not look like SharePoint. Group members can create folders in the Files tool, along with documents created by Office and other tools. See Figure 4-4.

Figure 4-4. Documents in Office 365 Groups



The Files tool in Office 365 Groups provides a place for storing, sharing, and collaborating on documents. In the background it is a SharePoint document library.

- **Own Files and Shared Files.** Group members can store files directly in the Files tool in the Office 365 Group, or can share files and folders stored in other places in Office 365 into the Group. The former display under the Files title, the latter under the Shared With Us title (see Figure 4-4 above). When attaching documents to an email message, however, only documents stored directly in the Files tool can be accessed; documents accessible through the Shared With Us tab are not available for inclusion. Having both methods available provides flexibility in how a group can use the Files tool, storing directly related files in the group as well as getting access to existing corporate information and know-how from across Office 365.
- **Sync to OneDrive for Business.** Since the Files tool in Office 365 Groups is based on SharePoint, it can be synchronised to OneDrive for Business. This currently only works with the older OneDrive for Business client based on the Groove technology; it does not yet work with the Next Generation Sync Client for OneDrive for Business. That capability is coming, but is not available yet.
- **Missing Much of the SharePoint Goodness.** While the Files tool is based on SharePoint, it is a basic or cut-down version of what is available in a SharePoint document library. Missing capabilities are workflow, custom metadata, columns, views, sorting and grouping, and more. These capabilities may not be missed in the initial days of an Office 365 Group being in existence, but over time their lack may cause unforeseen problems. For example, the lack of columns and views becomes a challenge when any collection of documents becomes large and multi-faceted. Users need to be able to find the documents they need quickly and easily, a task which is facilitated by metadata and tailored views. The lack of workflow, likewise, becomes a problem when a group needs to do more with a document than just store in it one place; workflow capabilities provide document automation and routing to support getting work done.
- **Files as One Part of the Office 365 Groups Experience.** As with a SharePoint document library, the Files tool in Office 365 Groups is only one of the tools available to team and group members. Practically speaking, this means people can make use of group-aligned documents and files within the context of the group's wider work. Documents can be attached (directly or as cloud links) to conversations within the group. When Yammer becomes part of the Office 365 Groups experience, group members should be able to refer to documents within Yammer discussions as well. This ties together documents and conversations: the first as a developing statement of a position, and the second as an ever-changing flow around and about a document.

Since the Files tool in Office 365 Groups is based on SharePoint, it can be synchronised to OneDrive for Business.

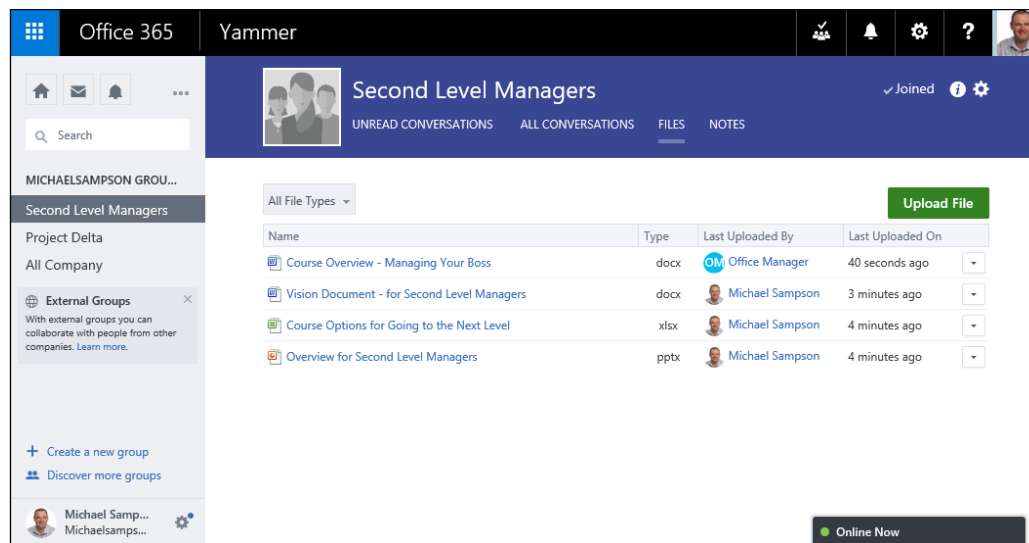
Office 365 Groups is the most recent addition to Office 365 that provides new ways of storing and sharing files. It is still early days for the capability, but it appears that Groups is a key strategic initiative within the platform.

Yammer Groups

Yammer Groups contain a Files tool, although this is separate from both OneDrive for Business and SharePoint document libraries.

- **Files in Yammer Groups.** Groups in Yammer include a Files tool, which provides a flat structure for storing and sharing files related to group activities. Folders are not supported. When viewing a file in Yammer (Office documents open in Office Online by default), there is the ability to add a description to the file, add related content, and have a conversation around the file. See Figure 4-5.
- **No Synchronisation to OneDrive for Business.** The storing of files in Yammer provides a place to store and share files, but not a way of synchronising files to a local device for offline access. Files and documents are accessible to anyone who is online via a computer or mobile device, but it is not possible to use OneDrive for Business to synchronise documents stored in Yammer.






Figure 4-5. Files in Yammer Groups





A Yammer group contains tools for conversations, files, and notes. The files tool can store documents, and Office documents open by default in Office Online. Files can be downloaded but not synchronised through OneDrive for Business.

Roadmap Intent

The capabilities available for storing and sharing files in Office 365 have a stream of associated updates pending. Here's what we know about Microsoft's plans in this area:


-  **Synchronisation of SharePoint Document Libraries.** The ability to synchronise a document library from SharePoint to the new OneDrive client is due by the end of 2016.¹⁰ A preview program is expected to start in September 2016, with general availability by the end of the calendar year.
-  **OneDrive for Business.** Microsoft continues to invest in the development of OneDrive for Business. Aside from the need to keep improving core reliability and performance, its roadmap investments include helping customers migrate from Box to OneDrive for Business, relaxing current restrictions on file name characters and lengths, integration with Sway, and enabling users to seamlessly upload a local file to OneDrive for Business to be attached as a link in Outlook 2016.
-  **Integration of SharePoint Team Sites and Office 365 Groups.** Microsoft announced plans in May 2016 to integrate SharePoint Team Sites and Office 365 Groups during 2016, bringing the two experiences together. When a team site is created in SharePoint an Office 365 Group will be automatically created as well, and the two will be linked through a common security group in Azure AD. Exactly how the two experiences will work together remains to be seen, but integration is definitely the intended direction.
-  **Integration Between OneDrive for Business and SharePoint Document Libraries.** Microsoft talked about its vision for the interaction between OneDrive for Business and a SharePoint document library in early May 2016.¹¹ One pathway sees an individual using OneDrive for Business to craft the initial version of a document, and then copy or move it to a SharePoint document library for wider sharing, input, and workflow approval processes. This approach could stand side by side with initially storing a document in a SharePoint document library, especially after document libraries synchronise properly with OneDrive for Business towards the end of calendar year 2016.
-  **Improved Handling of Shared Folders.** Shared folders are not well integrated into the OneDrive for Business experience; they are accessible through a separate navigation option and cannot currently be placed seamlessly in each user's folder hierarchy. They also do not synchronise through the OneDrive for Business client. Better handling of shared folders is due by the end of 2016.¹²

The ability to synchronise a document library from SharePoint to the new OneDrive client is due by the end of 2016.

-  **Placeholders in OneDrive for Business.** The Windows 8.1 version of the consumer OneDrive client supported smart files, which were more commonly known as placeholders. Placeholders enabled a user to see all of their files stored in OneDrive, whether or not they were actually stored on the device they were using (the “placeholder” displayed on the local device highlighted a file that was cloud-only). Placeholders were confusing to people who didn’t understand the difference between local and cloud files, and absolutely loved by those who did. Microsoft heard the confusion and removed the capability, much to the chagrin of the latter group. Many want the capability back. While passions run high on this topic, Microsoft’s intent remains unclear.
-  **No Plans for Yammer Files?** There doesn’t seem to be any plans to extend the files capability in Yammer, nor to elevate its capabilities in Yammer or Office 365. In light of Microsoft’s greater investments in other tools, with OneDrive for Business leading the pack, avoiding the use of Yammer Files would appear to be the right choice. Perhaps in the future Microsoft will replace Yammer Files with a SharePoint-based document library that can synchronise with OneDrive for Business.

Analysis and Evaluation

Getting access to “my files and documents” is probably one of the most personally relevant pieces in services like Office 365; it is through “my files and documents” that many people interact with their computers, and therefore this aspect just needs to work and work flawlessly. Let’s look at the pros and cons of what’s available in Office 365:

-  **Multiple Ways of Storing and Sharing Files.** Microsoft offers a number of complementary and overlapping tools to support the storing and sharing of files. This gives flexibility in how the capabilities in Office 365 can be used by individuals, groups, and organisations, as opposed to having merely a single approach into which all scenarios must be shoehorned. In some scenarios, a folder in OneDrive for Business will be perfectly adequate. In other situations a SharePoint document library with custom metadata, multiple views, and workflow will be absolutely essential. Clearly this multiplicity could be taken too far, leading to confusion and a poor user experience. Over time Microsoft has the opportunity to streamline the different options and communalise the experience across them.

The multiple tools in Office 365 give flexibility in how the capabilities can be used by individuals, groups, and organisations, as opposed to having merely a single approach into which all scenarios must be shoehorned.

- ✔ **Send Links, Not Files.** Microsoft offers multiple ways for people to stay in control of their documents and files by sending links instead of the files themselves. This is a long-running capability in SharePoint document libraries, and the sharing options in OneDrive for Business take this to the next level of commonality. Being able to seamlessly attach a link to an email message (instead of the file itself), plus having a streamlined way for any user to sign up for a Microsoft account to enable file access and even co-authoring, is very beneficial.
- ✔ **Non-Windows Support is Coming.** The OneDrive for Business clients and apps for Mac OS X, iOS, and Android have lacked support for synchronisation of SharePoint document libraries—which has diminished the capabilities available for people choosing something other than Windows. Of course, even on Windows it has been a poor experience with having to run two clients simultaneously, but at least it has been possible. Non-Windows users have previously had to look to third-party offerings to enable these capabilities. But the winds have shifted. Synchronisation of individual files in a SharePoint document library is newly available through the OneDrive for Business app on iOS, and support on Android devices is coming later in 2016. SharePoint document library access should be available in the new sync client on Mac OS X by the end of 2016 too, in parallel with combined access on Windows.
- ✘ **Poor Reputation for OneDrive for Business.** Microsoft is taking a long time to get OneDrive for Business to a place of sufficient maturity and stability for seamless and invisible use by individuals and across organisations. Capabilities which should have been available already—such as the synchronisation of SharePoint document libraries—are missing in action in the Next Generation Sync Client. Users must have two versions of the sync client running to support the synchronisation of SharePoint document libraries, which works (on Windows only), but is messy. The long time frame to getting these issues resolved does not endear users to Microsoft. From recent statements it appears 2016 will be the year in which this is finally resolved for Windows and Mac users, and not a moment too soon either. Some firms have delayed or cancelled their OneDrive for Business deployment due to the lack of these capabilities.
- ✘ **OneDrive Only Aggregates on Devices, Not in the Browser.** The unification of folders stored directly in OneDrive for Business plus SharePoint team sites and Office 365 Groups synchronised to a computer only displays on a computer, not in the browser. This creates a different experience for users across devices—what they see as a unified view on their devices is not the same as what is experienced when opening OneDrive for Business in a browser. This lack of consistency will cause frustration and confusion among users.

Microsoft is taking a long time to get OneDrive for Business to a place of sufficient maturity and stability for seamless and invisible use.

What Firms Are Doing

Many firms rely on Office 365 to provide capabilities for storing and sharing files. Here are three examples:

- **Booz Allen Hamilton.** Booz Allen Hamilton, a worldwide consulting firm, shifted to Office 365 to better support its highly mobile workforce and new types of mobile devices.¹³ Among other tools in the Office 365 service, OneDrive for Business features prominently in daily use among consultants. Consultants often don't know where they will be working from day to day or what specific content they will need to access when out and about with clients. The option in OneDrive for Business for just synchronising everything is therefore highly relevant to consultants, giving quick and easy access to everything they may need for daily work. Clearly the implication is that consultants must be equipped with laptops containing sufficient data storage to handle whatever they are storing in OneDrive for Business.
- **Dairy Company and Consulting Firm.** A dairy company and consulting firm are using Office 365 to provide a way to share files and documents during the implementation of a new enterprise resource planning system. The two firms are based in different cities and staff are geographically spread across the country. Office 365 was selected to support collaboration during the implementation project because as a cloud-based service, it enabled people across both firms to access the same documents; network security policies at the dairy company prevented the consultants from being able to access internal systems. Files are stored in document libraries in SharePoint Online, including Excel spreadsheets (for tracking project risks and issues), project planning documents, and Word documents. The shared document repository is used in some instances to support real-time co-authoring in Excel Online and Word, and at other times to support access to common documents without resorting to emailing attachments around the project team. Members of the project team from both firms have had to navigate differences in how SharePoint Online works compared to SharePoint Server on-premises, as well as the difficulty of people having different versions of Microsoft Office installed on their respective devices.
- **Fishs Eddy.** Fishs Eddy, a retail store in New York, sells classic tableware. After Hurricane Sandy highlighted the fragility of its IT environment, the small firm moved to Office 365 and centralised its previously disparate systems. OneDrive has become an important part of its approach to collaboration. Staff appreciate the ability to seamlessly work on documents or spreadsheets across multiple devices, and switch devices and retain access to the latest changes and updates.¹⁴

Consultants often don't know where they will be working from day to day or what specific content they will need to access when out and about.

Behavioural Aspects

Making productive use of the varied technical approaches in Office 365 for storing and sharing files requires effective behaviours. Let's look at those:

★ **Dumping Versus Refactoring.** Perhaps the greatest fear with storing and sharing files in Office 365 is that people will see OneDrive for Business as the easy replacement for file shares and merely drag and drop current folder structures from a file share into OneDrive for Business. While it can appear on the surface to be an appropriate transition strategy, this is not the purpose of OneDrive for Business. In reality, a refactoring—a re-imagining even—of what it means to store and share files in light of new technical possibilities in Office 365 is essential. Some folders from file shares should go into a given individual's OneDrive for Business account. The contents of many or most other folders should be moved into document libraries in SharePoint, aligned with business teams, projects and initiatives, and business record keeping. This refactoring requirement may be too big a shock for people and organisations, thereby diminishing the role that Office 365 can play in delivering new ways of storing and sharing files effectively.

A refactoring of what it means to store and share files in light of new technical possibilities in Office 365 is essential.

★ **Turning Descriptive Capabilities into Prescriptive Guidance.** Office 365 offers various options for storing and sharing files, as we have explored in this chapter. Organisations need to transform this description of capabilities into prescriptive guidance for individuals, teams, groups, and departments. Which tools should be used for which tasks under which circumstances, and what are the reasons for making a different choice? Without an organisational effort to create clarity for staff, many of the capabilities will languish from disuse or suffer from misuse.

★ **Available Versus Able.** While the capabilities in Office 365 eliminate the technological friction of being able to access and contribute to files and documents from anywhere, having the mental energy to do so may operate on a different cadence. People are not machines, able to do creative and thought-intensive work in a never-ending frenzy of activity. Sometimes it's best to leave that document for another day and look at it with fresh eyes. People need to know this is an acceptable path to take.

★ **Team Agreement on Tool Use.** Every team needs to decide which capability for storing and sharing files in Office 365 makes most sense for their specific type of work. For some teams a shared folder in OneDrive for Business will be sufficient; for others, a document library in SharePoint will be more appropriate. Teams that regularly work together will develop a standard way of working; people who work together infrequently will need to decide which approach is best.

On Improving Performance

Having seamless access to files and documents offers a number of ways of improving performance for people and organisations, including:

- **Simpler.** OneDrive for Business, SharePoint document libraries, and Office 365 Groups all provide simpler ways of storing files that are to be shared with other people. In particular, the ability to attach a link to a document within an email message—rather than sending the document itself—is a simpler way of requesting input and receiving feedback on a draft document. Equally, the ability to send a view-only link with an expiration date provides a simpler way of controlling access to organisational documents over time.
- **More Efficient.** Being able to access necessary files and documents wherever you are instead of having to be in a particular geographical place is an efficient use of time and resources. You can work from the client's site. You can look up critical information at the point in time it is requested from you. You can review feedback on a document while sitting in a café and kick off a collaborative review from anywhere. And while disconnected from the network, your current files are immediately available. Work goes on.
- **More Effective.** The ability in Office 365 to create shared places of storing files for common access and shared collaborative input is an effective way of supporting individual and team work. Individuals know where to look to find the documents they require for a current project, and with tools like OneDrive for Business, changes made to a local document will synchronise back for shared access. Team members have a centralised place for working together. New team members—or external participants who require short-term access to a specific document—can be easily inducted into the shared place without requiring a mad scramble to locate and email around critical team documents.
- **More Effective (Redux).** The easy methods offered in Office 365 for sharing links to documents increase the likelihood of people using the co-authoring capabilities in Office 365. The old way of sending documents around by email for input and review created a deeply dysfunctional and time-consuming work practice when creating a new master document to include all input from reviewers. The new work practices supported by Office 365 are much more effective and rely on underlying tools like OneDrive for Business to work flawlessly.

Being able to access necessary files and documents wherever you are instead of having to be in a particular geographical place is an efficient use of time and resources.

Summary

In this chapter we have looked at the second of eight opportunities for re-imagining productive work: how people store and share files. Getting access to individual, team, group, and organisational files and documents is a critical part of daily work, and we have looked at the various ways Office 365 supports this daily need. Capabilities include OneDrive for Business, SharePoint document libraries, and Office 365 Groups. In addition, we looked at some examples of organisations using Office 365 to store and share files in new ways and evaluated the pros and cons of what's on offer from Microsoft.

In the next chapter we look at the opportunity available with profiling employee expertise, and the broad value of the concept and in-market experiences of organisations already using Office 365 to profile employee expertise.

Getting access to individual, team, group, and organisational files and documents is a critical part of daily work, and we have looked at the various ways Office 365 supports this daily need.

¹ Ted Schadler, *Should Companies Allow Employees to Use Cloud-Hosted File Sync/Share Solutions? Yes, With Precautions*, Forrester Blogs, May 2013, at http://blogs.forrester.com/ted_schadler/13-05-13-should_companies_allow_employees_to_use_cloud_hosted_file_syncshare_solutions_yes_with_precautions.

² See my blog post *Increased Number and Diversity of Commonly Used Devices*, March 2016, at michaelsampson.net/2016/03/18/moredevices/.

³ Gartner, *Magic Quadrant for Enterprise File Synchronisation and Sharing*, Gartner Inc. See www.gartner.com/doc/2788017/magic-quadrant-enterprise-file-synchronization for the July 2014 report, and www.gartner.com/doc/3098819/magic-quadrant-enterprise-file-synchronization for the July 2015 update. Various vendors have licensed these reports for public distribution.

⁴ For example, see Vineet Jain, *An open letter to the enterprise file sync and share market*, VentureBeat, September 2015, at venturebeat.com/2015/09/02/an-open-letter-to-the-enterprise-file-sync-and-share-market/. Vineet is the co-founder and CEO of Egnyte, an EFSS vendor.

⁵ Simon Robinson, *Cloud storage creeps up the enterprise agenda*, ComputerWeekly, September 2013, at www.computerweekly.com/opinion/Cloud-storage-creeps-up-the-enterprise-agenda.

⁶ Data from the Osterman Research study from August 2015 is illustrated in the *Top Enterprise IT Concerns About Consumer File Sync and Share*, an infographic produced by AeroFS in December 2015. See <https://cf1.cdn.aerofs.com/2015/12/01084202/top-enterprise-it-concerns-about-cfss.pdf>.

⁷ John Landy, *Your Sensitive Information Could Be at Risk: File Sync and Share Security Issue*, Intralinks CollaboristaBlog, May 2014, at <http://blogs.intralinks.com/collaborista/2014/05/sensitive-information-risk-file-sync-share-security-issue/>.

⁸ Jeff Teper, *OneDrive for Business update on storage plans and Next Generation Sync Client*, Office Blogs, December 2015, at blogs.office.com/2015/12/16/onedrive-for-business-update-on-storage-plans-and-next-generation-sync-client/. Microsoft at one time promised “unlimited storage” for all business and enterprise Office 365 plans, but has clarified that “unlimited” actually means 5TB automatically and more if you request it, and that it is only available for the premium plans.

⁹ Jeff Teper, *OneDrive for Business update on storage plans and Next Generation Sync Client*, Office Blogs, December 2015, at blogs.office.com/2015/12/16/onedrive-for-business-update-on-storage-plans-and-next-generation-sync-client/.

¹⁰ Jeff Teper, *OneDrive for Business recognized as an EFSS leader and continues momentum with spring updates*, Office Blogs, April 2016, at blogs.office.com/2016/04/12/onedrive-for-business-recognized-as-an-efss-leader-and-continues-momentum-with-spring-updates/.

¹¹ Office 365 Team, *Announcing simple and powerful file sharing and collaboration for Office 365*, Office Blogs, May 2016, at blogs.office.com/2016/05/04/announcing-simple-and-powerful-file-sharing-and-collaboration-for-office-365/.

¹² Jeff Teper, *The Future of SharePoint*, Office Blogs, May 2016, at blogs.office.com/2016/05/04/the-future-of-sharepoint/.

¹³ See my blog post *Booz Allen Hamilton on Office 365*, March 2016, at michaelsampson.net/2016/03/29/bah/.

¹⁴ Microsoft, *Fish's Eddy Sets the Table for Growing Business with Office Products*, Microsoft Customer Stories, January 2016, at customers.microsoft.com/Pages/CustomerStory.aspx?recid=25505.

Chapter 5.

Profiling Employee Expertise

*What are you passionate about?*¹

Joshua Fields Millburn and Ryan Nicodemus

In all organisations the Ghostbusters question is asked every day: Who you gonna call? The answer is not usually the one from the movie, of course, but that doesn't diminish the challenge of the question.² Who is the right person to whom I should ask this question? Who is the best person to help the customer calling for help right now? Where do I find the people we already employ to share their expertise on current and pressing problems? From the depths of the organisation to its utmost heights, everyone is looking for the best person. For all these specific questions—and the hundreds of nuances of the same—a method for profiling expertise across an organisation goes a long way to an efficient and productive resolution.

In this chapter, we will:

1. Look at the big idea of profiling employee expertise.
2. Consider the history of profiling systems and the research findings available.
3. Investigate and evaluate the capabilities currently available in Office 365, as well as those on the future roadmap from Microsoft.
4. Review how firms are currently using the profiling capabilities in Office 365.
5. Think about the critical behavioural aspects of profiling employee expertise.

The Big Idea

When we apply for a new job, a potential employer wants to see our curriculum vitae—a succinct multi-page document outlining who we are and what we’ve done to date across a set of domains such as education, work experience, and interests outside of work. A curriculum vitae usually includes a list of two or more referees—people who can vouch for the individual profiled in the document and comment on the claims being made. The potential employer uses this information to assess the fit of an applicant to the job role that is available; they are looking for matching skills, passion, and experiences. Just as a curriculum vitae can open the door and allow us to plant a foothold in the firm, a living curriculum vitae within the organisation allows us to strengthen our foothold.

Let’s look at this idea of a living curriculum vitae and the contribution it can make to improving performance:

A curriculum vitae can open the door and allow us to plant a foothold in the firm; a living curriculum vitae within the organisation allows us to strengthen our foothold.

- **Benefits of Public Profiles.** For some job roles, there are clear benefits on having a public profile on a service like LinkedIn, Facebook, or one of the other popular services. Consultants of all stripes, for example, use a LinkedIn profile to establish a presence and landing page for prospective clients; it’s one way that many find work. Other benefits include staying in contact with previous colleagues, networking with professional contacts, and engaging in discussions with like-minded people. In creating a LinkedIn profile, however, the choice to do so is under the control the individual, in light of one or more specific benefits to pursue. While these general benefits can apply within an organisation, the interest of employees to do so has to be cultivated.
- **Benefits of Internal Profiles.** The value of internal profiles is realised only at the point in time when someone is looking for specific expertise. If profiles exist, people can be discovered and invited to contribute. If profiles don’t exist, potential contributors are unlikely to be found.
- **Why are Profiles Needed?** In some organisations the role you play is transitioning away from a strict job description to a broad mandate to contribute, be collaborative, and assist where that makes sense across a variety of projects. You are hired for domain knowledge plus competence to collaborate. In this new world of work, a profile becomes an essential tool so you can be found by others looking for the right expertise, and equally so that you can signal the type of projects and activities you have the competence and interest to participate in. If it’s not stated, it’s not knowable by others.

- **Four Levels of Data.** An employee profile has four levels of data (see Figure 5-1): who they are in the system, who they are as a person, who they are by the activities and tasks they have engaged with, and who they are in relation to other people in the firm. Some of these levels can be automatically generated by the system, or can be automatically included by linking with other systems. Employees should never have to manually enter any information that is already known to be correct from other systems.

Figure 5-1. Four Levels of Data

	Description	Source of Data	Examples
Level 1 System Details	Name and contact details for the employee	Active Directory HR System Other databases	First Name Last Name Email address Phone number Mobile phone number Skype for Business name
Level 2 About the Employee	A written introduction to the person	The employee	Educational background Career aspirations
Level 3 What the Employee Does	Contributions the employee makes	Project management system Collaboration platform Document management system	Projects involved with Documents authored Presentations given Committee membership Group membership
Level 4 Network Connectedness	The other people within the firm with whom the employee is connected	Explicit following action Explicitly adding the people as a network contact Implicit determination of likeness or relatedness Endorsements from other people on value gained	Employee's manager Employee's direct reports Network members People who do similar work

Data in an employee's profile is made up of different levels and sourced from different places.

- **The 99% Challenge.** The 1% challenge of an employee profile is getting an employee to fill in the details about themselves for the first time, with the bulk of the focus on the second level of data (see Figure 5-1). While this initial contribution is important, it pales to insignificance to the 99% challenge of keeping the profile up to date. Newer employee profiling systems push this 99% challenge

toward the automated end of the scale, and in principle, no employee should ever be asked to manually fill in details about events or happenings that can be authoritatively established based on activity in the organisation's systems.

- **Data About What the Employee Does.** People spend much of their work day using computers and organisational systems: they send and receive email, they write and read documents, they search for pages on the intranet, they schedule and attend meetings, and in some industries they bill time to specific projects. The summary detail on these actions can in many cases be automatically appended to an employee's profile, making up the third level of data (What the Employee Does). For example, if an employee is billing their time to a project, once it is over a certain number of hours it is highly likely the employee is involved in the project, and therefore the project can be stated on the employee's profile.
- **Up-to-Date Profiles for Inclusion in Proposals.** When submitting a proposal for work to a client, organisations are often required to include the names and profiles of the specific employees who will be completing the work. The client wants to know the organisation has the expertise available and that the specifically named people will be dedicated to the project. Having a means of automatically keeping employee profiles up to date and immediately available for use in proposals is one example of where employee profiles make business sense.
- **The "Best" Person Versus the "Good Enough" Person.** For many of the tasks or questions that arise in day-to-day organisational life, being able to get quick access to a "good enough" person is sufficient. The difference between "best" and "good enough," if only evaluated on the basis of content knowledge, will lead to dissatisfaction if the "best" person is busy or otherwise unavailable. A "good enough" person becomes the "best" person for a task or question when other factors are included in the equation—such as availability and the penchant for sharing. Linking employee profiles with internal systems that show presence and availability along with methods of real-time communication—such as Skype for Business—help with identifying the best person, right here, right now.
- **The Profile as Message.** All vendors that offer employee profiles are going to keep fiddling with the capabilities on offer, and Microsoft is no different. At some point in the future your profile will be fully integrated across all the systems you use and will probably take feed streams from your wearable devices too. All of this will give colleagues and managers the tools they need to choose the right person for a particular job. Regardless of your vendor's moves, however, your profile should be something you are proud of, as a description of your contribution, hard work, smart work, wild success, and biggest learnings. If you're not happy with what it says, the profile is merely the message. The transformation thereof, as they say, is up to you.

While there are degrees of declaration in common practice today—and even location on the declaration continuum will appeal to some and turn others off—saying something about who you are and the value you bring to the table is helpful.

Research Findings

Profiling employee expertise has been an area of focus for a few decades. Let's look at the research findings:

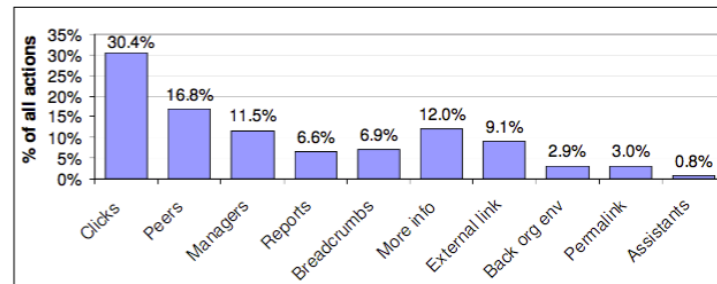
- **Mandating Participation Fails.** In the mid-to-late 1990s knowledge yellow pages databases were frequently developed at firms with tens or hundreds of office/business locations around the world, as well as thousands or tens of thousands of employees. The purpose of a knowledge yellow pages system was to highlight expertise and make it possible to find the right person to speak to about a particular matter. The major problem with such databases was getting people to fill out their profiles. For example, BP, a petroleum giant with thousands of locations around the world, developed a knowledge yellow pages system to help employees locate expertise. In year 1, only 12% of staff had volunteered their information. Similarly, when Pratt-Whitney Rocketdyne, a manufacturer of high-performance rocket engines, implemented a knowledge yellow pages system in the late 1990s, by 2006 only 25% of scientists had filled out their profile. Making participation mandatory usually backfired. People ignored the mandate, especially when there were no consequences. Or they only participated at the minimum level—putting in as little information as possible, or obfuscating their expertise and ignoring demands for keeping the system up to date.
- **Getting “Extra Work” If Located?** One roadblock to the effective use of employee profiles is that experts in the organisation may not want to be found because of the extra requests for assistance they will receive. After creating an internal expertise system, one large organisation found that having ways for experts to share their knowledge through non-real-time methods mitigated this challenge: *“Once we gave Contributors the choice about how to share their knowledge and experience, we found that they were more likely to contribute using these social options, since they realised that the result would be fewer emails, IMs and phone calls asking for their basic expertise. Once Seekers find an expert via Profiles, they are able to consume some of their knowledge and expertise without disrupting them. The nature of the remaining email/IM/ phone requests from Seekers were about their deeper experience, their knowledge that will always remain tacit. In effect, Contributors sharing their more ‘basic’ expertise online enabled Seekers to accelerate whatever collaboration they further required from Contributors.”*³
- **Employees Need Control over their Profiles.** Organisations already have a raft of internal systems that communicate information about employees from the organisational point-of-view: they define the employee in terms of how the organisation sees them. Long-time industry analyst Mike Gotta advocates that employees should be enabled and encouraged to use their profile (in systems like Office 365) to communicate their own identity—who they are and the value they bring to the organisation in personal terms.⁴

Once Seekers find an expert via Profiles, they are able to consume some of their knowledge and expertise without disrupting them.

- **Searching for Expertise or Searching for People.** In a review of research on people search, the authors differentiated searching for expertise and for people.⁵ A search for expertise is generally based on using a topic in the search construct. Where a topic is not included, the search is usually directly for a person. Motivations included: *"... look[ing] up the details of an individual with whom they have a meeting or correspond with on email or instant messaging explor[ing] the organizational unit or management chain of a complete stranger whose name they heard during a call look[ing] up a specific detail, such as the phone, email, or office location of a person they already know. In some cases, employees may only have partial information about the person they want to find: Alice whose last name starts with an 'H', Bob who works in Dublin, or someone whose last name is Johnson and works in the Research division."* In their subsequent research project, the researchers found that a high proportion of searches were for people already known, which suggests they wanted an update on the known individual, their place in the organisation, their contact details, and perhaps a snapshot of recent activity.
- **High Interest in the Organisational Environment.** Once a person is located in a people search application, searchers have a high interest in the organisational environment around that person. In the above study, just under 35% of overall clicks after finding a profile of interest were related to this, with 16.8% clicking for information on peers, 11.5% on managers, and 6.6% on direct report information.⁶ Other information was searched too, including breadcrumb navigation, external links, and more. See Figure 5-2.

Once a person is located in a people search application, searchers have a high interest in the organisational environment around that person.

Figure 5-2. Actions After Finding a Profile



People searching for other people have a high interest in their place in the organisation—their peers, manager, and any direct reports.

- **Three Levels of Expertise.** In my book *Collaboration Roadmap*, I differentiate between three levels of expertise: declared, deduced, and discerned.⁷ Here's the difference:

At the most basic level, expertise is asserted by an individual. "I'm good at Widget fabrication processes," is an assertion that Julian might make about his expertise. But without evidence to back it up, his current colleagues—not to mention people inside his organisation who don't know him yet—have no way of evaluating whether it's true or not. Asserted (or declared expertise) requires self-knowledge for accuracy, and making the assertion and keeping the assertions up to date is an activity that is separated from real work. This is one of the main reasons why traditional expertise profiling systems have failed in organisations.

There is a second level to expertise that mitigates some of these weaknesses: expertise that is deduced by a technology system based on the day-to-day activities of an individual. What the person reads can indicate an interest in a topic—and therefore point in the direction of expertise. What a person writes in a document or on a wiki goes further, since they are contributing expertise to a particular topic. The same applies for their email messages and contributions to discussion threads in team and group conversations. The major benefit of deduced expertise over declared expertise is that evidence is available to back up the expertise labels, because in order to achieve expertise, you have to live it. If we return to Julian, if the system notices that he frequently contributes to discussions and current thinking about Widget fabrication processes, that label will be automatically associated with him.

The third-and-final level is discerned expertise, which means that someone else has recognised expertise in another person and has stated it in a way that other people can benefit from. At this third level, expertise has been previously "consumed" by another individual—they have received benefit from it, and their recommendation to others seeking similar expertise is to talk with the same person. Thinking about Julian again, if Sue had read one of Julian's blog posts about Widget fabrication processes and had then spoken with him about a process issue she was experiencing that he was able to clear up, Sue would freely tell others that Julian was the person to speak to about "Widget fabrication processes."

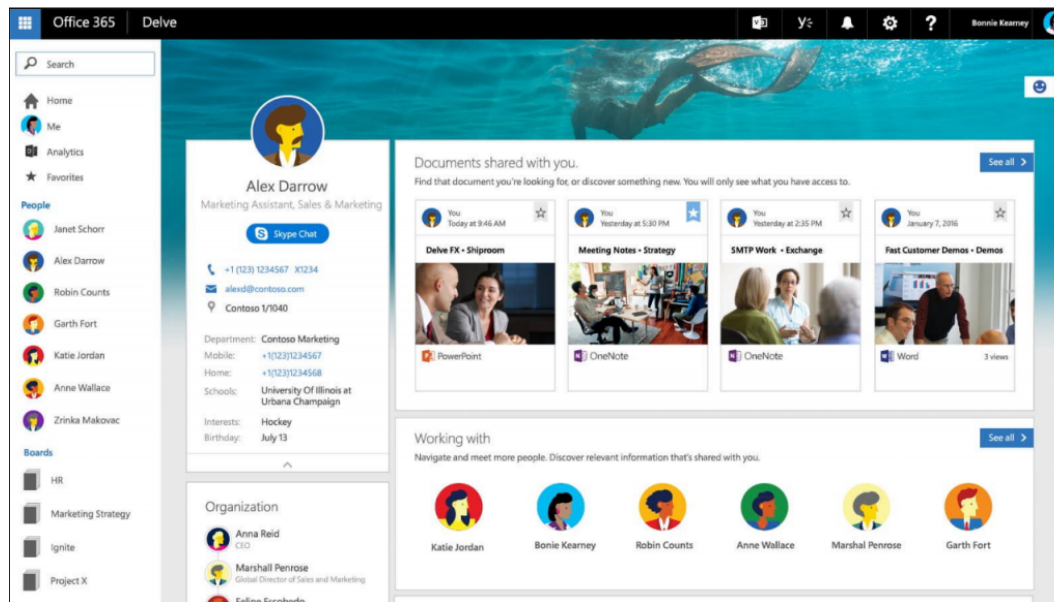
- **If My Expertise is Correctly Ascertained (Deduced), Expertise for Others Is Likely to Be Too.** In 2012, HP published the results of an internal research project that had looked at how to automatically ascertain experts and expertise based on the analysis of work products generated through daily activities.⁸ Work products were analysed using semantic analysis to automatically generate a taxonomy of expertise descriptors and to identify similar documents. In sharing the results of the analysis at an internal conference, the researchers found that if people thought the system correctly deduced their own areas of expertise, and if they also thought the other people who were recommended as similar or relevant was about right, they would have confidence in the expertise recommendations for people they did not already know.

Office 365 Capability

Office 365 offers a range of capabilities to support the profiling of employee expertise, including an internal public facing profile, links to activities, and machine learning–powered connectedness. Let's look at what's on offer:

- **Delve Profile.** The key profile in Office 365 for an individual is in Delve (see Figure 5-3). Delve is a multi-functional element in Office 365—powered by the Office Graph—that creates connections between people, their content, and other people and their content, and also provides a visually attractive profile for individuals. Delve is constantly scanning the activities and happenings across Office 365 to identify patterns, find content similarities, and suggest content and people connections based on relatedness.

Figure 5-3. Delve Profile



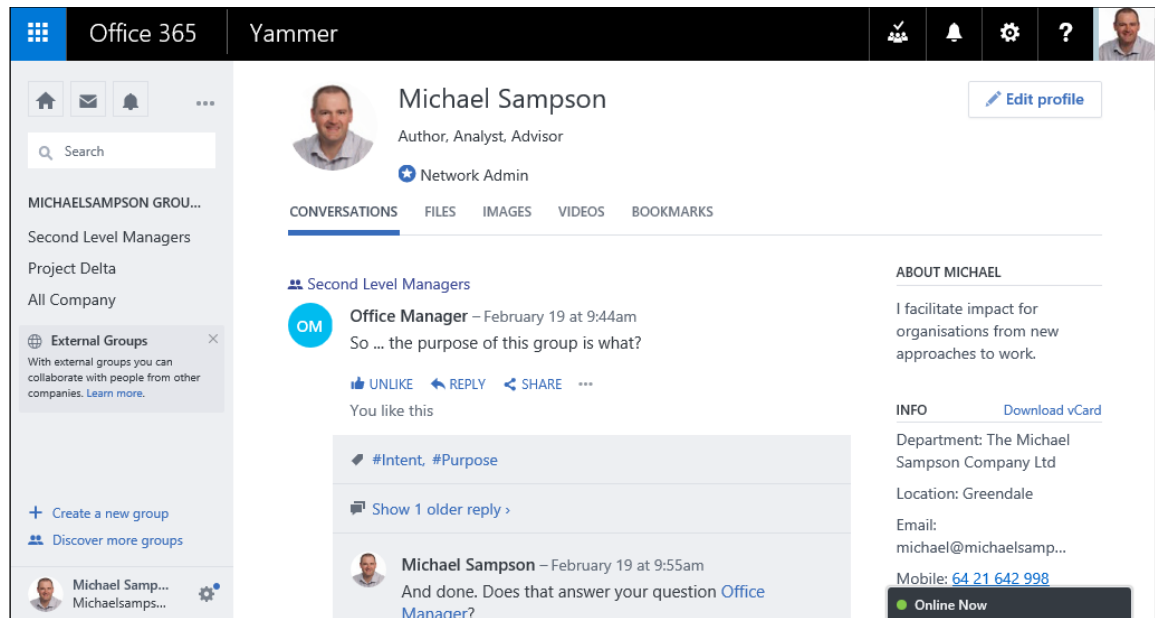
One of the capabilities of Delve is the employee profile—a place for seeing contact information, details, and recent activities for employees across the organisation. There is also a place for a photo of the individual to aid recognition in the real world.

- **Delve Contact Details Are From SharePoint.** Editing your profile from Delve opens a profile page in SharePoint, which allows the user to edit specific fields about themselves. There are capabilities in Office 365 for IT and human resources departments to set up automatic rules for populating some of the profile fields and to disallow editing of others. Note that even if Yammer is the default social network for your organisation, editing your profile in Delve still goes to the SharePoint profile, not the Yammer one.
- **Highlights Recent Activity.** Each user's profile shows their recent activity across Office 365, with the proviso that the individual looking at the profile has the right to at least read the specific content item. Content items an individual is not permitted to see are not displayed in the recent documents area. Since content items come from across Office 365, what's displayed is a snapshot of a broad range of activity across the board rather than being limited to one Office 365 tool. The individual looking at the profile can click to see a longer listing of recent documents, and this longer view includes the ability to focus on specific types of Office files (for example, show just Word documents, or Excel spreadsheets) in order to help findability.
- **Most Roads Lead to the Delve Profile.** With the exception of Yammer, all profile roads across Office 365 lead to the Delve profile. Clicking an individual's name anywhere in Office 365 links to their Delve profile. For example, clicking the profile link in the hover-over business card for a name in Outlook Online opens the user's Delve profile. Choosing About Me under your own photo at the top right of the Office 365 screen links to your own Delve profile.
- **Delve Activity is Based on Discrete Items, Not Summarised Themes.** The recent activity displayed in a Delve profile links to discrete content items—for example, a page in OneNote, a Word document, or an Excel spreadsheet. Even the means of refining the content items shown are based on file type. While this allows someone to see the discrete content items another employee has recently authored or edited, there is no sense of the overall themes conveyed through the collection of content items.
- **Profile as the Launching Board for Interaction.** A recent update to the Delve Profile added live contact details.⁹ Through integration with Skype for Business, a visitor to a profile can click to start a Skype chat, and once in Skype, to escalate to a voice or video call, or to add other people into the chat / call / video meeting. The user's email address is displayed, and phone numbers and other details can also be shown. There is a link on the profile for accessing their OneDrive for Business folder, and what's displayed are the files and documents shared specifically with the visitor to the profile. This provides an easy way of getting access to shared files and documents.

Each user's profile shows their recent activity across Office 365, with the proviso that the individual looking at the profile has the right to at least read the specific content item.

- **Yammer Profile.** The Yammer service in Office 365 has its own profile capability; it is completely different to the Delve profile (see Figure 5-4). Clicking a user's photo in Yammer opens their Yammer profile, not the Delve one. This redundancy may be resolved in future releases of Office 365, but at least at the moment, there are two separate profiles in Office 365 assuming Yammer is used as a component of the Office 365 service.

Figure 5-4. Yammer Profile




Yammer offers a native profile capability for Yammer users, showing only Yammer-specific information in the profile. Activity across files, images, videos, and links are Yammer-specific, not Office 365 general.


- **Recent Activity, Contact Information, and More.** The Yammer profile displays recent conversations, files, images, and videos, among other types of content, as long as the content is within Yammer. It also displays contact information for the individual, the groups and external networks they belong to, the people they are following and being followed by on Yammer, and any tags they are following. It gives a quick visual snapshot of the work and place of the individual within the firm from the perspective of Yammer.


Roadmap Intent


Let's review some of the key intentions on Microsoft's roadmap relating to profiling employee expertise in Office 365:


 **Machine Learning for Ask Me About.** In one of the updates to the Delve profile during 2015, the Ask Me About section was removed. This was previously a place where the profile owner could declare or assert their expertise—very much a first level approach to expertise. When asked about the removal of the section, this answer was given: *"This was removed by design. Microsoft is working on a new machine learning–driven component to help showcase ideas and projects users are actively working on."* Once delivered, this will move the Delve Profile clearly into the second level of expertise and perhaps lay the foundation for third level recognition.¹⁰

Microsoft is working on a new machine learning–driven component to help showcase ideas and projects users are actively working on.

 **Delve Analytics—For Expertise Too?** Microsoft is working on Delve Analytics, a capability that analyses user behaviour in Office 365 in comparison to co-workers and other employees across an organisation, providing a dashboard of reports and comparative data tailored for the individual. In its initial release, expected capabilities include use of time, relationships, and email effectiveness. This analytics foundation could be extended in the future to provide more prescriptive guidance for individuals around expertise, such as links to key experts related to an individual's current work.

 **Adding More Office 365 Activity Signals to Delve.** The list of services across Office 365 that feed activity signals to Delve will increase, with support for Yammer activity signals currently rolling out and signals from Office 365 Groups coming. The integration of Office 365 Groups will also mean that Delve will recommend relevant groups based on the intersection between a user's activity and a group's activities.

 **Adding Activity Signals from Beyond Office 365?** While Office 365 is a rich source of content activity which can be mined for expertise, it's not the only system in use. In its initial release, the Microsoft Graph is a developer toolset for accessing the Office Graph (the foundation of Delve) and Office 365 services. It is possible that a future release will support feeding activity signals from beyond Office 365 into the Office Graph to be displayed in Delve.¹¹ If so, expertise profiles can be built based on wider data sources.

 **Yammer Profile Populated from Azure AD.** While the Yammer profile will remain as a separate entity for Yammer users, Microsoft plans on providing a method for updating key user attributes from Azure AD. This means that any changes to attributes in Azure AD can be pushed to both the Delve and Yammer profiles, decreasing the likelihood of diverging data attributes and removing the need for individuals to keep key Yammer profile attributes manually up to date.

Analysis and Evaluation

We have looked at what's on offer from Microsoft in Office 365 for profiling employee expertise. Let's consider the pros and cons (and a thought or two):

- ☑ **Rationalisation of Profiles.** Microsoft has made good progress with streamlining the profile capability in Office 365, in particular with de-emphasising the profile information that was traditionally stored in the SharePoint newsfeed. The new Delve profile is visually appealing and for organisations not using Yammer, it's the only profile that people will see. At some point in the future it would be good to see a similarly appealing profile editing screen for individuals, getting rid of the current method using the older SharePoint interface.
- ☑ **Who, What, How.** The new Delve profile quickly answers three questions: who is this person, what have they been working on, and how do I get in contact with them. The who question is answered through the brief summary and organisational structure information, the what through the recent documents area, and how via the various communication channels presented to the individual viewing the profile. Anyone inside an organisation can quickly gauge the potential collaboration value of co-workers and colleagues.
- ☑ **More Than Just a Pretty Corporate Phone Directory.** Phone directories have been a mainstay on the corporate intranet for many years, and rightly so—looking up contact details for a colleague is a daily task for most people. Microsoft's work on Delve includes these contact details in a visually attractive way in Office 365 while adding rich layers of additional insight about the work done by that individual. It meets one of the core needs of today's worker while extending it into additional territory.
- ☑ **Signals for More Contributions on a Topic.** Microsoft is adding File Analytics, a report on how other people use your documents and files. This tracks the overall number of views of a given document over time and counts the individuals who were accessing the document. Microsoft's intent is to add tracking for likes and shares too, additional social constructs that give insight into reach and impact. For an individual, these analytics can signal the content areas in which other people are relying on their expertise, and therefore act as an encouragement to do deeper work or keep a frequently referenced document more up to date. Expertise is a two-way street: what you have to offer, in parallel with what others find of value. File Analytics is a helpful signal for the latter, which can help shape the former over time.

The new Delve profile quickly answers three questions: who is this person, what have they been working on, and how do I get in contact with them.

- ✖ **Delve Profile and Yammer Profile.** Having two distinct and non-integrated profiles in Office 365 is poor design. Yammer was purchased in mid-2012, which is almost four years ago. That's a long time in enterprise software development and an eternity in cloud software development. The promise of software development agility in the cloud is not being met here; unless Yammer is non-strategic in the future roadmap of Office 365, the two profiles should become one as soon as possible.
- ✖ **On the Yammer Profile (Redux).** Having a separate Yammer profile allows an organisation to embrace Yammer in a standalone fashion without the rest of the Office 365 suite; that's a valid reason. However, for organisations that embrace both, there should be integration between the two profiles. By all means the Yammer profile could be retained for standalone use, but organisations using the whole Office 365 suite should have only one profile per individual.
- ✖ **Aggregated Activity, Not Deduced Expertise.** An individual's Delve Profile is an aggregated view of their recent activity based on discrete content items, but there is no attempt made within Office 365 to present a synthesised view of the expertise of the individual. For example, if most of the discrete content items are on a particular topic, the reader of the profile is not given a list of topics that they could engage with the employee on. The reader has to deduce that for themselves after reading the profile, which is time-consuming on a person-by-person basis and likewise makes it impossible for Office 365 to provide a browsable list of employees based on deduced expertise. This has negative implications for individuals and organisations.

Yammer was purchased in mid-2012, which is almost four years ago. That's a long time in enterprise software development and an eternity in cloud software development.

Finally, here's a couple of "wouldn't it be cool if" ideas:

- * **Brokered Access to an Expert.** Locating an expert, seeing who they are, and reading their contact details doesn't give any sense of the best way to engage them. If you don't know the person, they're multiple levels up the organisation, or work out of a far-flung office, how does the expertise seeker engage best? Wouldn't it be cool if the Office Graph could suggest a connectivity pathway through mutually known colleagues, involvement in a particular Yammer group, or through brokered access to the expert.
- * **Automated Suggestions on Content.** People with expertise to offer have generally created many artifacts that contain and convey their expertise. Wouldn't it be cool if after finding an expert on Delve, the expertise seeker could ask the expert a question that was first run through the Office Graph. They could be pointed in the direction of key content contributions that address the specific question, or if there is nothing available, either re-direct the expertise seeker somewhere else or then accept the query for the expert.

What Firms Are Doing

It is early days for organisations using Office 365 to profile employee expertise, especially with the Delve profile being so new. Here is one example of a firm using Office 365 and another of a firm using a similar tool from a different vendor. Both case studies focus on the benefit of having easy access to expertise among employees:

- **AIA Group (14,000 employees).** AIA Group, an insurance firm with 14,000 employees in 18 markets across Asia Pacific, moved to Office 365. With employees from many countries, the language translations capabilities have been particularly useful. AIA Group has also seen benefits in connecting expertise across the firm. *“Team members use Yammer to announce enhancements to the company actuarial software and share best practices with their colleagues, raising the overall knowledge capital of the company. And onboarding the yearly influx of actuarial interns is a much smoother process now that they use Wave to get answers and ramp up quickly—a win for the interns and AIA in terms of immediate productivity gains. Marketing teams in different countries spark new ideas by showcasing their best campaigns on Microsoft SharePoint Online and OneDrive for Business. And the PR and marketing teams use Skype for Business Online meetings to broadcast product-launch details to marketing managers in various markets across Asia.”*¹²
- **PricewaterhouseCoopers (180,000 employees).** PricewaterhouseCoopers (PwC) implemented a modern collaboration tool to enable new ways of working across its 180,000 employees. With respect to profiling expertise, the PwC leader for Global Knowledge reports: *“... [on one] occasion I was contacted at 11 at night by a person in Brazil who had noticed that I had some expertise in turning around failing housing projects in London. The PwC colleague – whom I did not know – was going into a client the following morning on a similar project and needed help. Because it was a person-to-person interaction it fitted our culture for me to talk for an hour at night telling him everything I knew about an arcane subject. PwC by its own nature is a fantastic knowledge-sharing organisation that depends on person-to-person connections. We swap knowledge on a one-to-one personal basis at the drop of a hat.”*¹³ There is a second example too: *“Colleagues in Germany were looking for two weeks for someone with a particular software skill set who could speak German but could find no one. Spark had not yet been rolled out in Germany due to concerns from the Work Councils there. So in the end they phoned an English manager to put the question on the network. Within 20 minutes he had 5 people from the US come back who had the requisite skills and spoke German. The Germans were amazed and that helped to push the business to launch Spark in that territory.”*

Onboarding the yearly influx of actuarial interns is a much smoother process now that they use Wave to get answers and ramp up quickly—a win for the interns and AIA in terms of immediate productivity gains.

Behavioural Aspects

Having good technology on offer to support the profiling of employee expertise is a good step. Add to the mix the right balance of behavioural aspects, and you have a situation ripe for benefit:

- ★ **Identity Information Needs to Be Well-Managed.** Information about an employee's identity needs to be well-managed if expertise profiling is going to work. This means having authoritative data sources which internal directories interrogate for the latest information, with the HR system usually being key here. Firms need an agreed process for keeping data attributes up-to-date.
- ★ **Define the Profile Baseline.** It is useful to have a minimum standard for profile information, modelled by senior executives, and for this to become an accepted way of working at your organisation. While people should feel free to include more details in their profile, there are at least four items which should be included in your minimum standard: an up-to-date professional photo¹⁴, a contact phone number, the geographical location in which the person usually works (which signals time zone details), and a job title. Note that while this guidance is generally applicable, managers must ensure that enforcing any profile information—especially a photo which can lead to charges of discrimination—is in line with corporate guidance on data privacy compliance (which differs by geography). If Skype for Business is a part of the Office 365 plan being used at your firm, a couple of these items are handled even better with Skype: a Skype contact name instead of a contact phone number, and a presence and availability indicator to show availability independent of normal geographical location.
- ★ **Senior Executive Modelling.** If your senior executives want Office 365 to succeed, they should model the behaviours they seek from others. Their own profiles should be up to date with more than the minimum amount of information. Executives should be active in using Office 365 for day-to-day work. They should emphasise to their direct reports the importance of creating a viable place for collaboration in Office 365. While executive involvement isn't a silver bullet for success with Office 365, few organisations succeed in the face of active executive resistance.
- ★ **Don't Ask for Dumb Data.** Employees should not have to fill in "dumb data," which is data that is already authoritatively stored and known from other systems. First name, last name, email address, phone numbers, office location, manager, assistant, and similar data should not be requested from employees when filling in their profile; those details are well-known and should be auto-populated. In some cases an employee will need to correct the data (which should be done in the kingpin system and then flow through), or an employee may not want particular data broadcast across the entire firm. In the latter case, having the ability to add security permissions to data elements is a useful system capability.

On Privacy and Employee Profiles

In this chapter we have looked at the potential benefits of having access to a comprehensive set of profiles about employees. However, these rosy ideals have downsides, and what sounds appealing to some people can smack of personal privacy issues to others, especially for European and Asian employees.

- **Europe.** Personally identifiable information is protected under data protection directives (they are not laws as such, so individual member states have some latitude in implementation). The European Commission has been working in recent years to align data protection rules across European Union member states. Some countries—such as France and Germany—add additional privacy requirements.
- **Asia.** Hong Kong, India, and Taiwan, among other Asian countries, have revised privacy laws in recent years. While consumer privacy is a big focus in these, they set an increasing standard for privacy of employee information.

What is involved in appropriately and adequately addressing privacy issues? Let us look at this from two angles—the business essentials and the technology essentials. Please note that these two pages are not intended to be a comprehensive treatment of privacy considerations in collaboration systems.¹⁵

The Business Essentials

The first essential prescription is to get your HR and legal departments involved early in the process. Outside of whatever happens with Office 365, part of their remit should be to keep abreast of privacy regulations in the different countries in which your organisation operates, and the translation of those regulations into appropriate policies and procedures for your organisation. Note, however, that given the complexities of these issues, your in-house legal department may find it best to engage an external legal firm with a cross-border specialisation in data privacy. Clearly your legal department will work with other parts of the organisation to implement these policies and procedures, but they have a driving role to play. It makes an impressive statement about an organisation when legal and privacy issues of new collaboration approaches and tools have been integrated from the beginning, not treated as a nearly-forgotten afterthought.

The second prescription is to involve a representative group of employees in the planning activities and discussions leading up to the introduction of Office 365. In many European countries, employees have a legal right to their private information and take such rights very seriously. Various other countries have similar legal frameworks in place, but irrespective of what is stated at law, to encourage the principle of collaboration inside an organisation you need to live the ideals of collaboration. Transparency, openness, and shared decision rights do

not merely come into being because an organisation implements new technology. Those ideals should be evidenced in an organisation's culture long before they get a new expression in Office 365.

Thirdly—and your legal department will be able to give specific guidance in this area—you may need to involve external bodies in exploring the impact of new collaboration approaches and tools. There are subtle but complex differences between European countries, so it is vital to get appropriate advice for each country. Don't leave this unaddressed or neglect to deal with it. Find out what is required and do it.

Finally, data privacy in the United States is very different from Europe. If you will be sharing profile data of European employees with offices in the United States, you must ensure that the legal implications of doing so have been thoroughly addressed.

The Technology Essentials

In terms of specific implications at a technology level with Office 365, the following strategies are likely to be required:

- **Encrypting Data on Mobile Devices.** Employees accessing Office 365 from a mobile device should be storing all data in encrypted form. This protects employees' privacy, not to mention organisational intellectual property, in the situation where a device is lost or stolen. If data from Office 365 is being stored on thumb drives, these too should be encrypted.
- **Wiping Data Remotely on Lost or Stolen Mobile Devices.** Mobile devices, including smartphones, tablets, and laptops, are frequently misplaced, lost, or stolen. In addition to the data being stored in an encrypted format, your IT department should have the ability to remotely wipe private and organisational data.
- **Storing Data on Cloud Services with Due Consideration.** Office 365 is by definition a cloud service. There are various considerations to be worked through from a privacy perspective when evaluating Office 365, such as where the data is actually stored—because this can entail a form of exporting data overseas.

In Conclusion

Privacy considerations will not derail your project or make it impossible to proceed unless you go about it the wrong way. Your employees have a moral and legal right to their privacy, so running roughshod over privacy is a recipe for disaster. Get legal guidance about what is required. Model transparency, openness, and other collaborative behaviours throughout the planning process and put in place the necessary frameworks.

On Improving Performance

Having access to up-to-date expertise profiles on employees confers a number of benefits for organisations, including:

- **Cheaper.** Organisations without a way of profiling current employee expertise often fall into the trap of hiring a new employee to address an expertise gap, not realising they already have such an expert on staff. This causes delays to project and product timelines and incurs significant expense for locating and selecting the right candidate, not to mention the ongoing salary and overhead costs of hiring someone who may not actually have been required.
- **More Efficient.** Work activities that would take a non-expert weeks to complete may be completed within hours by an expert. The expert has already invested the long and hard work of building a mental framework to guide decision making in a domain and can see pitfalls that less well-trained people will blindly fall into. Being able to quickly identify those people who have the ability to significantly reduce elapsed time is very efficient for organisations. There are, of course, strategic issues to consider around expertise sustainability and expertise succession planning over the long term, but at a transactional level, clearly identifying the right expert is more efficient than not being able to do so.
- **More Effective.** Identifying and including the right expert or experts in a project or initiative is more effective than not knowing who to call on. Experts have experience in a field that allows them to quickly see solutions to problems and problems with those solutions, often based on hard-won learnings over many years. Getting their viewpoint, input, and advice can help improve quality, reduce confusion, and create value quickly.
- **More Effective—Really?** Involving experts can lead to greater effectiveness, but of course the alternative can also be true: experts who are so tied to a particular approach can fail to see new possibilities based on new technologies, changed environmental conditions, and the involvement of people who are motivated differently from the people who were involved in earlier failed attempts. If the latter is true, it's often best to exclude those who say it can't be done.

Work activities that would take a non-expert weeks to complete may be completed within hours by an expert.

With some provisos, having access to up-to-date expertise profiles improves performance by making processes cheaper, more efficient, and more effective.

Summary

Employee profiles offer a way of understanding the people across your organisation, even those whom you have not met yet. This is useful in many situations, such as enabling someone to find a colleague with expertise in a particular topic, providing up-to-date employee profile information for client proposals, and identifying people with similar work interests. In this chapter we have looked the big idea of employee profiles for expertise, reviewed the research data, and evaluated the capabilities on offer in Office 365. Having a solid base of employee profiles available in the organisation provides the foundation for finding expertise, an advanced topic of interest in many organisations.

In the next chapter we turn our attention to the opportunity available from real-time collaboration on content, including documents, presentations, spreadsheets, and other content forms. Office 365 provides capabilities in many of these areas, and we look at what is on offer.

Employee profiles offer a way of understanding the people across your organisation, even those whom you have not met yet.

¹ The quote I initially had for this chapter was the innocent-sounding “What do you do?,” but when I googled the phrase I found Joshua and Ryan’s blog post on the same. What they wrote about that question, and how to rephrase it resonated with me, so I joyfully took away the initial quote (that I was never 100% pleased with) and have used their rephrasing instead. See *Life’s Most Dangerous Question: What Do You Do?* at www.theminimalists.com/do/.

² The hit movie *Ghostbusters* from 1984 used this question and its answer (“Ghostbusters!”) in the theme song. Listen at www.youtube.com/watch?v=m9We2XsVZfc.

³ Gia Lyons, *SharePoint My Sites: It ain’t just about profiles, people*, December 2007. See www.giatalks.com/2007/12/sharepoint-my-sites-it-aint-just-about-profiles-people/.

⁴ Elizabeth Lupfer, *Employee Profiles: It’s Not Just the ‘What’ You Are, But the ‘Who’*, *The Social Workplace*, October 2010, at www.thesocialworkplace.com/2010/10/employee-profiles-its-not-just-the-what-you-are-but-the-who/.

⁵ Ido Guy, et al., *Best Faces Forward: A Large-scale Study of People Search in the Enterprise*, CHI’12, May 2012, at www.research.ibm.com/haifa/dept/imt/papers/guyCHI12.pdf.

⁶ Ido Guy, et al., *Best Faces Forward: A Large-scale Study of People Search in the Enterprise*, CHI’12, May 2012, page 8, at www.research.ibm.com/haifa/dept/imt/papers/guyCHI12.pdf.

⁷ Michael Sampson, *Collaboration Roadmap: You’ve Got the Technology—Now What?*, 2011, at michaelsampson.net/collaborationroadmap/.

⁸ Omer Barkol, et al., *Enterprise Collective: Connecting People via Content*, Hewlett-Packard Development Company, May 2012, at www.hpl.hp.com/techreports/2012/HPL-2012-102.pdf.

⁹ Nick Robinson, *Updated people profile experience coming soon to Office 365*, *Office Blogs*, February 2016, at <https://blogs.office.com/2016/02/16/updated-people-profile-experience-coming-soon-to-office-365/>.

¹⁰ Mark Kashman, *New Office Delve People Experiences in Office 365*, *Office Blogs*, April 2015, at blogs.office.com/2015/04/14/new-office-delve-people-experiences-in-office-365/. Note that the blog post was updated in September 2015 to include the quoted answer.

¹¹ Rob Lefferts, *Today at Connect()—introducing the Microsoft Graph*, *Office Blogs*, November 2015, at blogs.office.com/2015/11/18/today-at-connect-introducing-the-microsoft-graph/.

¹² Microsoft, *AIA Group*, *Microsoft Customer Stories*, January 2016, at customers.microsoft.com/Pages/CustomerStory.aspx?recid=25256.

¹³ Marc Wright, *Sparks of collaboration at PwC*, *Simply Communicate*, 2013, at www.simply-communicate.com/case-studies/company-profile/sparks-collaboration-pwc.

¹⁴ In a few cases an employee may be unwilling to have a photo included with their profile. Reasons include fear of stalkers, privacy and discrimination concerns, or a personal abhorrence of having their photo taken. See *Say ‘Cheese’: Pros and Cons of Using Employee Profiles*, March 2011, at www.welterlaw.com/assets/say-cheese.pdf.

¹⁵ For another brief but complementary view of data privacy legislation in the European Union, see Martin White’s research note from May 2012—*Legal Issues for Intranet Managers*. www.intranetfocus.com/wp-content/uploads/Legal-issues-for-Intranet-Managers1.pdf

Chapter 6.

Co-Authoring Documents

Documents are an integral part of every business and institution, and organisations that cannot manage the production of documents effectively and efficiently risk a great deal more than poor business performance. Today, employees spend up to 25 per cent of their working day on non-productive, document collaboration related tasks.¹

Butler Group

Working on documents, spreadsheets, presentations, and other forms of content is a very common work activity for people in organisations today. From monthly reports, business plans, annual budgets, sales pitches, invoices, market share analyses, and many more, the world is awash in documents. When multiple people are involved in crafting documents (using that term broadly), there are much better ways than using email to distribute the document.

In this chapter, we will:

1. Look at the problems of co-authoring by email and the opportunity available with newer approaches.
2. Review the research findings over the years on co-authoring outside of email.
3. Consider and evaluate the capabilities in Office 365 to support co-authoring in Microsoft Word, Excel, PowerPoint, and OneNote.
4. Investigate the use of co-authoring by firms around the world.
5. Probe the behavioural aspects of making co-authoring work in organisations.

The Big Idea

Documents state a position, make an offer, or outline an argument at a particular point in time. Sometimes documents are created by a single individual, but it is more common for documents to contain input from multiple people. Currently, the most common way of working on a document together is by email and attachment—the document (or spreadsheet, or presentation) is drafted by a lead author and sent around for review and input by others. In response to the initial document distribution, the lead author receives an ongoing stream of email messages with new versions of the document—replete with in-document comments and direct edits to the text—and must decide how to integrate these into the overall master document. Document co-authoring by email is an error-prone process. Consider the following examples:

- **Poor Timeliness.** Key reviewers may forget to send their edits back in a timely fashion, holding up the process for everyone. The lead author needs to keep chasing them.
- **Duplicate Comments.** Reviewers may make the same comment as everyone else, but because the input is invisible to everyone but the lead author, there is duplication of effort.
- **Comparing Documents Multiple Times.** The lead author has the nightmare task of comparing multiple versions, and then merging input into the master document.
- **Heightened Risks.** Under tight deadlines, developing a document in this way introduces significant risks—including the possibility of including an old version of one part of the document. The author might miss a more recent version in their inbox. There are also practical problems, such as inconsistent formatting throughout the document.

If document co-authoring is a common activity at your organisation, and an email-enabled approach is the dominant strategy, there are new approaches that can be applied to reduce the problems experienced. In looking at these new approaches, you can sort the differences into two overall categories:

If document co-authoring is a common activity at your organisation, there are new approaches that can be applied to reduce the problems experienced when co-authoring with email.

- **Shared Storage, Single Author at a Time.** Providing a means of shared storage, where the document is stored in a central place that everyone can get to. Note that the approach is limited to permitting only a single person to work on the document at any given time, but still offers tremendous benefits in that the author can see

previous comments without having versioning issues, or having to do an email reply-all to distribute the latest updates. Switching from email to shared storage for document co-authoring can result in process efficiency savings of up to 50%.

- **Shared Storage, Multiple Simultaneous Authors.** Retaining the shared storage concept above, the second approach supports multiple simultaneous authors. This means that more than one person can open the document at a given time and work inside it. As edits are made by one person, everyone else also working on the document (or merely viewing the document) can see those changes in real-time. As Sally types words into a document, spreadsheet, or presentation, Bill, Jim, and other co-authors can see her words appearing on their screen. Multiple simultaneous authoring can result in savings of up to 60% compared to email.

While using email to distribute a document for review and input from others creates numerous problems, there are some affordances in using email that are highly effective. Specifically:

- **Clear Signal for Action.** An email with an attached document sends a clear signal that input is requested from a specific person or group of people at a particular point in time. As long as the email is properly written and the request clearly stated, those receiving the email should be in no doubt that their input is being sought. Whether they choose to act on that request is a separate matter, but the request is clearly stated. When to collaborate can become murky and amorphous when such signals are not clear.
- **Document Available Offline.** With modern email clients supporting local storage of messages and attachments, you can generally get to your email when not connected to a network. This allows people to process their email, write replies, and work on the documents in their email when they are in disconnected mode (e.g., on an airplane), and queue up a list of responses for when they are next connected to the network. It is very frustrating to not be able to access a document for which you only have a link when you finally have an hour or so to work on the document.
- **Content Development is Linked with Conversation.** The developing content is tightly linked with the conversation about the developing document. When Sally asks Bill, Jim, and others to comment on her document, Bill's edits to the document can be seen in conjunction with his email back to the group of reviewers. If Lucy and Sandy are the last to comment on the document, they can read over the email thread and see the general direction the document has moved in thanks to the work of previous authors.

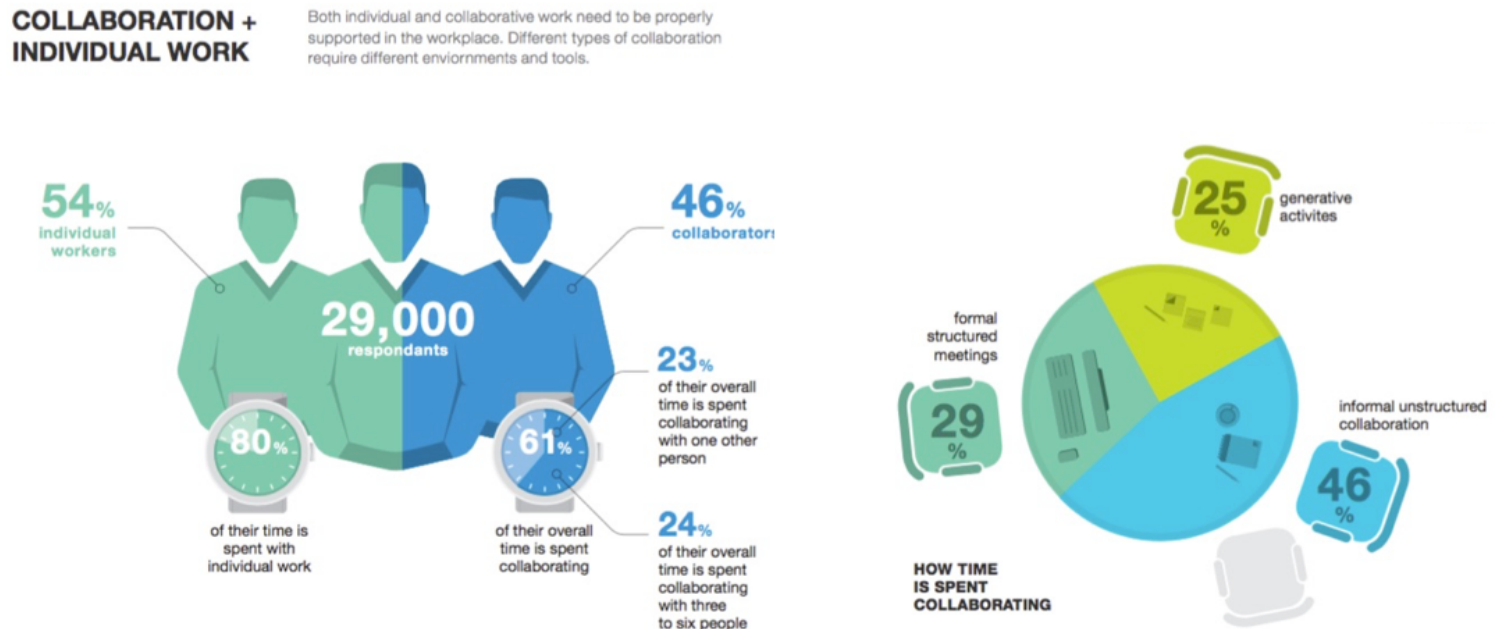
An email with an attached document sends a clear signal that input is requested from a specific person or group of people at a particular point in time.

In summary, the big idea of document co-authoring is to provide a new way for people to work on documents together.

Time Spent Collaborating

In a synthesis of its ongoing research, Steelcase found that just under half of workers spend 60% of their time collaborating; the remaining workers spend 80% of their time on individual work and 20% in collaborative work. The majority of collaboration is done in small group settings, with an emphasis on in-the-flow collaboration rather than formal structured meetings (see Figure 6-1).² Co-authoring of documents fits into the informal unstructured collaboration and generative activities that compose the majority of collaborative work.

Figure 6-1. Collaborating at Work



Half of workers spend the majority of their time collaborating, with informal unstructured collaboration and generative activities a greater part of collaborative work than meetings.

Improving Document Creation

Co-authoring is only one of the tools available for improving the quality of a document. There are other tools too:

- **Templates.** A template provides a standardised structure with consistent section titles, headers, and other document components. A document started from a template allows the author to avoid the struggles that previous authors have experienced in writing a particular style of document and should give a rapid boost into getting a document started. Templates also allow organisations to imprint their style onto documents.
- **Fragments.** Snippets (also called boilerplate in some fields) of a document that have been vetted as technically correct, prose-perfect, and generally applicable. The creator of a document can select fragments to include in a specific part of his or her new document, and the paragraph (or longer) of text will be automatically included. Having access to a fragment library is a great tool for lawyers working on contracts and salespeople developing proposals, among others.³
- **Exemplars.** Best practice examples of what a “great document” or “perfect presentation” look like, gathered or accessible from a common place. Having an exemplar library available provides inspiration, tips and tricks, pointers, and informal teaching. Exemplars show what has been judged to be of high quality in the past (which may or may not work in the future).

These tools have a particular role to play in the initial drafting of a document, with co-authoring having a greater role in the second and third stages of the creation lifecycle (see Figure 6-2). A fragment library can also be a helpful resource in the review stage of the document, if for example, a co-author or reviewer would prefer to replace one fragment with another.

Figure 6-2. Document Creation Lifecycle



Various other tools can be leveraged to improve the quality and timeliness of a document, such as templates, fragments, and exemplars.

Research Findings

Let's look at some of the research findings on new ways to work on documents together:

- **Butler Group on Document Collaboration Inefficiencies (2007).** IT research and advisory firm, The Butler Group, published a report on document collaboration in early 2007. The report argues that documents are an integral part of every business and institution, and organisations that cannot manage the production of documents effectively and efficiently risk a great deal more than poor business performance. The Butler Group estimated that employees spend up to 25 per cent of their working day on non-productive, document collaboration related tasks.⁴
- **PleaseTech on Document Co-Authoring (2010).** In its business case white paper for PleaseReview, its document co-authoring and co-editing solution, PleaseTech shows a number of worked examples from clients where benefits reach a 65% reduction in project duration by using more effective review tools.⁵ This reduction is due to less time spent by staff on each document review, a reduction in review cycles required, and fewer mistakes by staff (such as commenting on the wrong version of a document).
- **Telecom Italia (2010).** Telecom Italia, with 71,000 employees across Italy, Brazil, and Argentina, used the co-authoring capabilities of SharePoint and Office 2010 to streamline the creation of certification documents. These documents required input from multiple people and could span 200 pages per document. The ability for multiple people to work on the document at the same time reduced production time by 10%.⁶
- **BP with Project Andrew (1995).** Organisations have been able to benefit from improved document co-authoring approaches for a couple of decades, with BP noting a significant reduction in cycle time in the mid-1990s: *Another case in which virtual teamworking proved its effectiveness was the Andrew Project, a joint endeavour by BP, Brown and Root (a design and engineering firm based in Houston with an office in Wimbledon), and Trafalgar House (a construction company based in Scotland) to build a new oil platform in the North Sea. Andrew team members took advantage of the application-sharing feature of the [virtual teamworking] clients to write joint memos in just ten or fifteen minutes. These previously involved hours or days of sending drafts back and forth by email.*⁷

PleaseTech shows a number of worked examples from clients where benefits reach a 65% reduction in project duration by using more effective review tools.

Social Dynamics Risk in Early-Stage Collaboration: Conformity Takes Hold

Social scientists report that if group members are told or exposed to what the other people in a group think about an issue, there is a greater likelihood that subsequent people in the group will conform their thinking. This is decision making in light of full prior disclosure. The opposite finding is true too: that conformity decreases when people do not have full insight into what others are thinking.

This principle gives rise to a potential danger in collaborative situations. Let's take document co-authoring as an example. In the first review cycle, what does the author want? I'd argue for high-quality feedback from reviewers, so the document can be improved. In an "attach document to email and distribute it for feedback" approach, because none of the reviewers can see what the others have already said, they have to make an independent decision and give independent feedback. In a more open approach like we are exploring in this chapter, because the feedback of others is accessible in parallel with the original document, we run the risk that subsequent reviewers will reduce the quality of their review.

Potential problems are free riding and decreased feedback:

- **Free Riding.** "Jim has already said kind of what I wanted to say. I won't say anything."
- **Decreased Feedback.** "Sally, Lily and Dave have already agreed with the ethos of the document. I'm not going to say what I really think."

Thus, in general, we have a risk in early-stage open collaboration: that because subsequent people can see what others have already said, they will be less likely to share a diverging opinion.⁸ For a specific group, however, it is going to come down to the trust and interpersonal dynamics of the people involved. If you are confident people will speak their mind, go for open collaboration. If you are unsure, perhaps the first round of reviews should be a less open approach.

In terms of later-stage document co-authoring, where you want convergence on a final edition, the "attachment and email it around" approach will be less optimal in comparison to using a shared document stored in Office 365.

Because the feedback of others is accessible in parallel with the original document, we run the risk that subsequent reviewers will reduce the quality of their review.

Modelling the Benefit of Document Co-Authoring

We can model the difference in time involved in co-authoring a document using email versus the new ways we are exploring in this chapter (see Figure 6-3). For example:

- Review by Email.** Sally is the lead author, and it takes her 240 minutes to write the first draft of the document. When she sends it around by email to her five co-authors, they each are seeing only Sally's first draft, and it takes each of them 60 minutes to add their input. Sally spends 120 minutes to create the second master edition, based on the five round one versions. In the second review round, her co-authors are seeing input from the other co-authors for the first time; it takes each of them 60 minutes to further review and comment. On subsequent reviews, the amount of new information is reduced for the co-authors, but it still takes Sally 120 minutes to create each new master version.
- Review by Co-Authoring.** In an open collaboration situation, each co-author gets to see the totality of input from the initial author and all subsequent co-authors, so their input is given in that wider context. The time invested in the first round is equivalent, but in the second and subsequent rounds the time is much less. And because there's a single evolving master document, rather than a master document held by Sally that has to be updated based on a whole lot of other copies from the reviewers, Sally's task takes less time too. Finally, the number of review cycles may be less because co-authors have already seen what the other co-authors are saying.

Figure 6-3. Co-Authoring Documents a New Way (Time in Minutes)

Approach 1: Write Document, Attach to Email, Distribute for Input to Co-Authors					
Actor	Version1	Version2	Version3	Version4	Total Time
Sally (lead author)	240	120	120	120	600
Bill (co-author 1)	60	60	30	0	150
Jim (co-author 2)	60	60	30	0	150
Owen (co-author 3)	60	60	30	0	150
Lucy (co-author 4)	60	60	30	0	150
Sandy (co-author 5)	60	60	30	0	150
Total	540	420	270	120	
Total time taken					
	1350	22.5 hours			

Approach 2: Write Document, Manage Co-Authoring through Office 365					
Actor	Version1	Version2	Version3	Version4	Total Time
Sally (lead author)	240	60	60	0	360
Bill (co-author 1)	60	30	0	0	90
Jim (co-author 2)	60	30	0	0	90
Owen (co-author 3)	60	30	0	0	90
Lucy (co-author 4)	60	30	0	0	90
Sandy (co-author 5)	60	30	0	0	90
Total	540	210	60	0	
Total time taken					
	810	13.5 hours	40% faster delivery		

Co-authoring can lead to a significant reduction in the time required for completing a document.

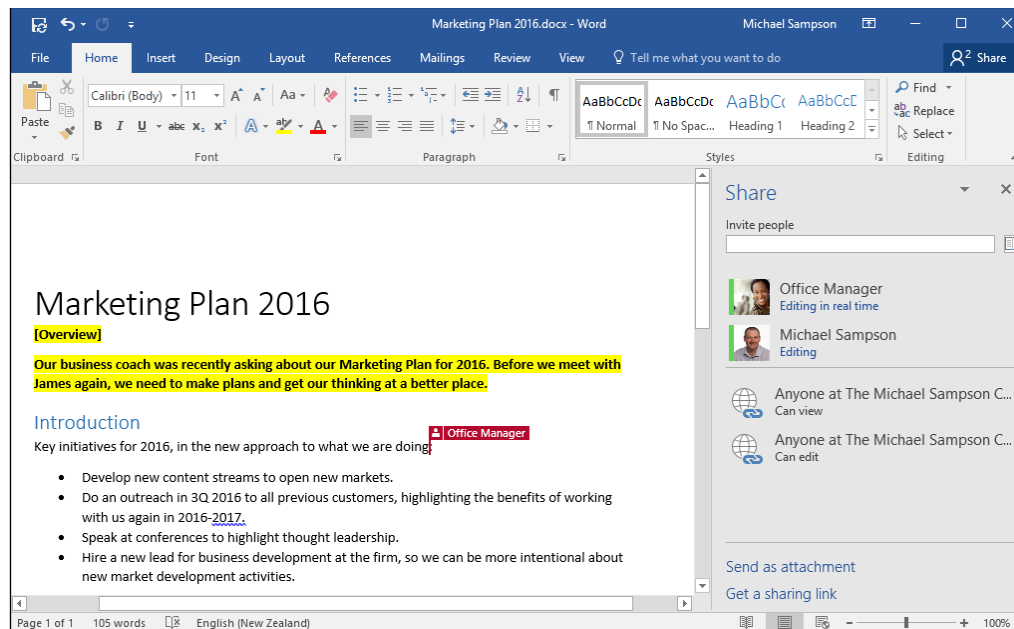
Office 365 Capability

Microsoft offers a wealth of capability to support document co-authoring in Office 365. Let's look at the details.

Microsoft Word

Microsoft Word is the best example of true real-time co-authoring in Office 365 and the Office 2016 desktop client for Windows. Multiple people can author a document simultaneously, with visual indicators given to show who is authoring the document and where they are doing so. See Figure 6-4.

Figure 6-4. Co-Authoring in Word 2016



Microsoft Word 2016 provides real-time co-authoring that displays changes to all co-authors as each person edits the document.

- **Coloured Flag Shows Person and Cursor Position.** A differently coloured flag is shown for each person working in the document, along with their name. The flag moves around the document as each author moves their cursor to another place to add new text to a paragraph or edit text that is already there.
- **Store Documents in OneDrive, OneDrive for Business, or SharePoint Online.** In order for co-authoring to work, the document must be stored in Office 365 on either OneDrive, OneDrive for Business, or SharePoint Online. Documents stored elsewhere do not support real-time co-authoring, as there are back-end processes that need to run on the document in order for the user experience to be delivered.
- **Word 2016 for Windows and Word Online.** Co-authoring in Word 2016 for Windows and Word Online (on supported browsers across Windows, Mac, mobile, and other platforms) offers a consistent experience. Each author sees each letter as another author types into the document, and each author's cursor position is shown with a coloured flag inside the document.
- **Different Co-Authoring Style on Mac and Apps on Mobile Devices.** The approach to co-authoring in Word 2016 for Mac and in the Word app on mobile devices is different. True real-time co-authoring where each letter is sent as typed is not supported on a Mac; changes are only shared when any author saves whatever edits they have made, and when the other authors save their copy of the document to bring in changes from the other authors. If auto-save is turned on for Word for iPad, however, these changes are sent and received quickly and seamlessly, albeit not in real-time. Microsoft recognises that this needs to change to be in line with the Word 2016 for Windows approach, but has not committed to a release schedule.⁹
- **Control Over Access Levels.** For documents shared via OneDrive for Business, the owner of the document can change access levels for other co-authors at any time, including revoking access altogether. These controls are accessed by right-clicking on the co-authors name in Word 2016; note this is not possible while using Word Online. The other place to revoke or change access is in OneDrive for Business itself. For documents shared via a SharePoint document library, access rights are handled by default at the SharePoint site level, not at the document level.

Each author sees each letter as another author types into the document, and each author's cursor position is shown with a coloured flag inside the document.

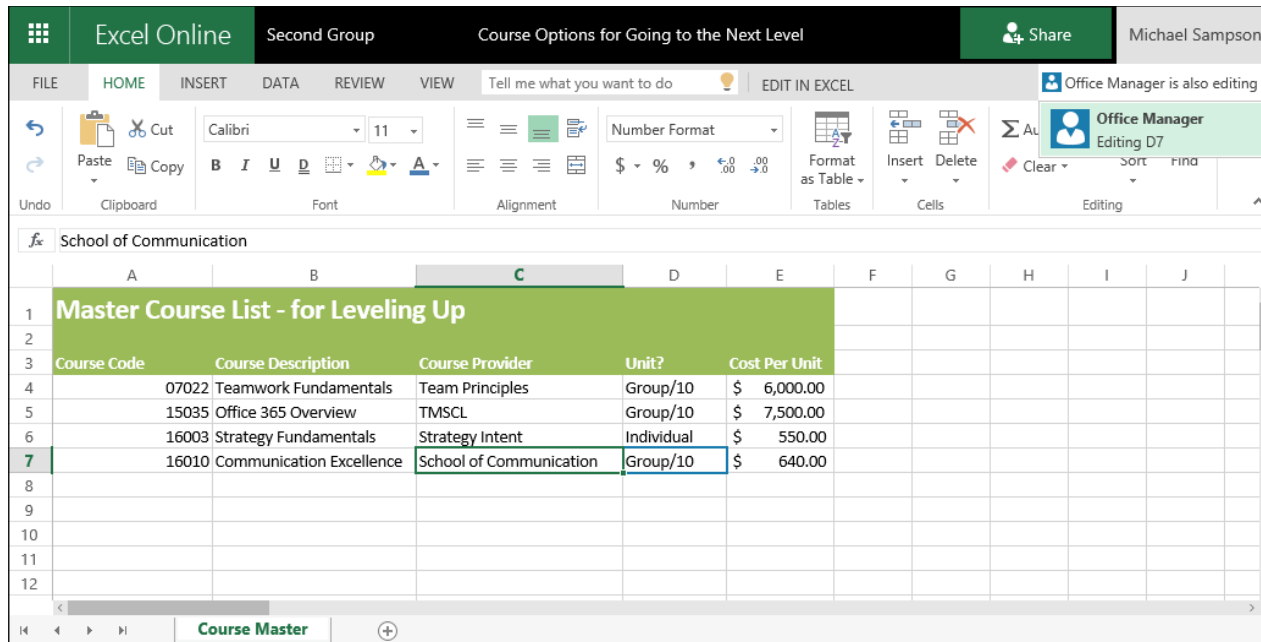
For people using Word on a frequent basis, the co-authoring capabilities help move the application to the next level of productivity.

Microsoft Excel

Real-time co-authoring is offered in Excel Online, but not in the Excel desktop or mobile apps. Microsoft has signalled its intent to extend real-time co-authoring to Excel 2016, but it is not available yet. Let's look at what is currently on offer.

- Co-Authoring in Excel Online.** Co-authoring is offered in Excel Online at a cell-by-cell level. When one author adds or changes the contents of a cell (and presses enter or return), other co-authors are able to immediately see the newly modified cell. In-sheet presence is displayed using a coloured border around the cell in which an author is active. See Figure 6-5.

Figure 6-5. Co-Authoring in Excel Online



Co-authoring is available in Excel Online—the browser-based alternative for opening and working with an Excel spreadsheet. In-sheet presence is shown with a coloured border around the active cell for an author.

- **Interaction Between Excel Online and Excel Desktop.** Although co-authoring is only offered in Excel Online, users have the option of opening a spreadsheet in the Excel desktop app and mobile apps. Microsoft has built in various checks to minimise the likelihood of conflicting changes (see Figure 6-6).

Figure 6-6. Alerts for Conflictive Changes

	Author 1	Author 2	Alert
Excel Online, then Excel Desktop or App	Has the spreadsheet opened for editing in Excel Online	Opens the spreadsheet in Excel desktop	Author 2 can only open the Excel spreadsheet in read only mode or create another copy
Excel Desktop or App, then Excel Online	Has the spreadsheet opened for editing in Excel desktop	Opens the spreadsheet in Excel Online and attempts to edit	Author 2 is warned that the spreadsheet is locked by another user
Excel Desktop or App, then Excel Desktop or App	Has the spreadsheet opened for editing in Excel desktop	Opens the spreadsheet in Excel desktop	Author 2 is warned that the spreadsheet is locked by another user. Choice is given for read-only or to create another copy

Co-authoring is only available in Excel Online; multiple people can't have the same spreadsheet open for editing when more than one person is using Excel 2016 or an Excel app on mobile. Alerts notify of the potential for conflict, and offer alternative options.

- **Real-Time Changes Not Shared in View-Only Mode.** Opening a spreadsheet in Excel Online puts it in view-only mode, but unless the user refreshes their browser or starts to edit the workbook, changes currently being made by other users will not be displayed. In other words a point-in-time view is provided for the spreadsheet, rather than the current status of the spreadsheet based on input from people currently working on the spreadsheet.
- **In-Sheet Follow the Author.** The list of currently active co-authors is displayed discretely at the top right of Excel Online, and clicking the list of co-authors shows where they are currently active in the Excel workbook (sheet name and cell reference). Choosing one of the names in the list of co-authors automatically takes the current user to where their co-author is working in the spreadsheet.

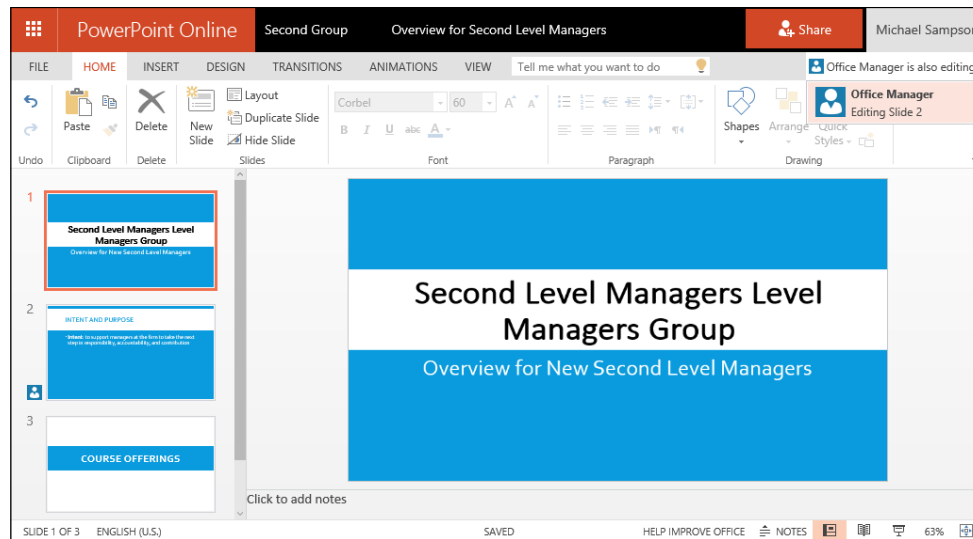
While the Excel desktop applications do not support co-authoring, support in Excel Online provides adequate capabilities for daily use among Excel users. Depending on their requirements from co-authoring capabilities, power users may find what is offered to be inadequate and should instead look at traditional screen sharing capabilities where control can be passed among meeting attendees.

Microsoft PowerPoint

PowerPoint presentations can be worked on by multiple co-authors, with co-authoring currently supported only in PowerPoint Online. As with the Excel desktop and mobile apps, Microsoft has indicated its intent to bring real-time co-authoring to the PowerPoint desktop and mobile apps, but has not yet committed to a timeframe for doing so. Let's review what's on offer in PowerPoint Online:

- **Co-Authoring in PowerPoint Online.** Real-time co-authoring is offered in PowerPoint Online, with in-slide presence shown in the slide navigator, plus an object-level activity indicator when viewing a slide. For example, if Sally is working on the title bar, the title bar on that slide will show with a coloured border and Sally's name for the other co-authors. This is only a light form of notification about where other people are working, however, because their presence in a particular object does not lock another author from making a change in that object. If two changes are made to the same object, one is overwritten without warning. See Figure 6-7.

Figure 6-7. Co-Authoring in PowerPoint



PowerPoint Online supports real-time co-authoring, while PowerPoint 2016 and the mobile apps offer a different form of co-authoring that synchronises changes between multiple people whenever a presentation is saved.

- **In-Slide Follow the Author in PowerPoint Online.** As with Excel Online, the list of currently active co-authors is displayed at the top right of PowerPoint Online, including the name of the current slide they are editing. Clicking a co-author's name jumps the user to that slide. There is no in-slide follow the author capability in PowerPoint 2016 or the mobile apps.
- **Interaction Between PowerPoint Online and PowerPoint Desktop.** Real-time co-authoring is offered only in PowerPoint Online, but users have the option of also opening a PowerPoint file in the PowerPoint desktop or mobile app. Unlike with Excel spreadsheets, a PowerPoint presentation can be opened simultaneously by a user in PowerPoint Online and another user in the PowerPoint desktop client. PowerPoint keeps a record of changes between the various online and desktop versions and merges all changes whenever the desktop versions are saved. A subtle notification is displayed in PowerPoint desktop to alert the user of pending changes and updates, and these can either be accepted by clicking the alert or merely saving the presentation.
- **Co-Authoring in Different Modes.** PowerPoint offers various modes to support co-authoring across a mix of online, desktop, and mobile apps. Capabilities are similar (but not the same) to Word 2016 and different from Excel 2016. See Figure 6-8.

Figure 6-8. Co-Authoring Across PowerPoint Modes

	Author 1	Author 2	Method
PowerPoint Online for both users	Presentation opened with PowerPoint Online	Presentation opened with PowerPoint Online	Real-time co-authoring is supported, with updates shown in real-time for all users in PowerPoint Online
PowerPoint Online and PowerPoint app	Presentation opened with PowerPoint Online	Presentation opened with PowerPoint app	Whenever the presentation is saved in the PowerPoint app, changes flow bi-directionally to PowerPoint Online
PowerPoint app for both users	Presentation opened with PowerPoint app	Presentation opened with PowerPoint app	Each author must save their presentation to receive the latest changes from other co-authors. No in-slide notification of where an author is working

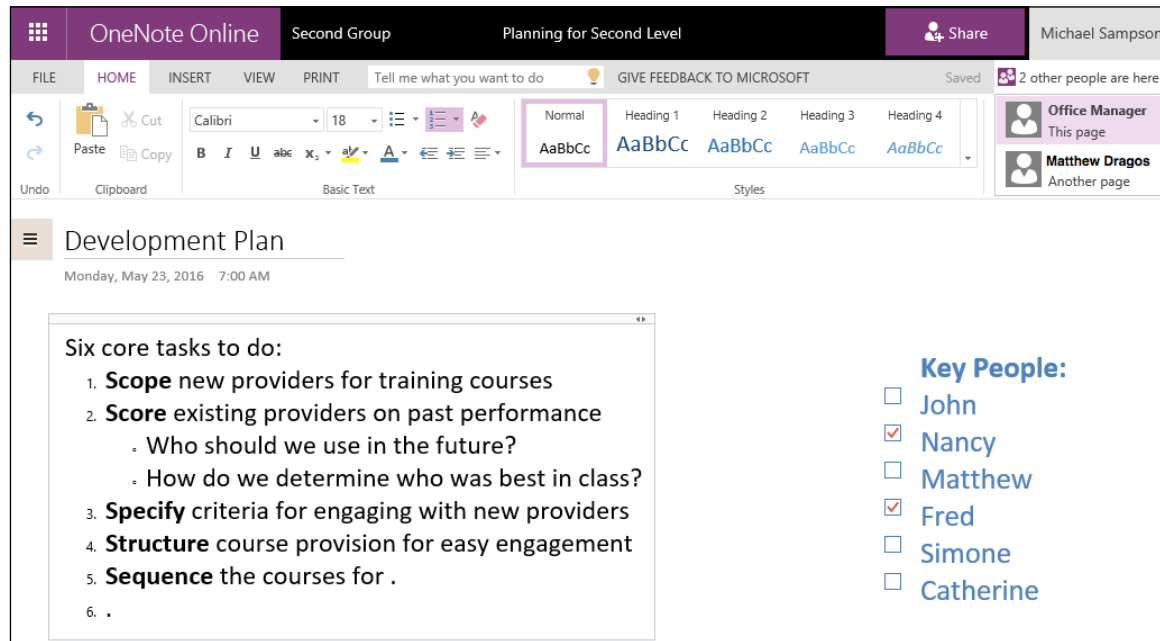
Real-time co-authoring is only available in PowerPoint Online, but different authors can open the same presentation in PowerPoint Online and PowerPoint apps. There are different ways for updates to flow across the various versions of the presentation.

Microsoft OneNote

OneNote, the digital notebook in the Office suite, supports real-time co-authoring using OneNote Online and the OneNote 2016 desktop applications and mobile apps. Let's look at what is on offer.

- **Co-authoring in OneNote.** After granting another person access to a OneNote notebook or opening a OneNote notebook in a SharePoint site, multiple people can work inside the notebook at the same time. In OneNote Online, OneNote 2016, and the OneNote mobile apps, changes made on a OneNote page flow across all open notebooks. See Figure 6-9.

Figure 6-9. Co-Authoring in OneNote



Co-authoring is supported across OneNote Online, OneNote 2016, and the OneNote mobile apps. In-notebook presence shows who is currently working in the notebook and on what page they are currently active.

- **In-Notebook Presence in OneNote Online.** An in-notebook presence indicator is displayed in OneNote Online, allowing each author to see a list of other co-authors in the notebook and the page on which they are currently working. Clicking an author's name in the list takes the current user to that page. In-notebook presence is not displayed in OneNote 2016 nor the OneNote mobile apps, although changes from other authors will still flow into the notebook. Changes made by another author are displayed alongside their initials to give some sense of who is currently active in the notebook.
- **Co-Authoring Across OneNote Modes.** Co-authoring is supported across OneNote Online and the OneNote application. Figure 6-10 reviews the various OneNote co-authoring modalities and how co-authoring is specifically supported.

Figure 6-10. Co-Authoring Across OneNote Modes

	Author 1	Author 2	Method
OneNote Online for both users	OneNote page opened with OneNote Online	OneNote page opened with OneNote Online	Real-time co-authoring is supported, with updates shown in near real-time. Updates flow fragment-by-fragment (a word or two at a time), rather than letter-by-letter.
OneNote Online and OneNote app	OneNote page opened with OneNote Online	OneNote page opened with OneNote 2016	Real-time co-authoring is supported, with updates shown in near real-time. Updates flow fragment-by-fragment (a word or two at a time), rather than letter-by-letter.
OneNote app for both users	OneNote page opened with OneNote 2016	OneNote page opened with OneNote 2016	Real-time co-authoring is supported, with updates shown in near real-time. Updates flow fragment-by-fragment (a word or two at a time), rather than letter-by-letter.

OneNote offers a consistent approach to co-authoring across online experiences and client-enabled ones too.

- **Breakout Groups in Meetings.** OneNote is a great tool for organising meetings—developing an agenda, listing pre-meeting reading material, and capturing the discussion during a meeting. The co-authoring capabilities of OneNote can be used during the meeting itself, for example, in breakouts where small groups go away to work on a particular issue and then report back to the wider group. In a meeting where people are not physically in the same place, OneNote can be used as a collaborative whiteboard in each breakout, with each breakout group having a separate page in the OneNote notebook.

Where to Store the File for Co-Authoring

Perhaps the biggest practical question with co-authoring is where to actually store the file in Office 365: OneDrive for Business, a SharePoint document library, or somewhere else. At one level the answer doesn't matter, because as long as the file (document, spreadsheet, presentation, notebook) is stored in Office 365, other people can be given co-authoring rights. So we are choosing between good options, not good and bad options. Here's a way of thinking about it:


- **OneDrive for Business.** If it is your file—you own it, you control the content, you want to control who can access and edit it—then put the file in your OneDrive for Business folder. This will require your ongoing management of the file as you gift and revoke access to it over time. Be aware, in addition, that storing the file in OneDrive for Business decreases the ability for other people to access and leverage the information in the file. If it is “your” file but has value beyond yourself, keeping it in OneDrive for Business is not ideal because it constrains access to pre-identified individuals; it would be better to be in SharePoint.
- **OneDrive for Business (Redux).** OneDrive for Business provides a semi-secret place for developing a document, while a document library provides the potential for a more open place to both develop and publish the document. Therefore, one approach is to develop the document in the secret place, and then when it is ready for wider distribution, to publish it to the appropriate document library. It doesn't have to be an either-or situation.
- **SharePoint Document Library.** If the file is closely linked with a specific project, team, initiative, or other activity that has an associated SharePoint site, it should be stored in a document library. This allows access to be managed at a higher level than the file itself; instead of controlling access to the file as an individual element, access can be managed at the level of the document library. This simplifies ongoing management and administration of access rights. In addition, storing the document in a document library allows the file to be discovered by SharePoint search, potentially bringing value to many other people beyond the initial team or group members.
- **Yammer Files.** Yammer Files now defaults to the Office Online apps. If your team or group is using a Yammer Group for its collaborative work, Yammer Files could be used for associated documents.

Perhaps the biggest practical question with co-authoring is where to actually store the file in Office 365: OneDrive for Business, a SharePoint document library, or somewhere else.


On balance, most files and documents should be stored in a SharePoint document library for co-authoring, with some selective usage of OneDrive for Business under specific conditions.¹⁰


Roadmap Intent


Microsoft has made some comments about its roadmap intent with co-authoring. Here's what we know:

 **More Real-Time Typing.** Real-time typing—being able to see what a co-author is doing in a shared document letter-by-letter—is the gold standard of co-authoring. This currently works in Word Online and Word 2016, but it is not consistently supported across all device platforms on which Word is available. In late 2015 Microsoft said, *“We agree that to have a great collaboration experience, you need to be able to co-author on your documents no matter what device you are using. While we can’t share specific plans, we are working on bringing this new real-time co-authoring functionality to more platforms. Note: you can already co-author using the Word Mobile App for Windows 10, Word for iOS, Word for Mac, though they do not include real-time typing... yet.”*¹¹ The “yet” signalled has not been shipped yet, and neither is support for real-time typing (letter-by-letter) beyond Word—which hasn’t been promised but would make sense as a next logical step by Microsoft.

Real-time typing—being able to see what a co-author is doing in a shared document letter-by-letter—is the gold standard of co-authoring.

 **Real-Time Co-Authoring and Language Translation.** When Microsoft integrated Office Online into Yammer, it commented that *“Our aim is to enable real-time co-authoring and document translation during the first half of 2016.”* If added to the core of Office Online (which is where it would make sense to be added), this would be a tremendous boon to cross-cultural teams.¹²

 **Linking IM and Chat with a Document Under Co-Authoring.** Microsoft introduced an integration between Office Online and the consumer version of Skype in March 2016, which enables a user of Office Online to click to chat, place a voice call, or have a video call with the other people who currently working on the same document in Office Online.¹³ Skype Chat conversations from previous co-authoring sessions are saved for later review in the document. Microsoft indicated that this functionality would be extended beyond documents stored in OneDrive (consumer), with support for documents stored in OneDrive for Business and SharePoint Online coming at some point, and also support would extend from Skype (consumer) to Skype for Business.

 **Classroom Scale Co-Authoring in PowerPoint Online.** For education customers, Microsoft is developing the ability for a whole classroom to work together on the same PowerPoint deck. Investments for education customers in PowerPoint co-authoring should flow across to other users and industry sectors too, although the need for co-authoring at such scale outside of educational situations would be unusual. Nevertheless, while the specific investments for educational customers may not apply directly, any iterative improvements in the reliability of co-authoring in PowerPoint are welcome.

Analysis and Evaluation

Microsoft has assembled a good arsenal of capabilities for co-authoring in Office 365 and supporting applications. Here's the pros and cons:

- ✓ **From Browser to Client Apps.** Real-time co-authoring via a Web browser using Office Online works well; Microsoft has matured this capability over the past few years. With the 2016 wave of desktop and mobile apps, Microsoft is slowly but surely extending its real-time co-authoring capabilities from the browser to the Office desktop and mobile apps. For many users, it's the apps where they want to work, not in a web browser. The real-time capabilities in Word 2016 lead the pack in the Office applications and point to a promising future for all of the applications in Microsoft Office.
- ✓ **Unlearning the Email Habit.** Microsoft is offering regular nudges to wean people off the email and attachment habit by providing prompts and alternatives at the point of writing and sending an email message with an attachment. If the user includes a link to a document stored in OneDrive, OneDrive for Business, or a SharePoint document library instead, then co-authoring is possible. In Outlook for iOS, for example, users can attach a link to a file stored in OneDrive when writing an email, rather than an attachment as such. And inserting a link is the default option too, which has been shown to help people make the transition from an ingrained set of behaviours. The same default behaviour is also supported in Outlook 2016 for Windows, with the user having to take additional steps to convert the attachment of a link to a cloud file into an attached file as such.
- ✓ **Situational Awareness of Co-Author Activity.** Co-authoring is a new work practice for people, and providing an environment that minimises weird activity in a document helps with its acceptance. For example, the various visual indicators in the Office applications that show where other people are editing represent good design, as does the ability to jump to where others are making changes in a document, slide deck, or spreadsheet.
- ✓ **Integration Across Tools.** Microsoft offers core applications for creating and presenting content, along with supplementary applications for coordinating action across people. Microsoft's efforts to integrate these applications is a good move, linking the creative task of creating content with the collaborative task of coordinating activity. Witness, for example, the provision of Skype capabilities for chat and calling with co-authors directly within Office documents; these are offered at the point of content work, rather than requiring a switch of context and the fiddling with controls to add or locate co-authors in a list of contacts.

With the 2016 wave of desktop and mobile apps, Microsoft is slowly but surely extending its real-time co-authoring capabilities from the browser to the apps.

- ❗ **Lack of a Consistent Approach to Co-Authoring Across Office Applications.** There are just too many varying approaches to co-authoring in play across the Office desktop and mobile applications, with dependencies on device type, operating system, and client version. Microsoft needs to get co-authoring to where it “just works” on all devices and operating systems in a consistent way. The letter-by-letter display of co-editing activity in Word 2016 sets the gold standard; all other applications in Office should consistently match this approach. With this consistency, users will be able to seamlessly maximise co-authoring with colleagues.
- ❗ **Attempting to Solve the Complexity Creates Confusion.** Google Apps brought co-authoring to the masses, simply and easily. If you wanted to co-author a document, there was only one way: you had to use a browser to do so. This meant it just worked. Microsoft is attempting a much more complex set of interrelated engineering challenges to enable co-authoring across installed applications on different devices and device types, with files stored in the cloud but that can also be opened locally through synchronisation. The matrix of possible combinations pushes Microsoft’s implementation into the extremely complex, which brings with it a high degree of possible confusion. While Microsoft has made good strides with co-authoring, it is still very much a work in progress. It remains to be seen if Microsoft can achieve the simplicity of the Google approach within the richness of the Microsoft application suite.
- ❗ **Opening from a Synced OneDrive for Business Document Doesn’t Always Work.** Synchronising documents from OneDrive for Business to a local device and then opening the locally stored document for co-authoring doesn’t yet work. With the OneDrive for Business client on the Mac, if the user wants to share the document in a co-authoring session, they are prompted to save it to the cloud—even though the document already exists in the cloud, although it has been opened locally as the result of a synchronisation activity. If the user does proceed and overwrites the cloud version with the local version, the local version will be updated by sync after the co-authoring session, but then the same behaviour will occur when opening the local version for co-authoring the next time. This user experience is confusing, and a more invisible way of escalating a locally stored synced file for co-authoring is necessary. Microsoft appears to have resolved this issue within the OneDrive for Business client for Windows, but there are some situations in which it still doesn’t work.¹⁴
- ❗ **No Ability to Constrain Co-Authoring Activity to a Subset of a Document.** An invitation to co-author a file or document is an open invitation to make changes across the entirety of a document. The document owner cannot limit the input of other people to particular pages or sections, which is a requirement in certain co-authoring situations.

Microsoft needs to get co-authoring to where it “just works” on all devices and operating systems in a consistent way.

What Firms Are Doing

Let's look at how four firms are using the co-authoring capabilities in Office 365 to improve work:

- **Agricultural Exporter.** Employees at the firm track inventory across multiple continents using an Excel spreadsheet stored in a SharePoint document library. The link is emailed around, not the document itself, allowing access by multiple people. When preparing for the monthly board meeting, a link to the board report stored in a SharePoint document library is distributed. Managers and their staff edit the document directly rather than sending attachments by email. The firm estimates it has eliminated 1,000 copies of the board report per month from being distributed and stored in email, once all the review and approval copies were tallied.
- **Economic Development Agency.** Staff at the agency use Office Online to prepare a weekly report on what everyone has been doing during the previous week and what is coming up in the subsequent week. Instead of everyone emailing their own slice of the report to an office administrator to assemble into a single document for distribution, everyone just edits the shared document directly in Office Online. When it is ready, it is available for everyone to view.
- **Air Canada.** Air Canada moved its 27,000 employees to Office 365. It has embraced many of the capabilities in Office 365, including co-authoring in Microsoft Excel of status lists and progress updates into which multiple people have access.¹⁵ The Manager of IT and Innovation at Air Canada says, *"With OneDrive for Business we can share files and have multiple people edit them at the same time. We can see the changes others are making in near real-time and avoid waiting for them to complete their edits. It's a vast improvement."*
- **Childcare Centre.** One of the opportunities with Office 365 is to re-imagine a work process, moving away from a current way of doing things in light of new technology-enabled possibilities. For a childcare centre in New Zealand, a SharePoint list was introduced for handling change requests for children changing the number of attendance hours. The previous process involved a teacher sending an email to the Accounts department to request an update; now all changes are logged by the teacher in a SharePoint list that has a simple workflow attached. The current status of all requests are visible, further information can be requested in-process by the Accounts team, and overall communication has been streamlined. It's not co-authoring in the traditional sense, but rather gives a new perspective to the possibilities of working off the same information, editing and updating a common "document."

We can see the changes others are making in near real-time and avoid waiting for them to complete their edits. It's a vast improvement.

Behavioural Aspects

Making co-authoring work effectively in your organisation requires the availability of good technology, plus the embrace of effective human behaviours and work practices. Let's look at what is needed on the behavioural front:

★ **Make It a Draft.** Regardless of which application you are using in Office 365, asking co-authors for their input requires a willingness to hear what they have to say. Therefore make your document, spreadsheet, or presentation a draft—not perfectly formed, not perfectly written, not perfectly stated—otherwise your co-authors will question the value of their input and the time required to do so effectively. There is a good argument to be made for writing the first version as an outline, with prompt questions and potential lines of argument to which co-authors can respond with their perspective.

Make your document, spreadsheet, or presentation a draft, otherwise your co-authors will question the value of their input and the time required to do so effectively.

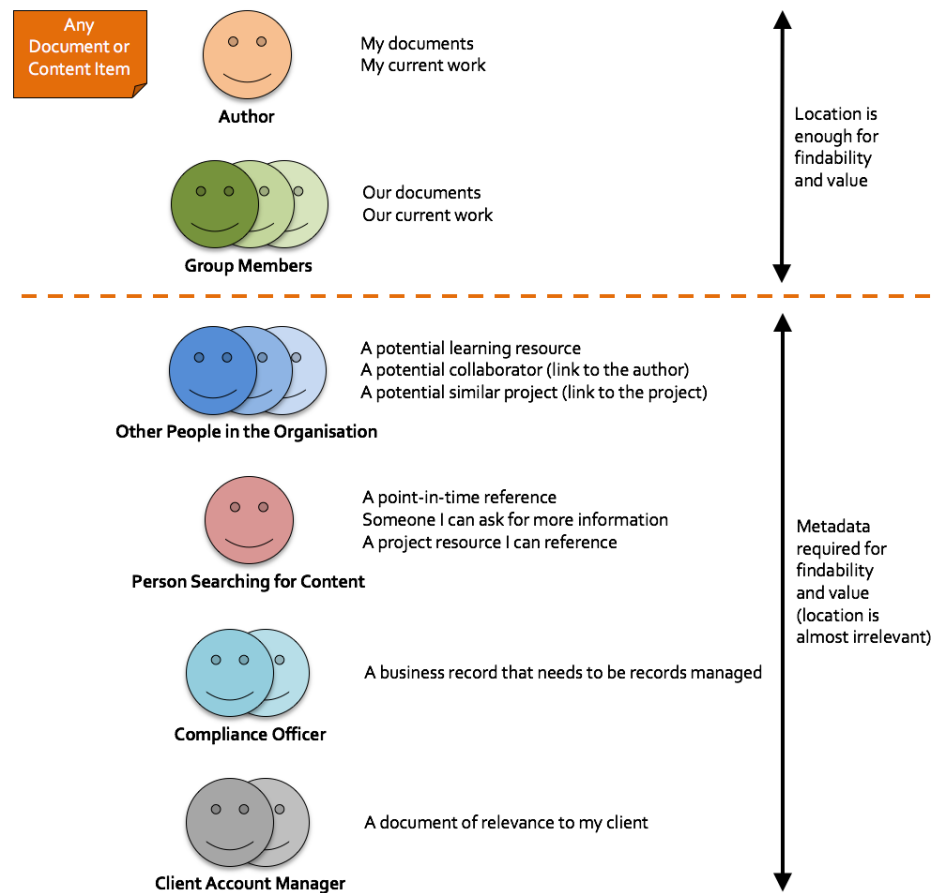
★ **Be Clear on Requested Contribution.** When asking others for input to a document, be clear on the contribution you seek. If you want a detailed review of a particular section, say so. If you want your co-author to write one of the sections, say that. If you are only looking for an editorial review of flow and spelling instead of substantive content input, state that too. Almost everyone is working in the context of unclear expectations, and everyone has more to do than they can get through. Use the power of clarity to make it easy for your colleagues to make the best contribution they can.

★ **Wherever Doesn't Equal Whenever.** Office 365 eliminates the wherever constraint—wherever you are working you can now almost certainly get access to your in-progress documents. However, the availability of technology does not mean the availability of focused mental energy, deep attention, and clarity of insight to make an excellent contribution to the document, spreadsheet, or presentation. Each co-author will still need to create the right conditions for making the best contribution they can offer.

★ **Someone Has to Take the Lead.** Office 365 provides a range of new approaches and capabilities to support the co-creation of documents and other content. If your team or group has been using email and attachments for a long time to do co-authoring, someone has to take the lead and set a new standard and approach using the best of what Office 365 has to offer. This requires a delicate balance of coaching, encouragement, and tenacity.

- ★ **Don't Do "Just in Case" Reviews.** Ambiguity in organisational accountability, responsibility, and decision rights leads to the request for unnecessary reviews. Avoid "just in case" reviews wherever possible, meaning that if someone's input doesn't really matter, then don't ask for it. By all means send a copy of the draft document for their reading pleasure, but don't ask for a review. Amazon championed the two pizza rule; once feeding a team required more than two pizzas, the team was too big, and more critically, accountability and autonomy would suffer.¹⁶ In the world of document creation, too much communication bogs down the process and turns what should be light and fleet-footed into an onerous time sink.
- ★ **It's Not Always Co-Authoring That Makes the Performance Difference.** Co-authoring capabilities have a real value in some teams and groups, but not every team, group, document, or work process requires it. It is worth evaluating the capabilities within your team or group, and if there is value gained, push forward and use it more. Even more so, it is worth uncovering the actual performance barrier being experienced in the team or group, and matching that with the approaches to improving document creation we reviewed earlier in this chapter (see page 95). At a healthcare organisation in the United States, for example, a process being coordinated by email and attachment was re-imagined using a wiki, and this reduced time-to-completion from weeks to days. It wasn't co-authoring that made the difference, but shared access to a set of content pages.
- ★ **Metadata for Wider Findability.** Any single piece of content has immediate value to the individual or group working within the project or initiative, but is likely to also have complementary and longer term value to other people outside of the project or initiative. Metadata—descriptive words or short phrases to describe the data inside the document—is the key technology to make this transition between the immediate and long term. For the lead author and group members, where the document is stored is usually enough for them to find it and get value from the document. For everyone else, however, metadata is required for finding the document and thus getting value from it (see Figure 6-11). For example, metadata noting the market industry the document relates to will help others interested in current happenings in that industry find the document. A compliance officer who needs to ensure all contract documents align with the business process will need the ability to quickly locate and review all contract documents. A client account manager, in the same way, will want to be able to find all presentations that were used with one of their clients. Metadata can be manually entered against any single piece of content, can be automatically configured for a collection of documents, or can be applied in an automated way based on content inside the document. Regardless of how it happens, it needs to.

Co-authoring capabilities have a real value in some teams and groups, but not every team, group, document, or work process requires it.

Figure 6-11. Metadata Facilitates Multiple Perspectives

Metadata is essential for wider findability of documents and content items. The location where the file or document is stored is usually enough for the original author and group members to locate and get value from the document, but other people in the organisation require metadata.

On Improving Performance

The co-authoring capabilities in Office 365 can help organisations improve performance across the following dimensions:

- **Simpler.** Document co-authoring greatly simplifies the process of creating documents that contain input from multiple people. It eliminates the need for a lead author to combine multiple versions into a new master version. It eliminates the risk that co-authors will add their comments in an old and out-dated version of a document, not realising that a more up-to-date version is available. It eliminates the difficulty of showing another person the current state of a document during a call but at the same time to incorporate their feedback into the document during the call.
- **More Effective.** Providing an editing canvas that always displays the latest input from all co-authors allows people to focus their contributions where it adds the most value in the developing document, spreadsheet, or slide deck. Comments and input that other people have already made are already displayed for review, not locked away in a version of the document hidden in someone's email inbox. If it has been said already, it is displayed, leaving each subsequent co-author to agree implicitly by letting the comment stand, or to explicitly engage for a different interpretation, wording, or way of communicating the idea.
- **Attractive.** Co-authoring capabilities across Office applications and Office 365 transform the applications from tools for individuals with sharing added as an afterthought into a more attractive set of applications with cohesive sharing and collaborative capabilities baked into the very core of what's on offer. From a competitive perspective, Google was able to draw a lot of attention to its early Google Apps services due to the inclusion of collaborative capabilities from the beginning. This decreased the attractiveness of Microsoft Office in the eyes of many, but Microsoft has fought back and thus regained attractiveness in comparison to Google—specifically with new co-authoring capabilities in Office and more generally with Office 365 cloud services.
- **More Effective (Redux).** Beyond its maturing co-authoring capabilities, the tools in Office 365 offer multiple pathways for improving the creation for documents, ranging from easy distribution of best practice templates, ways of providing access to shared fragments for documents with repetitive content snippets, and approaches for publishing exemplars that future authors can learn from. Co-authoring is definitely one approach for improving document creation, but Microsoft provides it within the context of complementary approaches too.

Document co-authoring greatly simplifies the process of creating documents that contain input from multiple people.

Summary

Working on documents with other people is a common work activity for teams and groups, and Office 365 provides a range of capabilities to streamline and support co-authoring requirements across Office applications. In this chapter we have reviewed the capabilities on offer for co-authoring documents, spreadsheets, presentations, and pages in a OneNote notebook. While co-authoring is available in each of these tools, the actual way co-authoring works in each is different. Microsoft has signalled its intent to reduce the differences over time. In addition to the benefits available from co-authoring, we also reviewed complementary approaches for improving the creation of content, such as templates, fragments, and exemplars.

In Chapter 7 we turn our attention to another very common work activity for teams and groups, and it's all about meetings.

Office 365 provides a range of capabilities to streamline and support the co-authoring activity.

¹ Butler Group, *Document Collaboration Inefficiencies Waste Up to 25% of Staff Time: Butler Group*, January 2007. See www.domain-b.com/infotech/itnews/2007/20070116_collaboration.html.

² Steelcase, *What Workers Want*, 360 Magazine, Issue 66, April 2014, page 28-29. See www.steelcase.com/content/uploads/2014/04/360Magazine-Issue66.pdf.

³ Office 365 does not include a fragment library as a standard capability. One third-party offering for SharePoint and Microsoft Office is MacroView ClauseBank. See www.macroview.com.au/Products/Pages/DocumentAutomation.aspx.

⁴ Butler Group, *Document Collaboration Inefficiencies Waste Up to 25% of Staff Time: Butler Group*, January 2007. See www.domain-b.com/infotech/itnews/2007/20070116_collaboration.html.

⁵ See *The Business Case for PleaseReview*, at www.pleasetech.com/business_case.aspx. You have to request the document to see the worked examples.

⁶ Microsoft Case Studies, *Telecommunications Firm Produces Reports 10 Percent Faster with Co-Authoring Feature*, 2010. See www.microsoft.com/casestudies/Microsoft-Office-Professional-Plus-2010/Telecom-Italia/Telecommunications-Firm-Produces-Reports-10-Percent-Faster-with-Coauthoring-Feature/4000008183.

⁷ Thomas Davenport and Laurence Pruzak, *Working Knowledge: How Organizations Manage What They Know*, HBR Press, 2000.

⁸ This is exactly the same dynamic—leveraged in the opposite direction—that a new entrant calendaring vendor discovered in their meeting scheduling research: that in a multi-person group, the latter people were very unlikely to reject a particular meeting time if everyone else said they could make it. See my June 2007 blog post at michaelsampson.net/2007/06/08/messaging-news-8/ for more.

⁹ Word Team, *Word real-time co-authoring—a closer look*, Microsoft Office Blogs, October 2015, at blogs.office.com/2015/10/30/word-real-time-co-authoring-a-closer-look/.

¹⁰ Microsoft has forged partnerships with third-party cloud storage vendors to enable organisations and users to link non-Microsoft storage offerings with Office 365. Hence another alternative for storage of documents for co-authoring is Box or Dropbox, among others. See Kirk Koenigsbauer, *New cloud storage options for Office mobile and Office Online*, Office Blogs, January 2016, at blogs.office.com/2016/01/27/new-cloud-storage-options-for-office-mobile-and-office-online/.

¹¹ See Melissa MacBeth's response to Harsh Shah's comment on Word Team, *Word real-time co-authoring—a closer look*, Microsoft Office Blogs, October 2015, at blogs.office.com/2015/10/30/word-real-time-co-authoring-a-closer-look/.

¹² Juliet Wei, *Document collaboration in Yammer just got better with Office Online!*, Office Blogs, July 2015, at blogs.office.com/2015/07/16/document-collaboration-in-yammer-just-got-better-with-office-online/.

¹³ Office Team, *Collaboration in Office - chat with your co-editors in real time via Skype!*, Office Blogs, March 2016, at blogs.office.com/2016/03/07/collaboration-in-office-chat-with-your-co-editors-in-real-time-via-skype/.

¹⁴ For example, UserA creates a new Word document and saves it to their locally synced OneDrive for Business folder. From within the Word document, UserA then invites UserB to share the document for co-authoring. UserB receives an invitation to co-author by email, clicks the link to open the shared file, but gets a read-only version not one that is available for co-authoring activity. UserB does not see any updates made by UserA, and if UserB saves the changes they have made, UserB is prompted to save the file in a location of their choice. This will create duplicated copies of documents, the very problem co-authoring is designed to avoid.

¹⁵ Microsoft, *Air Canada Soars into the Cloud to Speed Processes and Improve Service*, Microsoft Customer Stories, July 2015, at customers.microsoft.com/Pages/CustomerStory.aspx?recid=23119.

¹⁶ Jason Crawford, *Amazon's "two-pizza teams": The ultimate divisional organization*, July 2013. See blog.jasoncrawford.org/two-pizza-teams.

Chapter 7.

Managing Meetings

An effective meeting is 80 percent planning, 20 percent execution. Too often people spend most of their time in the meeting and the least amount of time getting ready for it. Plan better meetings. They don't just happen.¹

Tim Lewis

When people meet to discuss ideas, explore possibilities, make decisions, and otherwise communicate “in the now,” we usually say they are having a meeting. Like working on documents together, attending meetings is a very common way of spending your day in organisations—and therefore making meetings productive and effective is critically important. There are various ways that new technology—as available in Office 365—can enable a re-imagining of meetings, but even more important than new technology are the fundamental human disciplines that enable effective meetings.

In this chapter, we will:

1. Investigate the big idea of re-imagining meetings in light of newer approaches.
2. Look at the research findings on holding effective meetings.
3. Evaluate the capabilities in Office 365 to support managing meetings, as well as some of the devices from Microsoft to enable better meetings.
4. Consider how firms are re-imagining meetings thanks to the capabilities in Office 365.
5. Look at the human disciplines and behavioural aspects required for a re-imagining of meetings to return value to participants and the organisation.

The Big Idea

Meetings provide an opportunity for people to interact in real time, to focus on a topic at hand, to air different perspectives, and to form common agreement about a way forward. Having a “meeting” of minds and intent is a core part of collaboration—coordination of future work efforts toward a shared and common outcome. Unfortunately, meetings can be a waste of time if they are poorly led, badly structured, or unnecessary.

In auditing meetings in your organisation, some of the following issues may come to the surface:

- **People Are Unprepared.** People come unprepared to the meeting. They’re already harried and breathless when they come in the door, and claim to have had no time to read the materials in advance of getting together. The first half of the meeting turns into an ad-hoc presentation of the materials rather than a discussion about implications.
- **Meetings Are Poorly Designed.** Some meetings are just for airing status updates because there is no other way of informing everyone about what’s going on. The team doesn’t have a work tracking dashboard that summarises current state on multiple projects, so they have to get together for two hours every week to remind their colleagues about what they are working on.
- **Expected Contributing is Unclear.** People don’t know why they’ve come to the meeting because although they’ve seen the agenda, it is unclear what contribution they are supposed to make. But they’ve come anyway in case they “miss out on something.” And if they have flown in from another city or country to attend the meeting, that represents a waste of time and money and little to show for it.
- **Time and Discussion is Unmanaged.** Meetings drag on for too long, and a few people dominate the discussion by re-hashing more loudly what they’ve already said earlier in the meeting. Other people zone out and do email, play with their iPhones, or surf the web.
- **No Clear Direction on What Next.** It’s unclear what people are supposed to do after leaving the meeting. Specific actions to take and the responsibility for taking them are undefined and amorphous.

People don’t know why they’ve come to the meeting, because although they’ve seen the agenda, it is unclear what contribution they are supposed to make.

While we could attempt to resolve these issues by putting in new technology, it would be a waste of time and effort if it were only dealt with as a technology issue. Most of these issues represent failure in meeting practice. They are human and organisational cultural issues, not technology ones. That said, and based on the expectation that the human and cultural issues are recognised and active work to mitigate them has begun, new technology can lend some weight to managing meetings differently. See *Behavioural Aspects* later in this chapter for more on the human issues.

Do We Even Need a Meeting?

One of the possibilities we have when empowered with new technology is to re-think the activities that have become common place in light of earlier technological capabilities. The need to meet provides us with one such possibility.

A meeting represents a specific form for getting something done—by bringing people together at the same time and perhaps at the same place, everyone can hear what the other meeting participants are saying, a sense of whether there is common agreement or not can emerge, and decisions can be made in light of those factors. There are instances when a “meeting” remains absolutely essential, but there are other times when a different form could be used. For example:

- **From Meeting to Discussion Forum.** Meetings held to discuss the pros and cons of an idea could be replaced with a discussion forum. If the right people are involved, the need to meet around a table could go away entirely.
- **From Meeting To Structured List of Options.** Meetings held for deciding priorities and allocating resources could be replaced with a structured list of possible initiatives, along with a means for the right people to comment on and rate the initiatives they believe should be supported. This would allow the initiatives that were viewed highly to rise to the top of the priority list without having to resort to a meeting.

Meetings held to discuss the pros and cons of an idea could be replaced with a discussion forum. If the right people are involved, the need to meet around a table could go away entirely.

The Clifford Chance Foundation, the charitable arm of the global Clifford Chance legal firm, has experienced such a re-thinking that replaces two forms—meetings and emails—with a wiki for decision-making and resource allocation.²

Meeting by Video

Video meetings are changing. A couple of recent reports made the following observations:

- **CFOs on Video Conferencing.** CFOs place high priority on making more video conferencing equipment available in order to reduce travel costs and the associated impacts.³
- **From Room-Based to Desk-Based.** In recent expenditure patterns, organisations are de-emphasising room-based video conferencing and telepresence equipment and shifting more towards video-enabled desk phones and desktop video devices.⁴

Throw in the tremendous traction gained by mobile device manufacturers over the past five years with video-capable smartphones and tablets, and you have the makings of a new story: video conferencing where you work, not where you go to have a meeting.

When done right—big screens, great audio, and a jitter-free experience—room-based video conferencing is tremendous, and telepresence for inter-office meetings is even more incredible. Telepresence is supposed to be “as good as being there,” but since you don’t have to travel it’s probably “better than being there.” However, while room-based video conferencing does have a place for small and large group meetings, (a) you still have to go somewhere different to where you work to participate, and (b) it’s hard booking such a room on a regular basis for a one-to-one meeting. If such meeting rooms are scarce, most organisations will prioritise those for group meetings rather than one-to-one discussions, unless of course you happen to be the CEO.

Which brings us to video conferencing where you work. PBX-based video conferencing systems that put a video-equipped phone on your desktop took the leading position for video shipments in 2Q 2012.⁵ If it hadn’t been for the growth in that segment, the whole video conferencing and telepresence market would have reported much worse figures. If the person calling you has a video phone too, you get desktop-to-desktop video in the flow of day-to-day work. If you have a tablet or smartphone with video capabilities, you can achieve the same outcome without requiring special hardware. Wherever you are, regardless of being at your desk or not, you can join a video meeting.

When done right—big screens, great audio, and a jitter-free experience—room-based video conferencing is tremendous, and telepresence for inter-office meetings is even more incredible.

Meeting Face to Face

There are times when it's worth paying the price to meet face to face, and insisting on a remote meeting in such instances will significantly undermine the efficacy of the interaction. Figure 7-1 lists five factors to consider when choosing a remote or in-person meeting:

Figure 7-1. Choosing Between a Remote Meeting or a Face-to-Face Meeting

Factor	Remote Meeting	Face-to-Face Meeting
Type of meeting	Routine catchup between existing team members	Talking to a large group, leading a workshop, interviews
Length of meeting	Between one and three hours	More than three hours; one to three days (or more)
Time zone differences	Only a few time zones	Many time zones
Questions and topics	Questions and topics that are regularly discussed	Confidential, sensitive, or difficult questions or topics
Facial expressions and body language	Already know their facial expressions and body language	Vital to understanding and guiding the meeting

When choosing between a remote or face-to-face meeting, look for the presence of multiple factors lining up under either type. Once you have got three factors, that's usually the approach to take.

Clearly if budget and time are not issues in your organisation (which is not true for many organisations anymore), face-to-face meetings all the time is a strategy that can work—as long as the meeting dynamics are managed appropriately. What is more likely to happen, given current economic realities, is that all face-to-face meetings are cancelled as expensive and unproductive and a blanket edict issued allowing only remote meetings. Again, remote meetings can work in many situations, but there are times when a remote meeting is not the best design given the participants, the agenda, and the need to communicate (as opposed to merely pushing information at others).

Remote meetings can work in many situations, but there are times when a remote meeting is not the best design given the participants, the agenda, and the need to communicate.

Research Findings

Making meetings better is an important pursuit and has been the subject of much research. Here's a sampling of research findings on managing meetings.

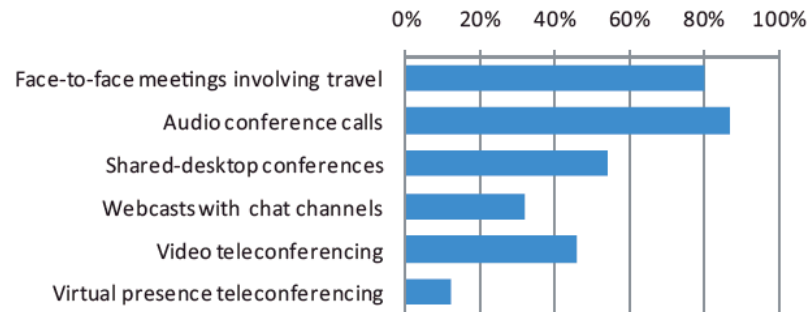
- **Reducing Travel is the Fastest Way to Save Money on Meetings.** Organisations can quickly save a lot of money by reducing travel expenses for meetings. Giving people the ability to work and meet from where they are, without having to travel for meetings, is a quick road to saving money.⁶ In any period of economic difficulty or constrained budgets, reducing travel for meetings is a frequent response.
- **Reducing Travel is Also a Way to Increase Service Quality.** Removing the need for people to travel to meetings saves money (an efficiency benefit, as above), but it can also be leveraged to achieve other benefits. For example, enabling a design engineer to share their current design work with a remote client in an online meeting and get faster feedback on the design thinking and constraints delivers improved service quality and is likely to lead to a more effective design outcome.
- **70% of Meetings are Regular and Routine.** The majority of meetings are held between the same group of people on a regular basis; for example, colleagues who already know each other who meet every week or two to catch up and review progress on shared projects and initiatives.⁷ The sheer numerical magnitude of these meetings, and the impact such meetings have on the forward progress of the organisation, mean that making these meetings productive and effective is a critical priority. While new approaches can reduce the travel time and expense, you have streamlined the wrong aspect if the meeting itself isn't effective.
- **Face-to-Face Communication Builds Business Relationships.** The vast majority of people believe that face-to-face communication—whether in person or by video-conferencing—improves business relationships compared with audio-only meetings.⁸ While many organisations are cutting back on travel budgets, new approaches to meeting with distant colleagues, clients, and partners still provide a way of meeting face to face.

While new approaches can reduce the travel time and expense, if the meeting itself isn't effective, you have streamlined the wrong aspect.

- **Meetings for Coordinating During Projects.** A research report by AIIM showed that meetings—in many variations—are a key component of coordination during projects. The most common meeting form was audio conferencing (almost 90%), followed by face-to-face meetings involving travel (80%).⁹ See Figure 7-2.

Figure 7-2. Meetings Are Used for Project Coordination

Figure 13: Which of the following are in regular use by your team or within your business unit for project coordination? (multiple)



Organisations use a variety of meeting types to support coordination during projects. Audio conferencing calls are the most frequently used meeting type, followed by face-to-face meetings involving travel.

- **Meetings Are Frequently Ineffective.** A study of meeting effectiveness by Bain & Company found that while managers spend over half of their time in meetings, two-thirds of meetings end before the participants can make the important decisions.¹⁰ It should come as no surprise, therefore, that 85% of executives are not satisfied with the efficiency and effectiveness of the meetings held within their organisations.
- **Build Competence for Productive Meetings.** Reducing the frequency of ineffective meetings and increasing the quality of the remaining meetings require building competence across all levels of an organisation.¹¹ For example, empower people to ask, “Do I really need to attend?”

85% of executives are not satisfied with the efficiency and effectiveness of the meetings held within their organisations.

While the above research findings are sampled from a very large research publication base, the core question is what is the state of meetings in your organisation? What is working well? What is not working well? What could be improved? Where is the specific opportunity to create value?

Office 365 Capability

Managing meetings using Office 365 has a few moving parts: a calendar for upcoming meetings, a place to take meeting notes and facilitate in-meeting discussion, and a way to meet with other meeting participants. Office 365 also provides various places for storing documents and reference materials for a meeting. Let's review the capabilities on offer.

Outlook for Calendaring

Every individual needs a way of seeing what meetings they have coming up—in order to schedule any required travel, make time to read the briefing documents, and complete any tasks that have to be done in advance of a meeting. Microsoft Outlook is the place to do this.

Using the calendaring capabilities of Outlook, you can:

- **Schedule the Meeting.** Create an invitation to a meeting and distribute it to the list of invited meeting participants. The meeting can be set as a one-off, or a recurrence schedule can be set for a certain frequency. In advance of sending the meeting invitation, if you have access to the free-busy time of other meeting invitees (which, practically speaking, generally requires they work at your organisation), you can search for the next best available time at which everyone can meet.
- **Overlay Multiple Calendars.** Everyone has their own calendar in Outlook, which can be subdivided into multiple colour-coded categories. However, in addition to the ability to subdivide your main calendar, calendars from SharePoint sites and Office 365 Groups can be displayed together in Outlook. This allows everyone to review the commitments they have within the context of all scheduled meetings and events.
- **Set a Link to a OneNote Page.** In Outlook 2016 for Windows you can set up a link to a OneNote page for taking meeting notes. These can be set as personal notes only (the page or notebook isn't necessarily shared) or as shared notes. If the shared notes option is chosen, Outlook inserts a link to the OneNote page into the meeting invitation. This only works with the Windows version of Outlook.
- **Add Skype for Business Meeting Details.** In Outlook 2016 for Windows you can also add Skype for Business meeting details to the meeting invitation, providing a seamless way of notifying meeting participants of how to join the meeting. Participants just have to click or touch the link inside the meeting invitation to join. Adding Skype for Business meeting details requires a recent version of Outlook for Windows; it doesn't work in non-Windows versions of Outlook.

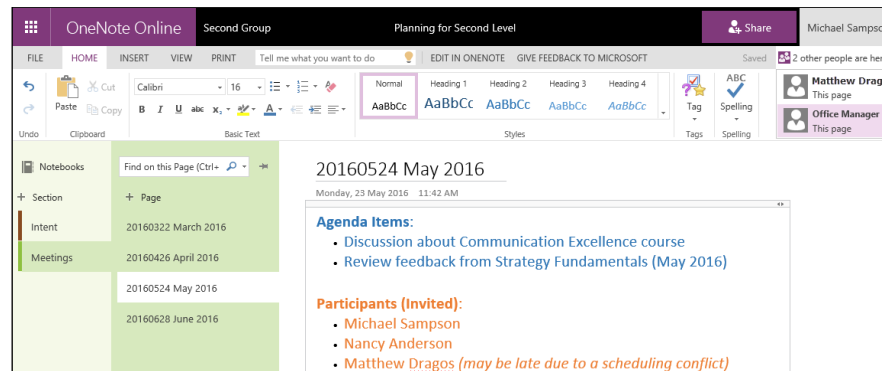
OneNote for Meeting Notes and Discussion

Microsoft OneNote provides the capability for people to use a notebook-style interface for capturing meeting notes, ideas, and other artifacts created or discussed during the meeting. If the notebook is shared by all participants in the meeting, then it is even better (see Figure 7-3). Using OneNote during the meeting you can:

- ❶ **Create Meeting Notes in a Shared Place.** A shared OneNote notebook provides a place for creating meeting notes that are shared by participants, creating an ongoing record of the meeting instead of multiple diverging viewpoints on what actually happened.
- ❷ **Share a Digital Whiteboard.** Thanks to the co-authoring capabilities in OneNote, multiple meeting participants can be active in the notebook at the same time. They can contribute to the current discussion, take part in breakout rooms (using a separate OneNote page), or capture tasks and next actions for themselves and others. Users with digital ink-capable devices—such as the iPad Pro or Surface Pro/Book—can draw and annotate in freeform.

While OneNote isn't the only tool that could be used for capturing meeting notes—Microsoft Word could also be used—the beauty of OneNote is its support for multiple pages within a notebook and its easier methods for capturing ideas in multiple formats outside of the constrictions of a Word document.

Figure 7-3. OneNote for Meeting Notes and Discussion



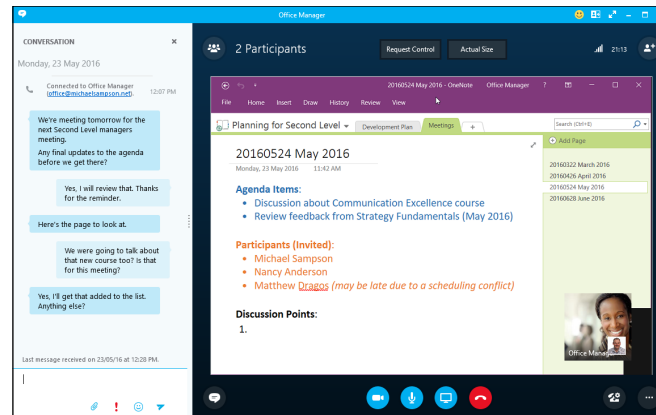
OneNote provides a place for capturing meeting notes, and offering multi-person co-authoring and ongoing access through a shared notebook.

Skype for Business for Holding the Meeting

In our increasingly global economy, we work with people in multiple locations and need effective ways to connect with them. Skype for Business offers presence and instant messaging, voice calling, and video conferencing capabilities to support remote meetings and remote teams (see Figure 7-4). Capabilities include:

- **Presence and Instant Messaging.** Presence indicators in Skype for Business display whether someone is online and available for interaction, regardless of their geographical location or time zone. Instant messaging provides a quick way of interacting with people, using real-time typed messages.
- **Voice Calling.** Click to call someone in Skype for Business and add more people to the call if necessary. Presence information displays if someone is available for a call or not, which is very useful when deciding to initiate the call in the first place.
- **Video Conferencing.** Seamlessly switch from a voice only call to a video conferencing experience. With an increasing proportion of computing and mobile devices including embedded video cameras, video calling is a generally available capability.

Figure 7-4. Skype for Business



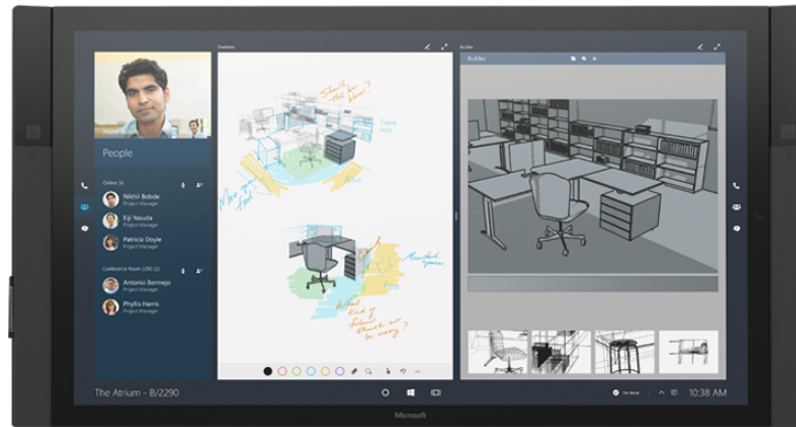
Skype for Business is an essential tool for bringing people together for interaction and communication, with support for multiple forms of interaction including instant messaging, voice calling, and video conferencing.

Surface Hub for Meeting Rooms

The Microsoft Surface Hub is a large-screen meeting aid that is not part of Office 365, but is designed to complement and extend its capabilities (see Figure 7-5). Surface Hub is available in 55" and 84" display sizes, and provides:

- **Digital Whiteboard.** Surface Hub offers digital whiteboard capabilities plus support for running applications, interacting with data on the screen, and video conferencing through the dual front-facing high-definition wide-angle cameras. Video conferencing capabilities link with Skype for Business for adding remote meeting participants. Content can be shared with compatible personal devices.
- **Touch and Pen Input.** Surface Hub supports touch and pen input for immersive and collaborative input during a meeting. Two people can ink on the screen simultaneously using the two styluses that come with Surface Hub (each stylus has its own dock for recharging when not in use).
- **Meeting History.** The outputs of a meeting can be distributed to meeting participants at the conclusion of a meeting, providing a record of the discussion plus ongoing accountability for next actions.

Figure 7-5. Microsoft Surface Hub



Surface Hub offers a large-screen display to support meetings, with the capability to run applications, interact with data, and support video conferencing.

On Where to Store Documents and Reference Material

There are a few options in Office 365 for where to store documents and reference material related to a meeting. Let's look at the options:





- **OneDrive for Business.** Documents and reference material can be stored in one individual's OneDrive for Business folder and then shared with other members of the meeting. If the meeting is held only occasionally, the membership of the meeting changes from meeting to meeting, or the documents pertain only to a specific meeting and do not form part of an ongoing collection of documents, using OneDrive for Business is an appropriate design choice.
- **SharePoint Site.** All documents and reference material are stored in the SharePoint site for the team or group. If the meeting is related to a specific team or group and is part of an ongoing series of meetings, this is a good design choice. Documents should be clearly named to indicate alignment with a specific meeting date, and metadata should be set for each document so the entire collection of documents can be navigated at any time to find those documents pertaining to a certain meeting, topic, or discussion. Storing documents and reference material in a SharePoint site provides an easy way for new team members to be added to the site and gain access to all previous meeting documents, and for members exiting the team to have their access permissions revoked.
- **Office 365 Groups.** As with a SharePoint site, storing documents in an Office 365 Group provides a common place for all meeting documents. The options for using metadata to classify documents are fewer in an Office 365 Group, however, which means meeting documents need to be named more clearly or stored in folders for meetings if the group is going to have a lot of meetings and associated documents.
- **Yammer.** Meeting documents could be stored as Yammer files or created directly as Yammer Notes. As with Office 365 Groups, there are few metadata options for classifying documents, which means documents need to be named properly. If a OneNote notebook is being used for meeting notes and minutes, it will need to be created and stored elsewhere (either in a SharePoint site or Office 365 Group set up for that purpose).

Storing documents in a SharePoint site provides an easy way for new team members to be added to the site and gain access to all previous meeting documents.

Having multiple options isn't necessarily bad—Office 365 has to appeal to everyone in every situation—but it does require that everyone make a simple and consistent choice about where and how they store documents and reference materials for the meetings they are involved in. Out of the four available options, generally speaking, use a SharePoint site or Office 365 Group.

Roadmap Intent

Microsoft has announced its intent to develop various capabilities that support how meetings are managed in Office 365. Let's review the highlights of what's on the roadmap:

-  **More Digital Ink.** In an upcoming release of Windows 10, Microsoft will add new digital ink capabilities.¹² This generalised improvement for ink-capable Windows 10 devices will enable people to draw and write more frequently, which Microsoft sees as improving productivity. If more people have ink-capable devices available for everyday tasks, the meeting experience in OneNote and other tools will improve in lock step. Windows Ink capabilities are expected by the end of 2016.
-  **Every Meeting Room a Skype Meeting Room.** Microsoft's Project Rigel initiative is focused on bringing Skype Meeting capabilities to any meeting room with a traditional projector or large screen display, using capabilities developed for the Surface Hub.¹³ Microsoft says, "*[Project Rigel] will use Windows 10 devices for center-of-room touch control and Skype for Business online meeting technology to easily connect remote users. Hardware partners including Polycom and Logitech will certify elements of their portfolios for use with Project Rigel systems.*" The first wave of systems based on Project Rigel are anticipated to launch in the second half of 2016. In a couple of separate initiatives, Microsoft is also working with Polycom to incorporate existing video conferencing equipment into Office 365 and Skype Meetings.
-  **Skype at the Point of Work.** In March 2016, Microsoft released an initial integration between the consumer version of Skype and Office Online apps for documents stored in the consumer version of OneDrive.¹⁴ This capability enables a user collaborating on a document to start a Skype chat, voice call, or video call with their co-editors directly from Office Online, providing an informal meeting directly at the point of work. Skype chats are saved against the document, allowing future reference to past conversations. While only initially a consumer play, Microsoft intends to extend these capabilities to Skype for Business and for files stored in OneDrive for Business and SharePoint document libraries. It's likely that this will include files in Office 365 Groups as well.
-  **Delve Analytics for Investigating Meeting Quality.** Available now to customers with the right plans, Delve Analytics reports on the number of hours an individual has spent in meetings over the past week; this is displayed in context with the average across the organisation. It also reports on the quality of meetings, noting which ones were "ineffective" and the reasons for being labeled so. The metrics used to calculate these assessments are interesting but basic, but as more experience is gained in analysing large data sets in Office 365, the metrics should become more advanced, more insightful, and better able to reshape meeting behaviours.

Project Rigel is focused on bringing Skype Meeting capabilities to any meeting room with a traditional projector or large screen display.

Analysis and Evaluation

Let's examine the pros and cons of what's available in Office 365 for managing meetings:

- ✓ **Wide Range of Capabilities.** Office 365 offers a wide range of capabilities that play a supporting role for better meetings—with the ubiquity of OneNote and Skype as cornerstone offerings. When combined with personal computing devices and meeting room hardware (such as the Microsoft Surface Hub), Microsoft offers a complete end-to-end solution for planning, scheduling, and holding in-person and remote meetings. Microsoft's efforts to make Skype scale from the smallest devices for one-to-one interaction to meeting rooms for small team and large group in-person and remote collaboration provides a consistent experience to simplify and streamline meetings.
- ✓ **OneNote.** OneNote is often referred to as the hidden jewel in the Office suite, offering capabilities for taking notes, recording information, and collaborating with others in formal and informal settings. The product keeps getting better, and its availability with full digital ink support on the iPad Pro line makes it an even more desirable addition for everyday use. Microsoft's recent initial efforts to give people an easy migration path from competing offerings such as Evernote bolster the story, broaden the appeal, and should bring many more people to the power of OneNote. And while it won't have much of a near-term impact on the use of OneNote, Microsoft's activity in the education sector for the broad use of OneNote in classroom and teaching situations will see a future stream of people joining the workforce who have experienced OneNote on a day-to-day basis and expect to be able to do so in their work setting too.
- ✓ **Visual Controls for Communication.** Phone systems have long offered difficult to remember key stroke sequences for transferring calls, adding people into a multi-party call, and more. Being difficult to remember is not conducive for driving effective use of those capabilities. Skype for Business provides easy-to-use visual controls for initiating calls, switching to video conferencing, and adding more people into a call, which will increase the rate of uptake and usage. A recent update to the Skype for Business apps on Android and iOS provide visual ways of managing data usage and resolving poor Internet connectivity.¹⁵
- ✓ **Delve Analytics and Meetings.** Delve Analytics is used to report on the quality of meetings and provides suggestions on how meetings can be made more effective. For example, if people are emailing during a meeting, this is a signal the meeting is not as effective as it could be. In one large firm, Delve Analytics highlighted that one "non-essential" weekly meeting consumed 300,000

Microsoft offers a complete end-to-end solution for planning, scheduling, and holding in-person and remote meetings.

hours of preparation time each year at a tremendous cost to the firm.¹⁶ With Office 365 offering an integrated platform for communication and collaboration, the intelligent analysis of what's happening across all of the tools can deliver insights for changing organisational dynamics, including meetings.

- ❗ **Uneven Distribution of Capabilities.** Some of the beneficial capabilities in Office 365 to support meetings are only supported in Office for Windows, or are at least best supported on that platform. This uneven distribution of capabilities undermines Microsoft's emphasis on cross-platform, cross-device support. In particular, the inability to link to a OneNote notebook or create a Skype for Business meeting in non-Windows versions of Outlook is not conducive to making these behaviours a core aspect of managing meetings better.
- ❗ **Poor Mobile Experience on Windows Phones.** Microsoft has put a lot of emphasis on delivering new capabilities to users with Android and iOS devices, but has not been so quick to support its own Windows Phone platform. While this is reflective of the overall market share of Android and iOS devices compared with Windows Phone, Microsoft-aligned individuals and organisations who have purchased Microsoft devices are not well supported.
- ❗ **Getting to "Finished" Is Taking Too Long.** With Microsoft building Skype for Business on a cloud-delivery model, getting to a finished state is taking too long. The reaction from hungry IT administrators is that they want it now, they want it finished, they want all of the Skype for Business goodness available globally in every region—and with perfect reliability thank you. Valid incremental additions, regardless of how small—such as the new Skype for Business client for Mac—are met with cries of derision from the public arena as being too little, too late. Innovating publicly with a product for which there are well-known alternatives is proving to be a challenge for Microsoft.
- ❗ **Too Much Cool Technology Overshadows Effective Meeting Behaviours.** It's Microsoft's responsibility to create cool technology to improve meeting processes; it's each organisation's responsibility to use it wisely. One potential danger of the improving technology coming out of Microsoft is that organisations fail to carry through on their responsibilities, embracing the new tools without a corresponding embrace of the new behaviours required to make it work. While that's not a Microsoft problem as such, a litany of disgruntled organisations will undermine the message Microsoft hopes to spread across the world.

The uneven distribution of capabilities undermines Microsoft's emphasis on cross-platform, cross-device support.

Organisations need to evaluate the applicability of these pros and cons in their environment and develop a plan for mitigating any of the cons that could undermine the effective use of Office 365 in managing meetings.

What Firms Are Doing

Firms across the world are using Office 365 to improve how meetings are managed. Some examples include:

- **VELUX Group.** For 75 years the VELUX Group has created better living environments for people around the world, making the most of daylight and fresh air through the roof. The product programme includes roof windows and modular skylights as well as a range of decoration and sun screenings, roller shutters, installation solutions and intelligent home controls. The firm has embraced Office 365, a journey which started with switching from Notes Mail to Outlook in 2013 and has continued to SharePoint, Delve, and Skype for Business, with other Office 365 products on the near-term roadmap. Staff members comment that Skype for Business has made a big impact on their day-to-day work, making it easier for them to join and participate in meetings anywhere and anytime without having to travel to sites across the VELUX Groups global presence. OneNote is used by staff members to take notes during meetings, and these are stored in SharePoint as a shared resource. Visit www.velux.com.
- **Insurance Firm.** The IT team use a SharePoint team site and a shared OneNote notebook for managing team projects and project meetings. Meetings—which often include remote participants joining via Skype—are run from a OneNote page with a list of agenda items. The notebook contains a tab for meetings, and each meeting is its own page. Each meeting participant opens the OneNote page for the given meeting and types notes and makes appropriate additions to the page during the meeting. This is usually text-based, although sometimes participants add a screen shot. The openness of the OneNote notebook allows project sponsors to review progress at any time, providing further direction and input as required to keep the project on track.
- **Early Adopters of the Surface Hub.** Microsoft commissioned Forrester Consulting to look at the business value of a Surface Hub. Forrester found that: *“Companies that conduct meetings in rooms and collaboration spaces with a Surface Hub installed experienced a 75% improvement in remote attendee setup and post-meeting productivity, saving about 15-20 minutes per hour-long meeting spent on setting up video or screen-sharing services and completing meeting notes. Organizations saw decreased printing costs of up to \$9,000 in the first year, using Surface Hub with pen and touch-enabled screen to make changes and take group notes instead of paper copies. Companies that conducted sales meetings using Surface Hub as a platform for presentations and collaboration with clients estimate a 20% sales improvement with those clients.”*¹⁷

Skype for Business has made a big impact on day-to-day work, making it easier for staff to join and participate in meetings anywhere.

Behavioural Aspects

The lead assertion in this chapter is that while better meeting technology can help, better technology has to be embraced in the context of better meeting behaviours. These include:

- ★ **Set Expectations for the Purpose of the Meeting.** Meetings are held for many different reasons and under many different circumstances. From the meandering one-to-one catchup, the one-to-one agenda-driven review, the small group face-to-face meeting, the small group multi-site meeting, to the large group face-to-face or multi-site meeting—and everything in between—there is no one-size-fits-all approach to this thing called a meeting. What's important, therefore, is shared clarity on the purpose of any given meeting, for which the person calling the meeting bears primary responsibility to state and make clear.
- ★ **Design an Agenda to Fulfil the Purpose.** Once the purpose of your meeting is clearly understood, design an agenda to meet the purpose. For many meetings this is likely to involve a way of sharing background context (either through a pre-meeting briefing paper or a start-of-meeting presentation), a time of discussion in which everyone at the meeting has an opportunity to share their point of view, and a means of reaching a decision on topics that need a decision made. The person calling the meeting has primary responsibility for designing the agenda to ensure the meeting purpose is attained.
- ★ **Invite the People Who Need to Be There.** Sloppy meeting purposes lead to the wrong people being invited to a meeting. Once you have a clear sense of purpose plus a clear agenda, only invite the people who need to be there—even to the point of inviting a changing roster of participants based on each slice of the agenda. If someone has input that's only relevant to one agenda topic, don't waste their time by inviting them to the entire meeting.
- ★ **Distribute Materials in Advance.** People who come unprepared to meetings because they have not read the materials in advance may do so because the materials are only distributed 10 minutes before the meeting. The human practice has to change, so that materials are made available at least 48 or 72 hours beforehand. Technology could help in three ways: by reminding the person tasked to distribute the materials they have a hard deadline coming up, and if they fail to do so, the meeting is automatically rescheduled. Technology could also help by the provision of a shared repository for meeting materials to get away from email distribution. Finally, for people who go from meeting to meeting and are never at their desk, an iPad or similar tablet could allow them to read on the go.

The person calling the meeting bears primary responsibility to state and make clear the purpose of their meeting.

- ★ **Create Time for Preparation.** Ideally, people should come to a meeting fully prepared for the ensuing discussion. In situations where people are in back-to-back meetings, this just doesn't happen. Amazon has established an excellent practice to allow people time to prepare for meetings: the first 30 minutes of a meeting are set aside for silently reading the document that has been written outlining the issue under discussion, after which discussion ensues.¹⁸
- ★ **Practice Meeting Presence.** Once people have made the decision to attend a meeting, they need to fully show up and be present during the meeting. No checking of phones. No doing email. No mindless web surfing. If the amazing devices we carry with us cause distraction during a meeting, ban them outright or severely limit their use. For the designated note-taker, who may have a preference for using a laptop or tablet, note the recent research that shows that handwritten notes are more effective.¹⁹
- ★ **Don't Use Meetings for Status Updates.** Meetings held simply for status updates can be eliminated by having an appropriate shared work tracking tool. The human practice—an expectation that everyone will use it and keep their work status appropriately updated—is essential to making it work. Besides, maybe the meeting shouldn't be eliminated altogether. There is real value in discussing roadblocks and mitigations, so the two-hour in-person weekly meeting to share work status updates transforms into a 30-minute audio conference focused on improvement.
- ★ **Take Proper Meeting Minutes.** People who attend meetings in case they “miss out on something” can be discouraged from doing so through a human practice and a technology change. The human practice is a return to taking real minutes during the meeting—something we seem to have forgotten in recent years. The technology change is that these minutes are posted to the team's shared repository, and there is an open invitation after the meeting to further discuss any matter in the repository. If someone wasn't there, they can still state their perspective. And if someone should have been there, that can be fixed in the future.
- ★ **Carefully Manage Meeting Duration.** Meetings that drag on for too long because some people dominate the discussion while others zone out can also be mitigated by practice and technology. The practices include better meeting facilitation (by an external person if required), the calling of shorter meetings, the removal of chairs from the meeting room so everyone has to stand up, the banning of laptops and smartphones except for the person taking minutes, and so on. Technology can also play a role: if the discussion is actively captured using dialogue mapping, people who keep returning to the same topic can be prevented from doing so.

While technology can play a supporting role in fixing meetings, the human practices are fundamental.

Any organisation that can address these behavioural aspects has a strong foundation for leveraging the capabilities in Office 365.

Alternatively, if the above prescription doesn't work, consider making a radical departure from current meeting etiquette. Embrace one or more of Jeffrey Baumgartner's proposals for an unconventional meeting:²⁰

Most likely, you have a process of booking meeting rooms (at least if yours is a larger company), sitting around a table and following a structured approach to your meeting which is all very conventional and, let us be honest here, boring.

Fortunately, there are all kinds of ways you can challenge your meeting conventions. Don't book a room, but randomly seek a space just before the meeting is to start. Have a standing meeting. Book an empty room and sit on the floor. Have a walking meeting. Sit outside. Stand on the roof. Establish a talking stick and make it mandatory that a person may only speak if holding the stick. Require that everyone wear a hat. Limit everyone to 30 seconds of speaking time.

Use webinar software to hold a meeting even though you are all in the same room.

Think about it and I am sure you can come up with a dozen unconventional ways to hold meetings. Better still, try some of them!

Yes, I know that a number of the ideas above have been suggested by others long ago—and some of the ideas, such as standing meetings and walking meetings have fans who swear by these approaches.

Nevertheless, changing the way you hold meetings is particularly useful if you want people to think more creatively. By challenging the conventions of corporate meetings, you open participants' minds to the idea of challenging conventions in other aspects of business—and it is just such thinking that leads to creativity.

So, if you want to be more creative yourself or if you want your team to be more creative, learn to reject conventional thinking from time to time.

By challenging the conventions of corporate meetings, you open participants' minds to the idea of challenging conventions in other aspects of business—and it is just such thinking that leads to creativity.

Such an approach to managing meetings won't be efficient (and is likely to be awkward, at least initially), but it could be the creative spark for a new set of ideas to propel your team, project, or organisation forward.

On Improving Performance

The capabilities in Office 365—combined with appropriate meeting behaviours—can drive improved performance across a number of dimensions. Specifically:

- **More Efficient.** Meetings can be held with anyone, anywhere, anytime, without requiring travel. Skype for Business can connect people on the devices they are using wherever they happen to be, supporting just voice calling if that is sufficient given the people involved in the call, or video where a face-to-face-like experience is required for effective interaction.
- **Faster.** With the right meeting behaviours in place—such as requiring a written briefing paper for each major issue under discussion, and an effective agenda to drive the conversation and curtail wasted time—shorter meetings can be held that arrive at a more effective decision conclusion. Office 365 supports these behaviours in a number of ways; for example, through access to briefing paper templates, providing a place to store the briefing papers that need to be read in advance of the meeting, and a way of composing and sharing the agenda.
- **More Effective.** Meetings held with the right people, for the right reasons, for the right duration, and with the right preparation will be more effective than those that do not meet these prerequisites. Much of getting these aspects “right” involves human disciplines and cultural expectations, but Office 365 has a role to play in making it possible to include mobile and far-flung team members wherever they happen to be through tools like Skype for Business.
- **Simpler.** Embracing a shared and common way of preparing for and holding meetings, enabled by Office 365, provides a simpler approach that people can put into practice. Always using an Office 365 Group, for example, to share meeting documents and notes gives a single approach that can work in almost all situations. Or using a SharePoint site to coordinate team activity and meetings allows the same benefit to be realised. Early evidence points to the simplifying effect of using a Surface Hub in a meeting room for in-person and remote meetings, and with Skype for Business having a similar look and feel to the consumer Skype edition, “everyone” knows how to use Skype.

With the right meeting behaviours in place, shorter meetings can be held that arrive at a more effective decision conclusion.

More efficient, faster, more effective, and simpler: that’s a good range of performance improvements on offer.

Summary

Meetings are a pretty central part of organisational life for most people, and given the sheer number and duration of meetings that people are expected to participate in every day, any strategy that improves meeting effectiveness is worthy of serious consideration. In this chapter we have taken the view that getting the fundamental human behaviours of meetings right is the core task for anyone wanting to drive a re-imagining of meetings. In a supporting role to this core task, we have also explored the capabilities in Office 365 directly, as well as the supporting capabilities from Microsoft, to drive more effective meetings.

In the next chapter we look at the opportunity to improve how discussions are held within organisations, to support a re-imagining of productive discussions in light of the capabilities in Office 365.

Getting the fundamental human behaviours of meetings right is the core task for anyone wanting to drive a re-imagining of meetings.

¹ I haven't met Tim Lewis (yet), but this quote about meetings is something he said in 2002 while the Manager of Knowledge and Culture at Eddie Bauer. I like it—it captures a reality I fully agree with and try hard to live. For the quote, see www.netspeedleadership.com/article.php?article=14. For Tim, see www.linkedin.com/pub/tim-lewis/3/967/48a.

² See my blog post, *From Email to Wiki: A Clifford Chance Case Study*, at michaelsampson.net/2010/10/21/from-email-to-wiki/. While Clifford Chance was not using Office 365 directly—Atlassian Confluence and Microsoft SharePoint are the tools of choice—the concept is what's important.

³ This is from a Deloitte survey of 250 CFOs in 2012. See *CFOs playing bigger role in driving sustainability efforts in their organisations*, from September 18, 2012, at www.prnewswire.com/news-releases/deloitte-survey-cfos-playing-bigger-role-in-driving-sustainability-efforts-in-their-organizations-170163456.html. The same sentiment is noted in Carlye Creel, *7 Must-Know Video Conferencing Stats*, PGi Blog, July 2014, at blog.pgi.com/2014/07/10-stats-video-conferencing/.

⁴ Infonetics Research, *Enterprise videoconferencing bogged down in Q2 by Europe, public sector*, September 2012, at www.infonetics.com/pr/2012/2Q12-Enterprise-Telepresence-and-Video-Conferencing-Market-Highlights.asp.

⁵ Infonetics Research, *Enterprise videoconferencing bogged down in Q2 by Europe, public sector*, September 2012, at www.infonetics.com/pr/2012/2Q12-Enterprise-Telepresence-and-Video-Conferencing-Market-Highlights.asp.

⁶ Probably the best example of travel cost reductions is in Figure 2 of a Cisco research report from 2009. See Rachael McBrearty, Brian Suckow, and Joel Barbier, *The Economics of Collaboration at Cisco*, 2009, at www.cisco.com/c/dam/en_us/about/ac79/docs/pov/Economics_Collaboration_POV_FINAL_041009.pdf. While you will hear the idea of reduced travel costs in many articles, this Cisco report demonstrates it in black and white.

⁷ This is according to Frost & Sullivan, as cited in *Collaboration tools deliver UC benefits*, Global Telecoms Business, October 2009, at www.globaltelecomsbusiness.com/Article/2308776/Sectors/25205/Collaboration-tools-deliver-UC-benefits.html.

⁸ Blue Jeans Network, *Blue Jeans Network Reveals the State of the Modern Meeting is Face-to-Face, No Travel Required*, December 2013, at bluejeans.com/press-releases/state-of-the-modern-meeting-jan2014.

⁹ AIIM, *Collaboration and Enterprise 2.0: Work-Meets-Play or the Future of Business?* June 2009, at www.aiim.org/Research-and-Publications/Research/Industry-Watch/Collaboration-Enterprise-20-2009.

¹⁰ Bain & Company, *Most meetings end before decisions are made*, Bain Insights, October 2010, at www.bain.com/publications/articles/most-meetings-end-before-decisions-are-made.aspx.

¹¹ Ryan Fuller, *How to Finally Kill the Useless, Recurring Meeting*, HBR, March 2015, at hbr.org/2015/03/how-to-finally-kill-the-useless-recurring-meeting.

¹² Aaron Woodman, *The Future of Pen: Windows Ink*, Windows Experience Blog, March 2016, at blogs.windows.com/windowsexperience/2016/03/30/the-future-of-pen-windows-ink/.

¹³ Zig Serafin and the Skype for Business Team, *Expanding the reach of Skype for Business meetings and voice services in Office 365*, Office Blogs, March 2016, at blogs.office.com/2016/03/09/expanding-the-reach-of-skype-for-business-meetings-and-voice-services-in-office-365/.

¹⁴ Office Team, *Collaboration in Office—chat with your co-editors in real time via Skype*, Office Blogs, March 2016, at blogs.office.com/2016/03/07/collaboration-in-office-chat-with-your-co-editors-in-real-time-via-skype/.

¹⁵ Skype for Business Team, *Announcing content viewing for Skype for Business on Android and updates to iOS*, Office Blogs, April 2016, at blogs.office.com/2016/04/12/announcing-content-viewing-for-skype-for-business-on-android-and-updates-to-ios/.

¹⁶ See my blog post, *300,000 Hours a Year for One "Non-Essential" Meeting*, April 2016, at michaelsampson.net/2016/04/29/non-essential/.

¹⁷ Brian Hall, *Microsoft Surface Hub has begun shipping to business customers*, Windows Blog, March 2016, at blogs.windows.com/devices/2016/03/25/microsoft-surface-hub-has-begun-shipping-to-business-customers/.

¹⁸ Janet Choi, *Effective Meeting Tactics employed at Execs at LinkedIn, Amazon and Asana*, Zapier Blog, October 2014, at zapier.com/blog/effective-meeting-tips-tactics/. For a longer exploration of the Amazon approach, see Adam Lashinsky, *Amazon's Jeff Bezos: The ultimate disrupter*, Fortune, November 2012, at fortune.com/2012/11/16/amazons-jeff-bezos-the-ultimate-disrupter/.

¹⁹ See my blog post, *Handwritten Notes vs. Keyboard*, December 2015, at michaelsampson.net/2015/12/23/handwritten-notes-vs-keyboard/. There's a link in the blog post to a good article on HBR on this topic.

²⁰ Jeffrey Baumgartner, *Dare to Be Anticonventional*, CreativeJeffrey.com, January 2015, at www.creativejeffrey.com/creative/rejectconvention.php?topic=act.

Chapter 8.

Holding Discussions

There's a performing motto ... to say yes instead of no. It's actually an improvisational rule ... it's about supporting the other person. And the corollary to that is if you concentrate on making other people look good, then we all have the potential to look good. And I've always found that my career happened as a result of a tremendous synergy of all the talented people I've worked with, all helping each other, all connecting and reconnecting in different combinations. So ... identify talented people around you and then instead of going into competition with them or trying to wipe them out, make alliances, make creative friendships that allow you and your friends to grow together.¹

Harold Ramis

There is nothing quite as satisfying as a great conversation with a group of people who share a common interest, are working towards a common outcome, or who really want to work something out. If you can get the dynamics right, it's a magical experience. Ideas flow. People share different perspectives. Disagreements arise. Alternatives are explored. Tempers flare. Passion is stirred. A compromise is mooted. There's more discussion. A new way begins to be understood. And by the end of the conversation, the group has coalesced around a new way forward, one that couldn't have happened without everyone's full participation. Such conversations are all too rare in business life, and we need more of them.

In this chapter, we will:

1. Look at the big idea of holding discussions in better ways than through email.
2. Review the research findings on effective discussions, and analyse when to choose a public or private discussion forum.
3. Investigate and evaluate the capabilities in Office 365 to support discussions, as well as the behavioural aspects to get right to improve the quality of discussions.

The Big Idea

A discussion provides a means for individuals, a team, or a group to discuss ideas, challenges, problems, and opportunities with a view to exploring the boundaries of what's known and laying the basis for making a decision. Discussions are frequently held around a meeting table, which allows the participants to both hear the words and read the body language and vocal intonation of other speakers. Due to the difficulties of getting everyone necessary around a meeting table whenever a discussion is required, discussions are also frequently held by email. However, while there are some efficiencies to be gained by holding a discussion by email, the approach is not without significant problems, such as confusion around conversation flow and context. This leads to:

- **Frustration.** People in the team can get frustrated with each other because their conversation is rendered chaotic by email. The academics tell us that failing to get team members to have the same mind and outlook on a project is one of the most significant roadblocks to project success; continually being frustrated with others does not contribute to healthy inter-team member relations and can hinder people from reaching a common position.
- **Misunderstandings.** It is very easy for people to add or remove others from specific messages in a thread, which means that everyone who received the original message is not guaranteed of seeing every resultant messages. Some people are added; others are removed. Thus not everyone is going to have the full picture of the conversation, and if they have missed out on certain important messages, they will not have the same view or perspective on the conversation that others have. This can lead to misunderstanding and conflict.
- **Constant Re-evaluation of Topic Fit.** New messages that arrive late in the piece force each recipient to cast their mind back to where the conversation currently stands, and then to re-evaluate just where precisely in that neatly ordered representation the new message should be slotted. Email helps greatly with helping people say what they want to say when they want to say it, but it doesn't help everyone else comprehend the important of what's being said. They've got to figure it out for themselves.
- **Fragmented and Time-Delayed Conversations.** While email is designed as a store-and-forward communication environment, which gives great power to all involved to communicate when they are ready to do so, such time delays in communication endeavours lead

While there are some efficiencies to be gained by holding a discussion by email, the approach is not without significant problems, such as confusion around conversation flow and context.

to fragmented conversations. You ask for feedback on something that you're working on; it may take three or four days before you've heard back from everyone, by which time the issue is no longer relevant. And even if you do email others to let them know that you're no longer looking for input, it is most likely that others will review the older messages first, thus responding anyway. You are going to get messages that you don't need anymore (and some of the subsequent points raised may make you re-evaluate decisions that can't be changed easily now), while other people are going to waste their time giving input that can no longer be fruitfully used.

- **Scattered Messages.** Merely looking at your email inbox isn't going to give you a total sense of a conversation that you are involved with, because it misses all of your contributions. Where are those? In your Sent folder. The majority of email clients do not show your contributions in line with contributions of others, instead moving them off somewhere else.

Email means that people have to work harder to follow the flow of a conversation than they would if more conversationally correct tools or approaches were used. A discussion forum enables people to specifically insert their feedback and thoughts into the correct place in a conversation hierarchy.

By changing the technology used for holding discussions, two improvements are possible:

- **Discussion Efficiency.** The purely mechanical tasks of holding a discussion are more efficient in a discussion forum compared to a collection of email messages. Where to click to read the latest messages is more clearly stated, and these new messages are shown immediately in the context of prior messages. People don't have to try to remember which discussion a particular thought is part of; it's obvious just by looking at where it is positioned.
- **Discussion Effectiveness.** Holding a discussion in a discussion forum can positively impact the effectiveness of the discussion. Wider participation from people with diverse perspectives can be achieved in the discussion, since it is more accessible for input from other people, instead of being limited by design to those who were included in the original email thread. A second way of increasing discussion effectiveness is through the retention of the discussion for future reference by staff and the incorporation of the discussion in search results. People can look back to see the thinking behind decisions and, if the thinking is more widely applicable, can leverage earlier approaches in current challenges.

There's a lot to be gained by shifting discussions out of email and into a discussion forum.

Email means that people have to work harder to follow the flow of a conversation than they would if more conversationally correct tools or approaches were used.

Research Findings

There are various ways of improving discussions through new tools, such as those offered in Office 365. Let's consider some of the pertinent research findings.

- **Encourage Dissent and Divergent Thinking.** People holding a dissenting view from other members of a group—even if that view is wrong—will cause group members to re-examine their assumptions and re-evaluate decision criteria. Dissenting views drive divergent thinking, which helps to counteract groupthink and make it more likely that a group will make the best decision out of the available options.² A dissenting view is therefore like a shock to the group's current way of structuring its decision options, shattering the illusion of conformity and driving a re-examination of the best way to proceed.
- **Have Enough People in the Discussion.** To be effective an online discussion needs a critical mass of people; large enough so one person doesn't dominate, and not too large so no-one wants to engage in the discussion because they feel anonymous and that their input will not be worth anything. In some environments this is pegged at 12 being the ideal number, although anything in the range of 8-20 participants will generally work.³
- **Develop Critical Thinking Skills.** In discussion forums where the topics are focused, structured, and purposeful, participants can develop and enhance higher-order thinking skills, such as critical thinking.⁴ One reason this happens is because participants have more time to reflect on what has already been written and plan their response appropriately. This outcome is more likely to be reached in a small group situation (see *Have Enough People in the Discussion* above) rather than large or massive groups where the discussion forum becomes a mess of unmanaged content. A leader or moderator who can steer the conversation is useful in this regard.
- **Differences in Public and Private Discussions.** For topics that require confidentiality or are of a sensitive nature, a private discussion forum is often the best approach. This is not always the case, and there is a strong argument to be made for more openness in discussions. See Figure 8-1.

People holding a dissenting view from other members of a group—even if that view is wrong—will cause group members to re-examine their assumptions and re-evaluate decision criteria.

Figure 8-1. Deciding on a Public or Private Discussion

Decision Attribute	Public Discussion Forum	Private Discussion Forum
Confidentiality over discussion items	Anyone with access to your Office 365 tenant can see and contribute towards discussion items. It's an open conversation.	Only those people invited to the discussion can see and contribute discussion items. It's hidden and private.
Suitability for discussing sensitive or secret topics	Low suitability. Anyone with access to your Office 365 tenant will be able to see what is being said.	High suitability. You can limit access to specific people, and conversation items are hidden from search results.
Potential for serendipity in contributions	High potential. Other people with an interest in the discussion can have their say.	Almost non-existent potential. You have to be pre-invited to even know about the discussion.
Potential for value beyond the immediate discussion	High potential. Other people can find the discussion in the future and benefit from the line of argument.	Almost non-existent potential. The discussion is hidden and private to those people who were initially involved in the discussion.
Discussion forum compared to a discussion by email	Improves discussion efficiency, plus increases the prospect of discussion effectiveness through participation from other people.	Improves discussion efficiency, but doesn't do anything for discussion effectiveness because participation is limited.

Both public and private discussion forums offer benefits compared with a discussion by email, but a public discussion forum offers the additional benefits of serendipity in contributions and long-term value.

- Discussion Forums Can Replace or Shape Meetings.** In the previous chapter we discussed how some meetings can be replaced by other forms of interaction. A post on the LightningTools blog puts the possibility this way: *Physical meetings are also a pain point for many people. Rather than hold a physical meeting straight away why not start a discussion thread on a forum and see if the objectives can be met there. If not—at least you'll have an agenda detailed down that can be used to keep the meeting to the point.*⁵
- Online Discussion Improves Social Well-Being.** Research on the use of online discussion forums in civic situations found that high identification with a forum led to improved satisfaction with life and higher involvement in offline civic activities.⁶ In other words, involvement with an effective forum had benefits for individuals (satisfaction with life) and the local society (higher participation in activities). Extrapolating from this research, then, it is possible that similar outcomes can be achieved in organisational settings.

This concludes our brief survey of the research on discussion forums.

Office 365 Capability

Three ways of holding discussions outside of email are offered in Office 365: the use of Office 365 Groups, Yammer, and a SharePoint discussion list. Let's look at what is on offer in each of these.

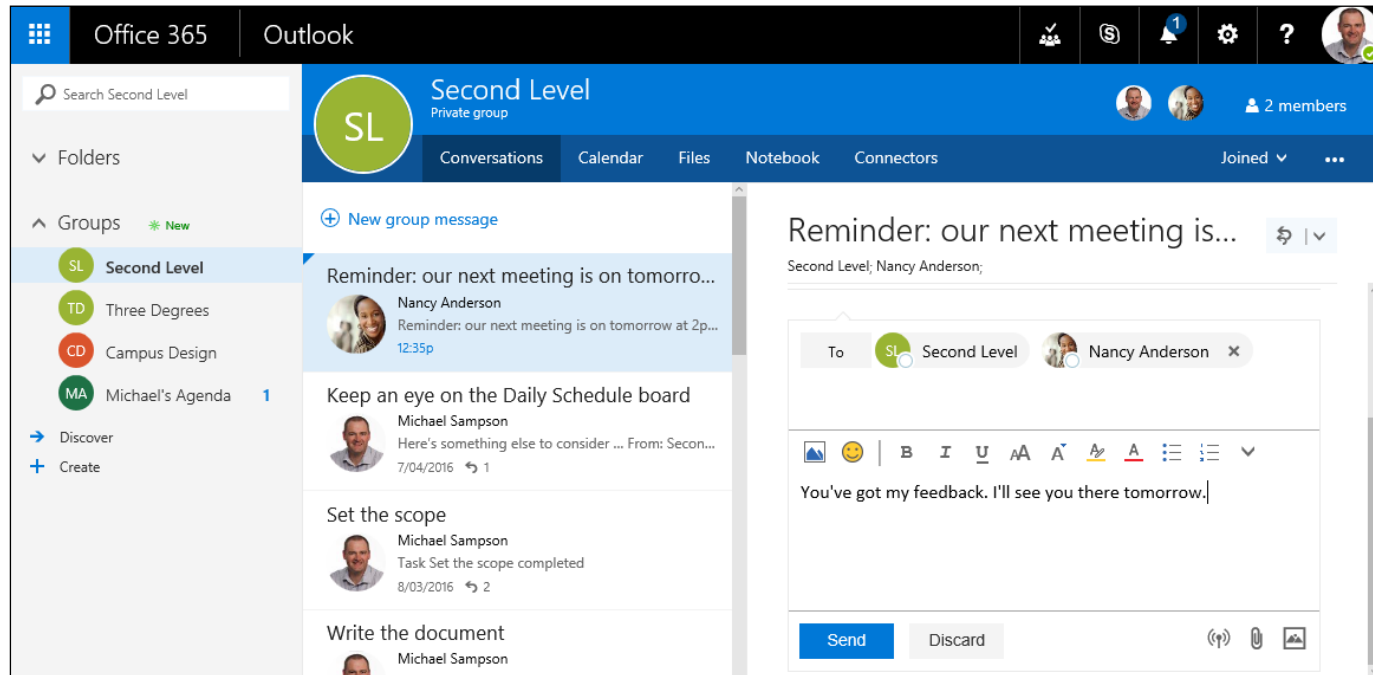
Office 365 Groups

Office 365 Groups is the most recent offering in Office 365 to support team and group interaction, including discussion capabilities (see Figure 8-2). Groups are accessible via Outlook Online and Outlook 2016 for Windows; Outlook users not on a Windows device need to use Outlook Online to access Groups.

- **Four Capabilities in an Office 365 Group.** Each Group offers four capabilities: conversations, calendar, files, and notebook. Conversations is a group-specific email discussion list, calendar is an Outlook calendar, files uses a special SharePoint document library, and notebook is a OneNote notebook for the group.
- **Start New Group Conversations.** From inside the Group, members can start a new conversation in a small message window. The new conversation is added to the group pane and, if members have elected to receive the message as an email, it will display in Outlook as well. Files can be directly attached to a new group conversation, although the preferred approach (and default choice) is to link to a file stored in a cloud-accessible location like OneDrive; this allows for single storage and co-authoring.
- **Reply to Current Group Conversations.** From the conversation pane, a member can reply to a group conversation and the reply will be shown in context with the original message (which is called message threading). Likewise, a member can reply from Outlook and the reply will be shown in context with the original conversation too.
- **Office 365 Groups and Outlook.** Groups are displayed in the left-hand navigation bar in Outlook Online and Outlook 2016 for Windows, under the Groups heading. Group members can review and participate in discussions, view the calendar, access files, and use the group's notebook. Groups are not yet listed in other Outlook clients, such as Outlook for Mac, or Outlook for iOS devices. While users on these platforms can participate in email discussions through Outlook, to access the group homepage they will need to use Outlook Online via their browser of choice.

Groups are displayed in the left-hand navigation bar in Outlook Online and Outlook 2016 for Windows.

Figure 8-2. Discussions in Office 365 Groups



Office 365 Groups leverages the familiarity of Outlook to provide a group-specific place for conversations, a calendar, files, and a notebook. Each component uses the appropriate capability from across Office 365, such as Outlook (for email and calendaring), SharePoint (for files), and OneNote (for the notebook).

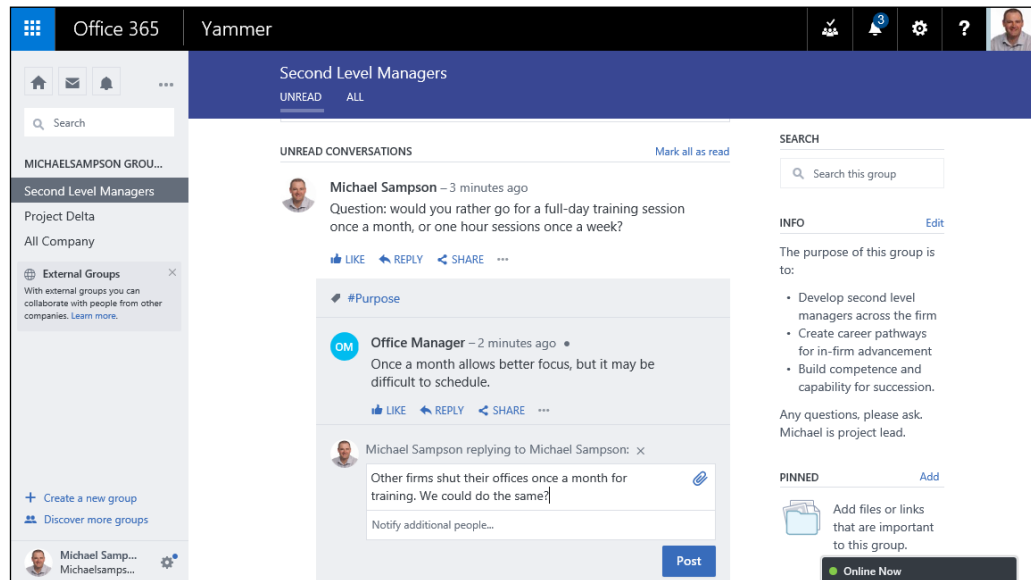
- **Office 365 Groups and Yammer—An Unresolved Question.** When Office 365 Groups was announced at the SharePoint Conference in March 2014, it was pitched as the “evolution of email,” and the Groups concept was explicitly noted as being taken from Yammer.⁷ At the time the intent was to provide a unified experience with seamless access to and interaction with Groups across Yammer and the Outlook Web App. While the Outlook Web App (Outlook Online) capability is available, two years on the Yammer capability is still missing in action. Microsoft signalled afresh in February 2016 that it will integrate Groups with Yammer (during the first half of 2016), but it remains to be seen how exactly this will work.⁸

Yammer

When Microsoft purchased Yammer in mid-2012, it acquired capabilities for employee discussions, engagement, and interaction to integrate across its platforms, including Office 365. While Yammer has a much bigger role to play in organisational life and re-imagining productivity (and we will look more at Yammer in subsequent chapters), the discussion capabilities on offer are:

- **Discussion by Declared Group.** Discussions can be held within the context of a private or public group or held together more loosely via a particular topic by using a hashtag (e.g., #topic1). If done in the context of a declared group, the purpose of the group can be displayed on the group's home page, membership can be monitored, and group files and online notes created and shared among group members. Note that the online notes are Yammer notes, not OneNote notes (see Figure 8-3).

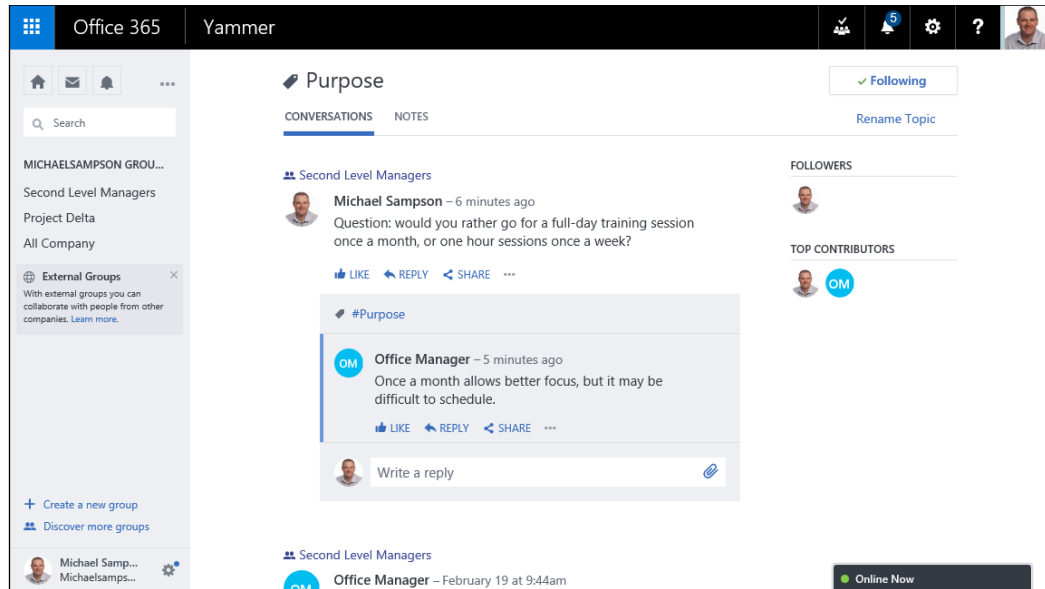
Figure 8-3. Discussions in Yammer by Declared Group



Yammer provides threaded discussion capabilities in Yammer Groups along with the capability to share files and notes. A group's homepage in Yammer can note its purpose and group membership can be moderated or monitored.

- **Discussion by Topic Grouping.** A second option for holding discussions in Yammer is to do so around a more loose approach using topic tags. Any discussions, notes, or announcements tagged with a particular topic in the All Company network or in any groups that the current user has access to are displayed for review when viewing the topic (see Figure 8-4, where the topic is Purpose).

Figure 8-4. Discussions in Yammer by Topic



In addition to discussions in declared groups, Yammer offers the option of loosely grouping discussion topics by using a common topic tag that will display all tagged conversations across the organisation's Yammer network and any groups that the current user has access to.

- **Yammer Across Devices.** Yammer is accessible through a web browser on supported devices, and Microsoft offers Yammer clients for mobile devices. Access via a browser provides access to both discussions in groups and by topics; on the mobile client only group-based discussions are accessible, as the tagged topic discussion approach is not.

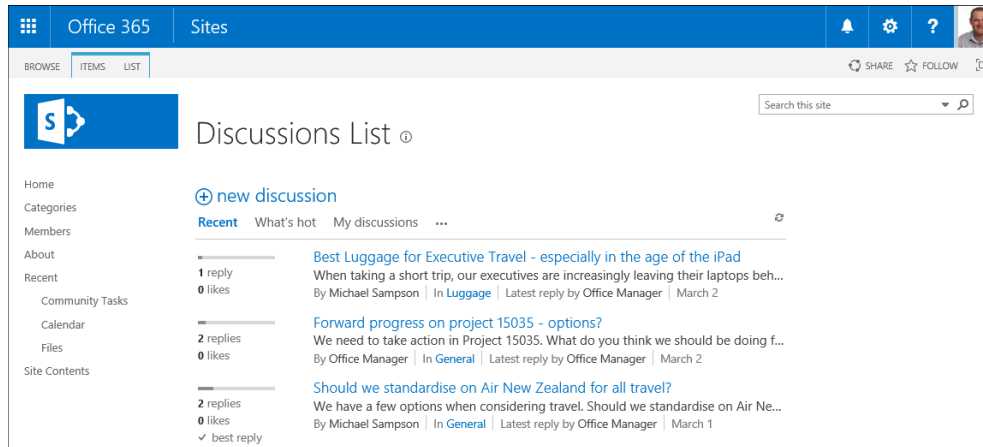
As mentioned at the beginning of this section, Yammer has a much larger role to play in organisational life, and we have only looked at the discussion capabilities in this section.

SharePoint Discussion List

The Sites app in the Office 365 App Launcher provides access to SharePoint Online. Inside a given SharePoint site, one of the options is to add a discussion app—and there are two on offer by default in SharePoint (the discussion list app in Community Sites, and the discussion board app in other types of sites). As with Yammer, SharePoint has a much larger role to play in organisational life than only supporting discussions, but let's look exclusively now at SharePoint's discussion capabilities.

- **Discussion App Inside a SharePoint Site.** A SharePoint site is a related collection of lists and libraries (albeit increasingly called “apps”) tied together in a unified container with the ability to moderate membership and access privileges within the site. A discussion app is one of the standard lists that can be added to a SharePoint site and is added by default to various SharePoint sites templates, such as the Community Site template (see Figure 8-5). Within a discussion app members can add new discussion topics, reply to current discussions, and show support by liking a discussion or a reply. In the Discussion List app in the Community Site template, there is also a category field for classifying discussion topics.

Figure 8-5. Discussions in SharePoint



A discussion app in a SharePoint site provides a way for site members to hold a discussion, with support for multiple discussion topics and replies. Discussion topics and replies can be liked for showing support. The Discussion List app in the Community Site also has a category concept (like the Yammer topic concept).

- **Discussion Topic as a Talking Point or a Question.** New discussion topics can be a direct discussion topic or flagged as a question by ticking the question box. Flagging a discussion topic as a question does not change the behaviour of the discussion topic nor reply capabilities, but within the views of the discussion app, unanswered and answered questions can be viewed separately from all other non-question discussion topics. Replies can be flagged as being the “best reply” for a discussion thread, which displays a highlighted copy of the best reply at the top of the reply hierarchy, making it clear for current and future discussion list members what was helpful in the discussion. There can only be one best reply at any time, and if the discussion topic is flagged as a question, the “best reply” is taken as the answer to the question. The “best reply” option is available to site owners as well as the individual who asked the question or started a discussion topic.
- **Email Alerts but Not Email Interaction.** SharePoint offers a standard capability for alerting via email (or text message) of new list item additions or changes, with various nuanced settings to create targeted alerts. These standard capabilities are available for SharePoint discussion app items, and while an alert can be sent to an email address, the email alert is an alert only. The recipient cannot respond to the email alert and have their comments included in the discussion hierarchy; he or she must click the link in the email alert to open the discussion app and respond within the SharePoint discussion app.
- **Email Interaction with Outlook for Windows.** One of the standard capabilities in SharePoint is the ability to add particular apps to Outlook for Windows, and the Discussion app supports this. Once a discussion app is added to Outlook for Windows, the user can review recent messages, post discussion items, and reply to current discussion items. In the technical sense it doesn’t use “email” as such to send and receive discussion items and replies, but in common usage the discussion material is available in an “email” application. The ability to add a SharePoint discussion app to Outlook is a Windows-only capability.
- **Add Metadata to Discussion Items.** While the discussion board app offers basic metadata fields for each discussion item (e.g., subject, body, question), site owners can add additional metadata fields that make sense for the nature of the discussion to be held through the board. For example, a Status metadata item could be added to each discussion topic, allowing the site owner or discussion topic owner to mark a topic as being closed or finished. Likewise, a Project Phase metadata item could be added to align discussion topics with particular project phases. SharePoint is limited only by imagination.
- **Lifecycle Content Management.** SharePoint supports lifecycle content management of discussion app items, with capabilities for regulatory compliance, archiving, workflow, and more. These capabilities are general capabilities across SharePoint, not specific solely to the discussion app. It is one of the great strengths of SharePoint within the enterprise.

New discussion topics can be a direct discussion topic or flagged as a question by ticking the question box.

Comparison Matrix for Holding Discussions

Office 365 offers three differing approaches for holding discussions. Common capabilities across the three include creating new discussion topics, replying in-line for a threaded discussion, the ability to set alerts on new messages and replies, and the ability to like a message to show support. The key differences between the three approaches are shown in Figure 8-6.


Figure 8-6. Comparing Discussion Capabilities in Office 365


	Office 365 Groups	Yammer	SharePoint Discussion
Interact with the discussion via email messages	Yes	Yes	No
Categorise a discussion topic	No	Yes (via free-form topics or #hashtags)	Yes (via categories in the Discussion List app in Community Sites)
Add new structured metadata settings to a discussion topic	No	No	Yes (add metadata columns to the discussion app)
Declare a group description or purpose	No	Yes (in declared Groups, but not in topic-aligned discussions)	Yes
Mobile app for interacting with the discussion	No	Yes	No
Ask a question and note a best answer	No	No	Yes
Mark a discussion topic as closed	No	No	Yes But (the discussion app owner would need to add a metadata column for status)


Each of the discussion tools in Office 365 can be used to hold discussions, but there are various major and minor differences between the three tools. These are shown in the table above, with the bold text highlighting the significant difference for each option.


Roadmap Intent

Let's look at Microsoft's future intent that impacts on holding discussions in Office 365:

 **Merging Office 365 Groups and a SharePoint Team Site.** At the Future of SharePoint event in early May 2016, Microsoft indicated tighter integration between SharePoint team sites and Office 365 Groups will be delivered in 2016.⁹ *"We're bringing the power of SharePoint team sites and Office 365 Groups together, giving every group a team site and giving team sites the benefit of groups for simple management of membership across Office 365 services. If you are assembling a team or starting a project, you can create a team site from the SharePoint home and provision a corresponding Office 365 Group in just seconds, with integrated information classification and compliance."* This integration will have implications for the discussion capabilities across team sites and Groups, but exactly how Microsoft will implement discussions in the newly integrated world remains to be seen.

 **Yammer is Go.** After some years of conflicting messages, Microsoft announced that Yammer would be broadly available to every eligible Office 365 tenant.¹⁰ Beyond mere availability, however, is its pending deeper integration across other Office 365 services.

 **Optimising Yammer for Team Collaboration.** With the wider role in Office 365 envisaged for Yammer, Microsoft is making a series of improvements to the Yammer experience. One significant roadmap improvement deals with the Yammer Inbox. *"Yammer is updating the Inbox for teamwork by providing better structure and workflow. As part of this, we're organizing inbox messages by group, introducing group bulk actions with the ability to mark a group as read, replacing "Mark as Unread" with "Read Later" that lets users flag messages for follow up for better workflow, and showing unread messages and messages marked "Read Later" as separate tabs within the inbox. We're also separating direct messages from group conversations in the inbox. Finally, we're streamlining the inbox by removing duplicate content that has been viewed elsewhere."*¹¹

 **Linking Yammer and Delve.** Microsoft is rolling out an integration between Yammer and Delve, with more capabilities to come during 2016. Specifically, Microsoft says that *"Delve will also enable inline conversations so you can share and discuss any content in Yammer directly from within the Delve experience."*¹² This enables an individual to work within Delve on content directly presented there, while simultaneously making discussion comments that are displayed and accessible from the Yammer side too.

Microsoft is bringing the power of SharePoint team sites and Office 365 Groups together, giving every group a team site and giving team sites the benefit of groups for simple management of membership across Office 365 services.

Analysis and Evaluation

The discussion capabilities in Office 365 have a set of associated pros and cons. Let's look at those, and a couple of ideas as well:

- ✔ **Three Good Options.** Office 365 offers three good options for holding discussions in new ways: Office 365 Groups, Yammer, and a SharePoint discussion list. Each option offers capabilities that align with the major needs to make discussions both more efficient and more effective. The particular strength of Office 365 Groups is its integration into Outlook for Windows allowing an email-like experience with the added benefit of future findability. For Yammer, the particular strength is support for discussions within defined Yammer Groups as well as Yammer-wide topic-based discussions. For a SharePoint discussion list, the particular strength is lifecycle content management of discussion items, and the ability, for example, for discussion items to instantiate workflow processes.
- ✔ **Good Coverage Across Computers and Devices.** Microsoft offers good (not perfect) coverage of the various computers and devices that people use for discussions, with strong support for mobile devices. People can participate in discussions in Office 365 Groups and Yammer using a mobile app on their device of choice.
- ✖ **Room for Improvement in Device Support.** There are two current weaknesses to resolve in device support with discussion capabilities in Office 365. First, the lack of a native mobile app for SharePoint discussions. Since Microsoft has recently added support for SharePoint sites to the iOS app (with Android support due in 2016), a future update may mitigate this weakness. Second, there is no integration in Outlook for Mac with Office 365 Groups, as there is in Outlook 2016 for Windows. Mac users need to use a web browser to interact with Groups.
- ✖ **Discussions Are Siloed in the Original Tool.** Discussions in Office 365 Groups, Yammer, and a SharePoint discussion list can make reference to other complementary discussions that have previously happened in the same specific discussion tool, but do not provide discovery nor a browsable discussion repository using cross-tool metadata. For example, Office 365 won't tell a Yammer group about a similar topic-based discussion in an Office 365 Group or a SharePoint site; it is blind to the conceptual linkages that exist across the tools. Ditto for an Office 365 Group and SharePoint sites. Perhaps this is an investment area that Delve could help draw together; after all, organisations want to know what they already know, not merely what is known in only one discussion silo.

Office 365 offers three good options for holding discussions in new ways: Office 365 Groups, Yammer, and a SharePoint discussion list.

- ❖ **SharePoint Discussion List Issues.** In terms of lifecycle management of discussion content, the SharePoint discussion list is the closest to the gold standard in Office 365, but this is let down by its ugly presentation and difficult usability. Various third-party vendors offer replacement discussion list capabilities for SharePoint on-premises, but few of these have made their way across to SharePoint Online. Microsoft needs to learn from its third-party vendors and create a more compelling discussion experience in SharePoint Online directly, or work with some of its leading third-party vendors to port better capabilities to Office 365. Some of this critique may be addressed by the pending refresh during 2016 of the SharePoint user experience, but that remains to be seen.
- ❖ **A Series of Trade-offs with No Clear Winner.** Figure 8-6 displays the differing capabilities across the three discussion tools in Office 365. Each has their own sweet spot, but none of the three present a clear winner in terms of which tool to always use for discussions. Office 365 Groups is good for email integration. Yammer feels natural to use but lacks lifecycle management capabilities for discussion threads. SharePoint is good for lifecycle management, but isn't as natural as Yammer. It would be good to see a merging of the best capabilities across the three tools.

Microsoft needs to create a more compelling discussion experience in SharePoint Online.

Finally, here's a couple of "wouldn't it be cool if" ideas:

- * **Delve Analytics on Discussions.** Microsoft has managed to figure out a simple way using Delve Analytics of reporting on the effectiveness of meetings. Wouldn't it be cool if that same analytical insight could be applied to discussions—in context of the discussion, across all of Office 365—giving an in-the-flow assessment of the quality of the discussion, as well as pointers on how to improve that quality ranking. For example, perhaps there are specific other individuals at your firm who would add tremendous value to the discussion. Or there are specific content items that should be read and incorporated into the discussion. Or if one person is dominating the discussion (through sheer volume of comments). Or if someone isn't hearing the argument that another person is trying to make and is instead mindlessly repeating their prior points.
- * **Cross-Tool Movement.** If the boundaries between the discussion tools in Office 365 are going to be retained, wouldn't it be cool if a discussion that starts in one tool could be moved into a different one. For example, a discussion thread in SharePoint—with all of its threaded data and associated metadata—could be lifted and shifted into a Yammer group. Or (depending on how Microsoft integrates Office 365 Groups and the SharePoint discussion list), a discussion thread from an Office 365 Group is moved into SharePoint for longer term retention and access. The ability to move discussion threads across tools would allow a team to start a discussion wherever it made most sense and then move it to a different tool as the need changed.

What Firms Are Doing

Firms around the world are already leveraging Office 365 to improve the way discussions are held. Here's two examples:

- **British Airways.** British Airways is using Yammer to connect its 41,000 people.¹³ The global head of IT operations reports on its use: *"We've found that Yammer facilitates spontaneous conversations among employees—sparking innovative ideas that help us operate more efficiently and improve customer service. For example, when our employees got their first look at the new Airbus A380 airliner, Yammer buzzed with excitement. However, some cabin crew members noted that the galley layout could be improved. One employee even sketched and posted some recommended adjustments. The engineering team, based in Wales, was tracking this social conversation and quickly captured and incorporated the feedback—all in a matter of days. This connection and level of collaboration between different parts of our organisation would have previously taken significantly longer to achieve. Yammer collaboration reduced the exchange to days and drove a highly effective solution that enhanced staff productivity and customer service on our new A380 flights. In another example, the team responsible for customer experience proposed some improvements to amenity kits that British Airways cabin crew give out to customers in our First cabins. Cabin crew started a thread talking about the amenity kits, discussing what customers thought about them and what products might be included in the future. Having real-time feedback from our colleagues at our fingertips ensures we can make changes that our customers will love, and our cabin crew colleagues know that their feedback is important."*
- **Marks & Spencer.** Marks & Spencer has experienced similar benefits from using Yammer to connect more than 80,000 global staff members across the firm's 1,330 stores, enabling new discussions that would otherwise not have happened.¹⁴ *"Store employees everywhere have taken to Yammer to share their successes and challenges to get instant feedback and support from their colleagues. With a constant dialogue among stores and offices, there's a better understanding about what is happening in the field and how to improve customer service. 'It benefits the customer every time store colleagues reach out to each other on a customer's behalf to help solve a problem,' says [the IT Service Delivery Manager at Marks & Spencer]. 'And it is very satisfying for employees to have a vehicle to take their concerns to the business and be listened to.'"* The firm is finding that new staff members greatly value the modern work tools and flexible work styles enabled by Yammer and the rest of the Office 365 toolset.

Yammer collaboration reduced the exchange to days and drove a highly effective solution that enhanced staff productivity and customer service.

Behavioural Aspects

Having a discussion is one of the fundamental patterns of human interaction that can be approached collaboratively ... or not. There are a number of behavioural aspects to get right:

- ★ **Use Conversations to Build, Not Overturn.** Edward Bulwer-Lytton said *"the true spirit of conversation consists in building on another man's observation, not overturning it."*¹⁵ Be careful how you use your freedom in conversation.
- ★ **Specify the Outcome Properly.** To drive understanding, to cultivate greater awareness, or to increase the number of perspectives that have been explored and shared are good outcomes for a discussion. Each removes the performance standard of having to commit to a decision immediately, which can stifle a willingness to participate. Giving people time and space for healthy discussion is a good approach to demonstrate transparency, openness, and a willingness to explore options. Approaching a discussion with the outcome specified as "getting what I want from the others" is an imposition, not a collaboration.
- ★ **Engage and Speak Your Mind.** "Great minds think alike" and "fools never differ" are both true, but the fools element can be mitigated by exploring the options. This requires someone to raise a different idea and take responsibility for talking it through. In any new problem domain we must enter a discussion expecting differences of opinion; if everyone agrees with the single quick answer then you have laziness of thinking. If a group has fully explored the options, debated the differences, and come to a common conclusion, then you are more likely to have arrived at the "great minds think alike" position. But don't expect to start there.
- ★ **Listen Deeply to Other People.** Your right in a collaborative discussion is to engage and speak your mind, but your responsibility is to give other people that same freedom. When they are engaging and speaking their mind, it is essential to listen deeply to what they are saying, otherwise you haven't fully discharged your responsibility. Some people can listen through their ears only, while others need to take notes, draw a mindmap, or jot down keywords. Use the practical support tools that enable your listening process.
- ★ **Provide Time to Reflect.** New information and different insights can lead people to seeing things differently; a position they passionately advocated earlier in a discussion can give way to tentative acceptance of a new viewpoint. Providing opportunities during a discussion for people to reflect on what's going on for them can help stimulate this process. When I have been facilitating a discussion, I often put a new sheet of paper on the wall, write the word "Reflections" in the middle, pause a moment, and then ask quietly if people have reflections to share. Or I might phrase it as "What do you see in the data?" if the discussion has been an exploration of research data.

★ **Be Willing to Do Something Different.** The real test of a collaborative discussion is that you are willing to do something different to what you had originally anticipated or planned—subject to that making sense based on the discussion. There is nothing so powerful as making a different decision on intent or action as a result of a discussion to show that you were fully involved, participating, and engaged in heart and mind.

Answering “But This All Takes Too Much Time”

Someone you work with is going to complain about the “extra time” it takes to use a discussion forum instead of email. Their complaint will be about all the steps involved in going into the discussion forum, creating topics with all the different fields, and then trawling through the discussion forum to find topics and questions they need to respond to. “Doesn’t it take less time to just use email?” they ask. Here’s a way of answering that question.

- Using a discussion forum does take time, but so does the current approach of using email. From the perspective of what you have to type to make each approach work, there isn’t actually a lot of difference though.
- If the discussion forum takes more time, it does it at the front of the process—creating the topics or questions and structuring the forum. By comparison, if it is quicker with email, it is quicker when creating and sending the initial emails.
- In comparison to email, a forum offers significant benefits over its lifetime. Previous conversations are not hidden in people’s inboxes, forever lost to the purview of other people. Expertise is clearly demonstrated in discussion contributions, and is thus discoverable by other people. Discussions confer long-term benefits beyond the immediate discussion; when someone is facing the same issue in 24 months, the whole discussion doesn’t have to be held again. Open the forum and the line of argument is in plain view.
- The real difference is one of perception. Your people have used email for holding discussions for years, and thus have deeply ingrained habits. How to use email to hold a discussion has become invisible to them because they have done it so often. Using a forum for a discussion is new—and by implication your people don’t have deeply ingrained habits. These habits have to be learnt.
- In summary, people are very efficient at using email for holding discussions, and will initially be inefficient at holding discussions in a forum. But the relative effectiveness of using a forum is much higher than using email. Once people have used a discussion forum for 20 to 30 times, it will start to become an ingrained way of working ... and the argument will go away. But if it doesn’t—because the forum isn’t being used for the right purposes or is being approached the wrong way—then go back to email.

On Improving Performance

Improving the way discussions are held within organisations promises performance benefits across a number of dimensions, including:

- **Simpler.** Discussions held in a proper discussion tool remove extraneous steps for every participant who is trying to use email for a group discussion and eliminates the complexity in identifying how a particular new message relates to a previous message in a discussion thread. A discussion tool enables topics, replies, questions, and answers to be naturally placed in the correct sequence, eliminating communication confusion for everyone involved.
- **Cheaper.** Since previous discussion threads can be searched and discovered in a discussion tool, the organisation can leverage previous discussions to inform and shape current discussions. Expertise exhibited in discussions can be accessed after the fact, not tied to a particular point in time. Lines of argument can be viewed to ascertain relevance to current issues. Answers that have worked previously may be immediately applicable.
- **More Effective.** Due to the design of having a discussion thread more accessible for input from other people, effectiveness can be improved by enabling wider participation from people with diverse perspectives, instead of being constrained to those who were included in the original email thread. A second way of increasing discussion effectiveness is through the retention of the discussion for future reference by staff. People can look back to see the thinking behind decisions, and if the thinking is more widely applicable, can leverage earlier approaches in current challenges. Patterns in discussions can be observed, enabling organisational members to adaptively learn how the organisation works best.
- **Beautiful.** Discussions are messy affairs, with ideas flowing free and fast across a range of topics. In email, it borders on a complete mess. Having the ability to corral discussions into a more structured approach, to close discussion threads that have resolved the pressing issue, to access historical discussions for current issues, and to apply metadata to categorise the discussion set and improve findability is a thing of sheer beauty (as long as you like well-designed information spaces, that is).

A discussion tool enables topics, replies, questions, and answers to be naturally placed in the correct sequence, eliminating communication confusion for everyone involved.

Simpler, cheaper, more effective, and beautiful. That's not a bad place to end up.

Summary

Discussions are used for many purposes in organisational life among people, small teams, and sometimes much larger groups. Too often these discussions are ineffective and unproductive because they are held via email, which ties the discussion to the people who were involved at the time. The ability to get broader benefit from a discussion requires the use of more open tools, of which Office 365 offers three different versions: Office 365 Groups, Yammer, and the discussion app capabilities in SharePoint. In this chapter we have reviewed these capabilities in Office 365, explored the pros and cons of what is available, and looked at the behavioural aspects that are so essential to making discussions productive and effective.

In Chapter 9 we investigate the use of Office 365 to support teams working on a project.

Getting broader benefit from a discussion requires the use of more open tools than email.

¹ Mo Fathelbab, *The Comedy Scene: Advice from the Late, Great Harold Ramis*, The Ex Comedy, March 2014, at www.theexcomedy.com/the-comedy-scene-advice-from-the-late-great-harold-ramis/.

² Adam Grant, *Decoding the Psychology of Original*, Inc. Video Idea Lab, at www.inc.com/leigh-buchanan/decode-the-psychology-of-original-thinking.html.

³ *A Brief Introduction to the Use of Online Discussion in Learning*, ITET Fellowship UNSW, at newt.phys.unsw.edu.au/ITET/literature.html.

⁴ Debbie Morrison, *How to Promote Critical Thinking with Online Discussion Forums*, Online Learning Insights, October 2013, at onlinelearninginsights.wordpress.com/2013/10/01/how-to-promote-critical-thinking-with-online-discussion-forums/.

⁵ LightningTools, *Company Forum - 5 Benefits*, LightningTools Blog, January 2014, at lightningtools.com/uncategorized/company-forum-5-benefits/.

⁶ Louise Pendry and Jessica Salvatore, *Individual and social benefits of online discussion forums*, Computers in Human Behavior, Volume 50, September 2015, pp. 211-220. See www.sciencedirect.com/science/article/pii/S074756321500268X.

⁷ Steve Chew, *The evolution of email*, Office Blogs, March 2014, at blogs.office.com/2014/03/31/the-evolution-of-email/.

⁸ Kirk Koenigsbauer, *Get ready for Yammer!*, Office Blogs, February 2016, at blogs.office.com/2016/02/02/get-ready-for-yammer/.

⁹ Jeff Teper, *The Future of SharePoint*, Office Blogs, May 2016, at blogs.office.com/2016/05/04/the-future-of-sharepoint/.

¹⁰ Kirk Koenigsbauer, *Get ready for Yammer!*, Office Blogs, February 2016, at blogs.office.com/2016/02/02/get-ready-for-yammer/.

¹¹ Search for “Yammer” on the Office 365 Roadmap, at fasttrack.microsoft.com/roadmap. In early May 2016, this item is displayed under both “Rolling Out” and “In Development,” indicating a future flow of pending changes over the 2016 calendar year.

¹² Julia White, *Office Delve—discover exactly what you need, when you need it*, Office Blogs, March 2015, at blogs.office.com/2015/03/16/office-delve-discover-exactly-what-you-need-when-you-need-it/.

¹³ Adrian Steel, *Yammer posts top one million—British Airways inspires innovative teamwork*, Office Blogs, September 2015, at blogs.office.com/2015/09/08/yammer-posts-top-one-million-british-airways-inspires-innovative-teamwork/.

¹⁴ Microsoft, *Global Retailer Employees Use Office 365 to Foster a Digital Mindset, Work Smarter*, Microsoft Customer Stories, May 2016, at customers.microsoft.com/Pages/CustomerStory.aspx?recid=27610.

¹⁵ Edward Bulwer-Lytton lived from 1803–1873, and as well as being a politician, wrote poetry, plays, and novels. See en.wikipedia.org/wiki/Edward_Bulwer-Lytton,_1st_Baron_Lytton.

Chapter 9.

Running Team Projects

Our team is quite diverse, but even in cases where the project team is quite large, everyone develops a pretty firm command of the subject, so no one is simply creating a vessel that others fill with content. Everyone has a real stake. Because they know it, they care about how we present it.

Steve Duenes, Graphics Director, The New York Times

Projects are a common way of working with other people in today's organisations and are characterised by a known list of members, a desired final deliverable or outcome, and usually a deadline by which the project should be completed. Office 365 offers a range of capabilities to support teams during a project, some of which have been around for a long time and others of which are newly emerging. Improving the performance of how team projects are run is the seventh core opportunity available to organisations embracing Office 365.

In this chapter, we will:

1. Review the big idea of running team projects in fit-for-purpose tools, as opposed to using email and file shares.
2. Investigate the research on running team projects in better ways.
3. Look at the current capabilities in Office 365 to support team projects, including SharePoint Online, Office 365 Planner, and OneNote.
4. Evaluate the capabilities in Office 365, analysing the pros and cons of what's on offer.
5. Discuss some of the behavioural aspects required for successful team projects.

The Big Idea

Email is the most commonly used collaboration tool today. On team projects, people use email to discuss issues, check up on timeframes, swap documents, and much more. But email is not ideally suited to managing team projects for a variety of reasons:

- **Document Chaos.** When co-authoring a document, no one is sure if they are working on the most recent edition, and at the end someone has to bring together all the suggested changes to create a new master copy. It's messy, error-prone, and takes far too long.
- **Versioning Chaos.** When a team member is looking for a document or spreadsheet, how does he or she know whether the copy on their desktop, in the file folder, or one of multiple copies in their email inbox is the most current version? They don't. It's a wild guess.
- **Communication Chaos.** Using email for conversations leads to chaos. Although modern email clients offer the ability to show related messages in a thread, threading is insufficient to give a proper and natural ordering of email messages when many people are conversing on an issue. Messages will be sent and received out of order. Some team members will respond to earlier messages in the thread, not the latest one. They're not trying to be malicious (in most cases)—they're trying to contribute—but since their contributions are handled via email and not a more appropriate tool, they contribute to conversation confusion.
- **Status Chaos.** With documents, discussions, upcoming meetings, and task allocations held in different places across multiple systems, everyone has a different perspective on the status of the project. One member believes the project is progressing well, based on the information he can see. Another member has a different view. And a third has a third view.
- **Induction Chaos.** While projects usually have a defined list of members at any point in time, that list can change and new people need to be inducted onto the project. However, without a common place for all of the documents, discussions, meetings, and tasks, the process of induction is difficult. One team member has to go through their historical records, forward the pertinent information, and give access to the other places where up-to-date information is stored (in various stages of readiness).

While email clients offer the ability to show related messages in a thread, threading is insufficient to give a proper and natural ordering of email messages when many people are conversing on an issue.

What can be done? Many organisations are experimenting with collaboration sites for team projects—and there are many options in Office 365 to support running team projects. A change of collaboration tool introduces changes to the way work is done:

- **Integrated Project Space.** People switch to the collaboration site and stop using email for the communication, collaboration and coordination work of the team project. The big idea with a collaboration site is that all of the documents, conversations, meetings, and tasks related to the project are brought together in a single application instead of being separated across several different applications.
- **Document Co-Authoring.** Documents are stored in the team site and not emailed around. All work on a document, spreadsheet or presentation is done out of the collaboration site; people don't work with local copies any more. That means a document is opened directly from the collaboration site and, after the changes have been made, saved directly back into the collaboration site.
- **Discussion Forum.** Communication and discussion happens in a discussion area within the collaboration site, rather than in email. This can be quite a big change for people because discussions no longer come through to their BlackBerries and iPhones. Although the discussion can be much easier to follow, there is a single version of the truth, and no one has to keep their own copy of the discussion.
- **Task Management.** The coordination around the team project happens within the collaboration site. Tasks are created and assigned to people. Meetings are scheduled and held. Project time lines are shared and updated.
- **Inducting New Team Members.** People can be easily added to and removed from the collaboration site to accommodate changing project membership. New project team members can quickly review what's been happening in the project and examine the current status of its different aspects.

The big idea with a collaboration site is that all of the documents, conversations, meetings, and tasks related to the project are brought together in a single application instead of being separated across several different applications.

The benefits of this new approach can be significant. Let's review the research findings.

Research Findings

Running team projects through a collaborative workspace provides a range of benefits to organisations. Here's what the research says about the new way:

- **Knowledge Workers Want Better Ways of Collaborating.** Forrester Consulting studied the collaboration habits of knowledge workers in the United States. One finding was that *"Workers experience core problems with the use of email for both collaboration and information gathering, and would like to learn about new tools. Speed and efficiency of collaboration (68%) and reduction of paperwork (68%) are the top benefits sought when looking for improved ways to collaborate with others."* See Figure 9-1.¹

Figure 9-1. How to Improve Collaboration

"What benefits would you seek when looking for improved ways of collaborating with others?"



Base: 695 US knowledge workers

Source: A commissioned study conducted by Forrester Consulting on behalf of Adobe, September 2009

Knowledge workers want improved ways of collaborating with others, with a reduction of paperwork and the speed and efficiency of collaboration the two highest sought benefits.

- **Collaborative Working a Key Driver for SharePoint.** In Allim's 2012 study of SharePoint in organisations, collaboration was a key driver. *"The collaborative aspects of SharePoint were the strongest original driver for exactly half of our respondents, rising to 57% for the largest organisations, with 38% for the smallest. Web portal/intranet (26%) and project management (13%) were also strong drivers."*²
- **30% Reduction in Time-to-Market for New Products.** CEMEX, a global building materials company, introduced new online collaboration tools across its organisation. One benefit has been faster time-to-market for new products by up to 30% in some situations. *"CEMEX designed Shift as a social network with a business focus. When employees use Shift, ideas, suggestions, and recommendations bubble up across the network. Communities of interest are formed to tackle challenges common to their locations, markets and skill sets. Projects can move forward without the barriers posed by traditional hurdles, such as over-reliance on e-mail and live meetings. The payoff is lower cycle times, faster time to market, and real-time process improvement. Shift is ultimately designed for a new kind of workforce, one that is mobile, global, and empowered."*³ Note that Shift is not based on Microsoft technologies, hence showing product category-level results.
- **30% Reduction in Project Timeframes by Making Buffers Visible.** Project managers want to have sufficient resources to complete their projects on time and on budget, but in some organisations this leads to sub-optimal behaviours, such as padding time and cost estimates. When open and transparent approaches are used for planning project timelines, organisations can start to identify the presence of these time and cost buffers—and then engage in a conversation with project managers to reduce these. The use of such approaches can result in a 30% reduction in project timeframes.
- **Leverage People Across Multiple Time Zones.** Once a collaborative tool is used for running team projects (and therefore all project information is accessible to authorised individuals in a common place), organisations can strategically leverage its people and teams spread across multiple time zones to reduce the elapsed time of a project. Products and services can be brought to market faster by using a follow-the-sun project methodology, or by having a support team located halfway around the world from the main team to provide problem resolution and support services while the main team is away from work overnight. Issues that the main team left unresolved at the end of their business day can be addressed by the time they get back to the office the next day.
- **Benefits from Online Collaboration.** Working with others through online collaboration spaces provides benefits such as less email and increased focus on the task at hand, increased productivity by reducing the need to meet in person, the ability to work from any location that makes sense, an increased ability to attract top talent, and greater clarity in the way people express their ideas and communicate in general.⁴

Office 365 Capability

There are two main capabilities in Office 365 to support people during a team project: a SharePoint project site and the new Office 365 Planner. Let's look at each in turn, and then briefly review a number of other capabilities also on offer to support project teams.

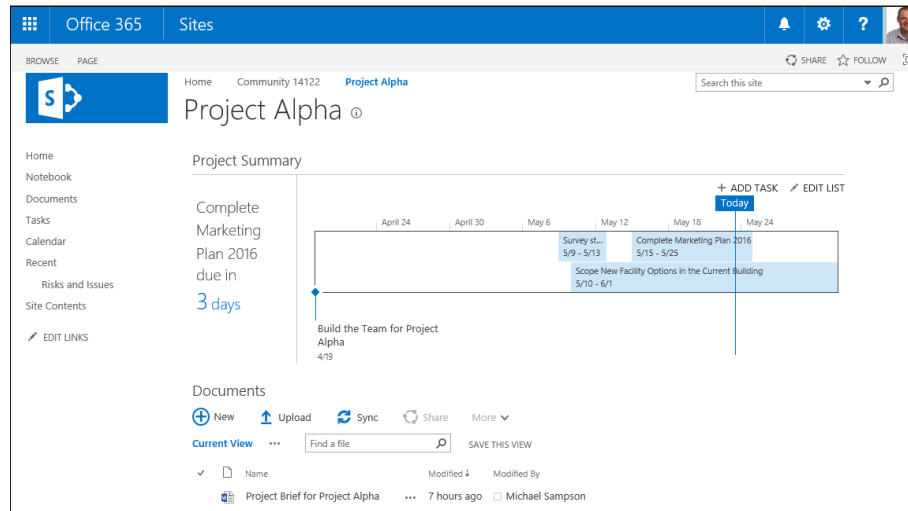
SharePoint Project Site

Beginning with the first version, SharePoint has offered capabilities for teams to work together using a specified SharePoint site. Here are the capabilities in SharePoint Online (see Figure 9-2):

- **SharePoint Project Site Template.** SharePoint Online offers the Project Site template, a place for project teams to work together. It includes a summary home page, a project task line, a project group notebook, a project calendar, and a project document library. A project site also includes a list of members, showing those people who are on the project team. Other lists, libraries, and apps can be added into the project site as required.
- **Project Site Makes Status and Momentum Visible.** The project team can use the shared tools in the project site to make current status and momentum visible. Project reference documents can be shared for common access, work in progress can be stored in the Document Library and thus support co-authoring and co-editing situations, and project team discussions can take place through a Discussion Board. Tasks for team members can be stated in the Tasks list and viewed by any project team member.
- **Handling Changing Membership.** As the membership of a project team changes, access rights and privileges can be easily changed for the project's SharePoint site. Departing members can have their access rights revoked, and new members can be quickly added to the site. New members immediately get access to all of the historical thinking, documents, and conversations that have led up to this point in the project, and no one has to trawl through their project file to send on what they think is relevant.
- **Offline Access to SharePoint Online.** While not a Microsoft-provided capability, various third-party vendors offer add-on tools for accessing SharePoint when offline. A project site can be synchronised for local access by mobile users.

As the membership of a project team changes, access rights and privileges can be easily changed for the project's SharePoint site.

Figure 9-2. SharePoint Project Site



The Project Site in SharePoint provides a common place for a project team to work together on a project.

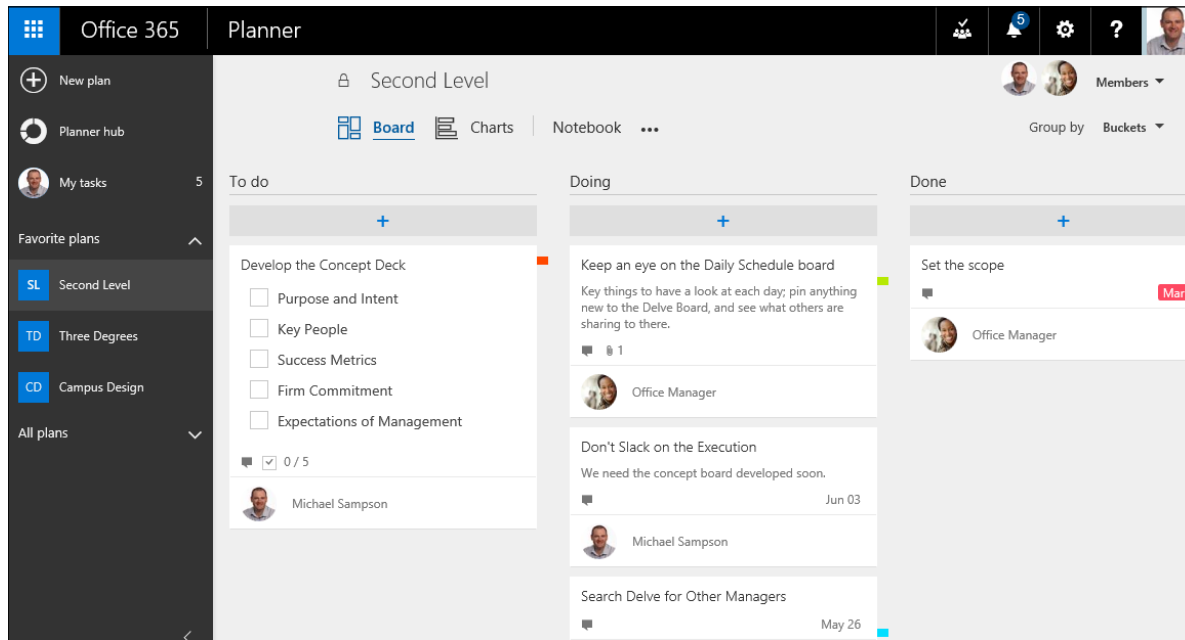
- **Add Other Lists, Libraries, and Apps.** A site owner or administrator can add other lists, libraries, and apps to the Project Site template, such as a Custom List (to track special data that doesn't fit in the design constructs of other out-of-the-box lists), a Wiki Page library (for creating a project wiki), Announcements, Contacts, Issue Tracking (for tracking project risks and issues), and more. Office 365 administrators can also license apps from the SharePoint Store in Office 365, adding new possibilities for tailored functionality that is not addressed by the out-of-the-box apps in Office 365.
- **Many Site Templates On Offer.** SharePoint offers numerous out-of-the-box templates for new sites, including the Team Site and the Project Site. The team site is described as *"a place to work together with a group of people"*, and is best viewed as a site for a team in an organisational structure (the marketing team, the sales team, etc.). In comparison, the Project Site template is described as *"a site for managing and collaborating on a project. This site template brings all status, communication, and artifacts relevant to the project into one place."* This has more direct alignment with a team project. As organisations become more advanced in their use of SharePoint for running team projects, a SharePoint administrator can create and publish customised site templates that embed elements of the firm's project methodology, or other specific apps that make sense for the organisation.

Office 365 Planner

Planner is a new addition to the Office 365 service, and at the time of publication of this book is still in preview for most customers. It offers a visual way of supporting teams during a project, using tasks as the core construct for coordinating work. Let's look at what is on offer.

- **Visual Task Cards.** Planner uses a task card as its key organising construct, where each task can be assigned to one person at any time, and can be displayed as part of a different workstream, phase, or some other way of visualising progress and momentum (these are called buckets). See Figure 9-3.

Figure 9-3. Office 365 Planner



Planner is a new service in Office 365 to support the management of tasks, either for an individual, or for tasks spread across a team or group. In a project sense, Planner brings visual management to shared project tasks, keeping people accountable for their contributions.

- **Conversation, Files, and Checklists.** Each task card has the name of the person who created the task, the name of the person it is assigned to (if any), a description, a place for file attachments and links, the option of a checklist, and a comments section. It also displays which bucket the task is allocated to, task status, start and due dates, and colour-coded categorisation. In other words, the task is the key organising construct in a Plan, around which everything else is attached to or associated with.
- **A Plan is a Group is a Plan.** Creating a new plan in Office 365 Planner is the same as creating a new Office 365 Group. They are one and the same, albeit viewed in different ways within the Planner app compared to the Group part of Outlook. This means that any groups a user is a member of will show in their collection of plans when opening the Planner app, and any plans a user is a member of will show in their list of groups. The OneNote notebook for the group is the same OneNote notebook used by the Plan. A user can get quick access to group conversations and files from the Plan. A comment in the conversation stream for a task within Groups will result in the conversation thread being updated on the task card in Planner. Microsoft has created a range of integrations across the two experiences to tie them together.
- **Visual Progress Reporting.** Planner tracks the status of the tasks in each Plan and reports on progress using a multi-coloured dashboard. The Charts dashboard displays the number of days left until the plan has to be completed, the total count of tasks plus how many are outstanding, and how each team member is progressing for completing the tasks assigned to them. These are displayed using colours—yellow for tasks not started, red for late or overdue tasks, blue for in-progress tasks, and green for completed tasks. This visual dashboard provides a project manager and each individual team member the ability to get an at-a-glance snapshot of current status and initiate corrective action if required.
- **Planner Hub for Overall Management.** Team members can work within a single plan and also get an aggregated visual dashboard across all of the plans in which they are involved. Planner Hub displays a user's favourite plans across the top with a follow-on section for all other plans. Each plan is presented with a circular status wheel, using the same colours above to show current status, progress, and areas that need to be addressed.

Creating a new plan in Office 365 Planner is the same as creating a new Office 365 Group. They are one and the same, albeit viewed in different ways.

It remains early days for Office 365 Planner, especially in regards to its cohesive integration with Office 365 Groups. However, there is much future promise in this app for running team projects, among other opportunities to improve productivity and collaboration.

Other Office 365 Capabilities to Support Team Projects


A team project has a variety of core characteristics (for example, a defined outcome, a deadline, and a list of members), but team projects vary greatly in their scale and scope. Some involve building the next jet airliner, while others have a marketing campaign in their sights. While SharePoint project sites and Office 365 Planner (and Groups) can be used for running team projects, other aspects of Office 365 can also be used:


- **Microsoft OneNote.** While a OneNote notebook is positioning as one of many capabilities in a SharePoint site or Office 365 Planner and Group, it can also be used as the core capability for running a team project. A shared notebook provides the project team with a place to specify the project outcome, the list of project team members, the project phases and sequencing; to record meeting notes; to create content together; and much besides. Instead of being relegated to an “also tool,” for some team projects OneNote can be “the tool.”
- **Delve Boards.** Delve Boards can play a supportive role for project teams, providing a lightweight approach to collating relevant links and content from across Office 365. Team members can keep an eye out for interesting content during their daily work, adding that content to a specified Delve Board whenever they come across it. And a link to the Delve Board can be created in the related SharePoint site, Office 365 Planner board, or OneNote notebook for quick access by team members.
- **Microsoft Project.** Complex or larger scale projects, programmes, and even project portfolios benefit from tight specification of tasks, task dependencies, project dependencies, sequencing, and resource allocations. Microsoft Project Online is an add-on Office 365 service that offers the power of Microsoft Project for project and portfolio management. For some projects, the power of Project is essential.
- **Yammer Group.** A Yammer group can be created to support a team running a project. Project team discussions can happen within the context of the group, files and links can be shared, and membership can be managed and moderated. Yammer does not, however, have a dedicated task management capability, so if the allocation of tasks to individuals is important within the project, this will need to be handled through topic tags (for example, #taskmichael), a Yammer note, or even a link to an Office 365 plan.

While SharePoint project sites and Office 365 Planner (and Groups) can be used for running team projects, other aspects of Office 365 can also be used.

Roadmap Intent


Change is afoot from Microsoft with respect to how projects are run in Office 365. Here's what we know:

 **Merging of SharePoint Team Sites and Office 365 Groups.** At the Future of SharePoint event in early May 2016, Microsoft indicated that SharePoint team sites and Office 365 Groups will see some integration during the 2016 calendar year.⁵ *"We're bringing the power of SharePoint team sites and Office 365 Groups together, giving every group a team site, and giving team sites the benefit of groups for simple management of membership across Office 365 services. If you are assembling a team or starting a project, you can create a team site from the SharePoint home and provision a corresponding Office 365 Group in just seconds with integrated information classification and compliance."* Exactly how this plays out remains to be seen—since the two services are still separate despite more integrated—but some level of integration and cross-service interaction is coming.

 **Many Developments for Office 365 Planner.** Microsoft's Office 365 roadmap lists many in-progress developments for Office 365 Planner, although specific dates for delivery have not been announced.⁶ Developments include the ability to assign a task to multiple team members, custom backgrounds, external guest user access, native apps for iOS and Android devices, access to out-of-the-box templates and the ability to create custom templates, and a timeline view for key milestones, among others. This indicates a strong investment from Microsoft to make Planner a productive place for teams to work on projects and other initiatives; what's been delivered is a good start, but it's only the beginning.

Microsoft's Office 365 roadmap lists many in-progress developments for Office 365 Planner, although specific dates for delivery have not been announced.

And from the "wouldn't it be nice if" file:

 **Early Adopters Want More from Office 365 Planner.** Planner is available in early release to select customers and IT professionals. Some have shared their wish list directly: the ability to follow a card (to have oversight, rather than be the assigned person), the ability for a group to have multiple plans, better information governance for attached files stored in OneDrive for Business, a calendar for the plan, and some sense of how Planner and Microsoft Project could interact.⁷ Other people have lodged their feedback at the UserVoice site for Planner, with high-rated requests including integration with Outlook tasks, integration with Office 365 Tasks, import and export to Excel, time tracking for cards, the ability to decrease update noise to Group conversations, and a global calendar for all tasks from all plans.⁸ It remains to be seen how much of this feedback is integrated into the service over time, but Microsoft's Planner Team is active on UserVoice and engaging with the community.

Analysis and Evaluation

Let's look at the pros and cons of Office 365 for running team projects, and a "wouldn't it be cool if" idea:

- ✓ **Good Range of Capabilities.** Office 365 offers a good range of capabilities to support teams during a project, from a SharePoint project site (or sites based on another template or custom development), Office 365 Planner and Groups, and other tools such as OneNote, Project, Yammer, and Delve. This range of capability means that every project team is likely to find at least one tool or approach in Office 365 that aligns with the needs of their project. Within any given organisation, however, this will require either a simple heuristic for when to use what service for a given type of project, or another form of guidance or coaching on how to proceed. Many options are good for covering the bases, but not necessarily for clarity.
- ✓ **Microsoft is Pushing Into New Territory.** Microsoft is demonstrating its willingness to experiment with new approaches to supporting project teams with the release of tools such as Office 365 Groups and Planner. The cross-product integrations under development allow Microsoft to leverage its investments across Office 365 to develop new ways of approaching current work scenarios. Running projects isn't just pigeon-holed as a SharePoint-only capability, but newer approaches that utilise emerging team concepts are finding their way into Office 365. Microsoft still has a lot of work to do in each of the new capabilities to make it a coherent part of Office 365, but its willingness to experiment and push the boundaries is refreshing.
- ✓ **Unification of the Group in Azure AD for Cross-Tool Security Permissions.** In bringing together any complex system, there's a lot of work hidden from the view of the end user to remove complexity and increase seamlessness. This is true of Microsoft's recent and ongoing activity to unify group membership in Azure AD for SharePoint sites, Office 365 Groups, Yammer, and Office 365 Planner. The use of a single group for setting permissions will greatly simplify future cross-tool project scenarios: one security group in Azure AD, multiple access pathways across the different services.
- ✗ **Offline Capabilities Are Still Lacking.** SharePoint Online, Office 365 Planner, and Office 365 Groups require the user to be online in order to use the services; Microsoft does not offer offline capabilities for these services across computing and mobile devices. Even on Windows devices, it is not possible to synchronise a complete SharePoint project site for offline access with two-way synchronisation and conflict checking of the site. Organisations need to acquire a third-party tool to support this situation.

Every project team is likely to find at least one tool or approach in Office 365 that aligns with the needs of their project.

- ❗ **Too Many Good Options?** Office 365 provides an overall collection of services that organisations and individuals can use to get work done, including the running of team projects; but that overall collection of different services breeds confusion that threatens to stymie clear forward movement. The line Microsoft has to walk is between simplifying the project options in Office 365 by integrating across current product lines versus continuing to emphasise the breadth of capabilities that one gets with an integrated cloud service.
- ❗ **Difficult to Aggregate Recent Activity Across Tools.** There is no automated way for an individual project team member to get an at-a-glance view of recent activity in a project because different non-integrated tools are used to support different elements of a project. In a SharePoint team site, updates to documents (in the Document Library) are not displayed in parallel with updates to the team's OneNote notebook nor to discussions on the discussion board. Likewise in an Office 365 Group. Individual team members need to click into the different tools to check on recent activity; this is a manual activity that is not conducive to seamless nor productive team work.
- ❗ **Plans and Groups Lack a Unified Experience.** It is still very early days for Office 365 Planner and even Office 365 Groups, but the possibilities for the two look promising. When opening the different tools in a plan or group it is easy to lose track of where you are, as there is no consistent unifying experience to centre the user. It is fair to expect Microsoft to address this over the coming 12-18 months, but the experience is not yet seamless enough and users will quickly get confused.

There is no automated way for an individual project team member to get an at-a-glance view of recent activity in a project because different non-integrated tools are used to support different elements of a project.

Finally, wouldn't it be cool if:

- ✱ **Analytics Were Available for Team Projects.** Delve Analytics reports on an individual level about the effectiveness and efficiency of the meetings that the individual was involved with during the past week. Wouldn't it be cool if the analytics capabilities in Office 365 could report on the effectiveness and efficiency of the activities undertaken in running a given team project over the previous week—highlighting meetings that were or were not effective (along with reasons for that conclusion and recommended mitigations), timeliness to complete tasks, and suggestions for other people to involve in the project as well. Delve Analytics at an individual level is good; at a team project level it would be fantastic. While Microsoft undoubtedly has its own research to draw on for such analytics, it would be worth reviewing Google's research on itself on what makes a perfect team.⁹

What Firms Are Doing

Various organisations use the capabilities in Office 365 to support team projects. Here's one example:

- **Richland Police Department.** The Richland PD shifted to Office 365 to improve department-wide collaboration and officer mobility.¹⁰ The department uses many capabilities in Office 365, including OneDrive for Business, Power BI, and Skype for Business. Projects are run using a combination of SharePoint Online and a Yammer group. Projects can start after identifying a crime pattern using Power BI. *"Once Richland PD identifies a pattern, the department forms a project group and assigns tasks to help address it. Previously, those groups met physically three to four times a week. Now, they establish a SharePoint Online site to share all project-related information and use the built-in dashboard for real-time data tracking. They also establish a Yammer enterprise social network group for the informal collaboration that used to take place in person."*

Planner is a new addition to Office 365, and case studies are lacking (they'll emerge as organisations embrace Planner over the next 12-18 months). Here's an example of how one firm is using Trello, a similar service that's not from Microsoft to manage projects:

- **WP Curve.** WP Curve, a WordPress development and support firm, uses Trello for managing projects.¹¹ The firm has Trello Boards (what Office 365 Planner calls Plans) for different projects—such as content marketing, writing a book, and managing guest content on the site. Each Board is then divided into Lists (what Planner calls Buckets), which are tailored for the project. In some projects, Lists equate to specific people. In others, Lists align with a different project phase or time frame. Cards (also called Cards in Planner) represent a single task. As mentioned, Trello was used to help with writing a book. Here's the process: *"Dan used Trello to collect and categorize his ideas for The 7 Day Startup. He would add ideas that he wanted to include into the book as cards then create lists for themes or chapters in the book. As the lists continued to grow he used it as an outline for creating his book. Since he already had a lot of the content written as blog posts before, this Trello board helped him map it out and get through the actual writing of the book quickly. Once all the ideas were categorized, Dan pulled them into a list of chapters to write in a new board. In that board he had lists for each step of the process (i.e. write rough draft, self-review, peer review, send to editor). This made it a more motivating way of working on the book so he could see each chapter progress as he completed the book."*

The Department forms project groups and establishes a SharePoint Online site to share all project-related information, using the built-in dashboard for real-time data tracking.

Behavioural Aspects

Running a team project benefits from access to good tools—such as those in Office 365—but there is an equal or greater need for the right behaviours by project team members. Those behaviours include the following:

- ★ **Your Methodology Dictates How To Use Office 365.** We followed a generic project methodology in this scenario. While your firm's project methodology is likely to share common elements with this generic methodology, it is unlikely to be the same. Look at your firm's project methodology and think through how to bring the intent of each stage to life in Office 365. For some stages the transition will be easy. For other stages it will require more heavy-duty thinking and reconceptualisation of what to do and what not to do.
- ★ **Seek Success, Not the Greater Use of Office 365.** The winning outcome of running a team project with Office 365 is that projects get done better, faster, cheaper, or some combination of the three. If project participants balk at using Office 365 but are still able to achieve high levels of project success, leave them to it. If they balk and are unable to achieve high levels of project success, coach them on using Office 365 effectively, or if they are unwilling to be coached, work with other project teams and make them successful. This will give you the needed exemplar stories to win the attention of reticent project members.
- ★ **Enlist Executive Support for Extending Great Results.** The way to enlist executive support is through the results the project teams in your firm have achieved. Don't ask them for support to roll out Office 365, because they will ask why. Do your preliminary work with a few selected project teams, tracking the results they achieve as a consequence of re-imagining how to run a team project in Office 365. Take those results—such as reducing elapsed time by 20%—and ask for support in making it more common across the firm. Instead of asking why they should approve the greater use of Office 365, they will be likely to ask why you are seeking permission to make the firm better.¹²
- ★ **There Is No “One Right Way” to Run a Project.** There are many approaches to running a project in Office 365. You can use a shared OneNote notebook. Or a SharePoint team site. Or Office 365 Planner. But there is no one right way. Experiment and see what works best in your firm, realising that a few complementary approaches will probably win out.

The winning outcome of running a team project with Office 365 is that projects get done better, faster, cheaper, or some combination of the three.

The Great Debate: That Teams Need Privacy to Do Their Best Work

Should you set access privileges on a project site to guarantee privacy for a project team? It's a common question. Let's look at two positions.

For—Privacy Prevents Interfering Others from Derailing the Work

Creating a private site for team members to work on a project reinforces the cultural tenet of competence. The team members have been selected to work on the project based on competence, availability, and interest. You've given them a place to work in Office 365. Now let them get on with it without unnecessary interference and second guessing from everyone else.

- **Controlled Access Guarantees Focus.** Access privileges are essential to guarantee unhindered work towards the completion of the project. By setting access privileges, the team's known roster of members can put all of their creativity and competence towards the shared vision. Team energy isn't dissipated dealing with non-team members who show up and want a say in the project.
- **Controlled Inclusion of Known Others.** The team can still bring other people into the space when required. Team members have the ability to manage the flow of the project and can bring other people into the project site in Office 365 when their involvement is required; access privileges don't eliminate the opportunity for non-team member involvement, they just provide a way of managing it. This remains under the control of the team itself and has greater relevance at particular junctures in the project, but doesn't need to be open at all times. If the team wants an expert to review a deliverable, they can request that. If the team wants wider input from a selected or open group of people, they have the ability to set that up. But outsiders are not bombarded by demands for input all the time.
- **Reduces Drive-By Contributions.** Access privileges decrease the likelihood of "drive by" contributions from other people who talk a big game but can never get any real work done. Such people feel a moral obligation to stick their necks into everything that is going on, and their perceived busyness validates the "critical" role they play in the organisation. But they can wreak havoc for everyone they come into contact with.

In short, by setting access privileges on the project space and giving the project team a private place to work—until they request input from other people—you set up the conditions for the team to do its best work.

Against—There's a Greater Need for Openness, Transparency, and Serendipity

Giving open access to a project site in Office 365 reinforces the cultural tenet of openness, provides transparency to project progress, and allows serendipity. These three outcomes result in a greater benefit to the organisation than privacy ever will.

- **Cultural Weirdness.** If your organisation espouses the cultural tenet of openness and working together, enforcing restrictive access privileges on project spaces undermines the credibility of the message. The two don't go together. Having closed or private spaces automatically raises the "that's weird" flag, and will encourage subsequent teams to request equivalent privacy. Pretty soon the cultural mandate of openness will be undermined and you will be back to a closed, silo-based organisation. You'll have fancy new technology but few benefits to show for it.
- **Cultural Goodness.** An open approach to access to project information creates a culture of transparency, minimising the likelihood that bad news will be deliberately hidden from view. If all team members know that their work is reviewable by other people, it keeps them focused on doing the best job possible. Transparency has another benefit of highlighting opportunities where other people can lend a helping hand, sharing their expertise on a project.
- **Decreased Serendipity.** As organisations grow larger, more diverse, and more geographically distributed, projects protected by access privileges hide progress being made in other parts of the organisation. Restrictive access privileges reinforce organisational silos, prevent cross-fertilisation of ideas, and decrease the prospect of serendipity. Where there are no access privileges on project spaces—beyond the need to be granted access to Office 365 in the first place—it is possible to find out who else is working on similar problems or opportunities. Office 365 offers Delve to facilitate these connections in an automated way.

In summary, there is a much greater need for openness, transparency, and serendipity. Access privileges do grant privacy and may give teams a quiet space to do their best work, but when set against the greater benefits to be gained through openness, it doesn't add up.

Conclusion—Which is Greater?

There is no universally correct answer in this debate, although the sentiment seems to be shifting more towards the openness end of the continuum. If you can address the potential downsides of an open approach—especially unnecessary interference in the early stages of a project—push for as many open projects as possible.

On Improving Performance

Changing the way projects are run using capabilities in Office 365 offers performance improvements across a number of dimensions:

- **Simpler.** Tasks surrounding the running of a team project are simpler when using Office 365, such as adding and removing team members from a project. A new member can be given immediate access to everything the team has been working on by simply adding them to the security group that controls access rights. Likewise, the access rights of a departing team member can be revoked simply and easily.
- **Faster.** Project tasks can be completed faster using services in Office 365 due to the affordances that eliminate unnecessary steps in the process. When a project team needs to pull together a proposal, for example, the real-time co-authoring capabilities remove confusion over who has the latest version, eliminates questions on who is editing the document, and negates the need for someone to integrate multiple versions. One document that always conveys the latest information is available to everyone, immediately.
- **More Effective.** Providing a shared space for team members to work in facilitates greater clarity on the purpose of the project, the team members who are involved in discussions, and which tasks are current and outstanding. Clarity on outstanding tasks enables active management to mitigate the negatives through task re-assignment, additional resources, or other means. Changes to the purpose and scope of the project can be easily communicated and discussed and the right pivots made to re-align activity in light of the revised intent.
- **Attractive.** New visual design concepts in Office 365 Planner offer an attractive place for people to work together, share information, and structure their joint work. The ability to get a visual perspective on a project enables a big picture view of what's happening, what's coming up, and who is responsible for particular aspects. Documents and other resources can be viewed in context of the visual flow of the project rather than being separately handled in a document library. The visual changes scheduled for SharePoint during 2016 will likewise increase the attractiveness of the offering.

Project tasks can be completed faster using services in Office 365, due to the affordances that eliminate unnecessary steps in the process.

Simpler, faster, more effective, and attractive; that's a good score card to push toward.

Summary

A project-based approach to business has become popular over the past couple of decades, with people moving away from strict job descriptions to a looser mandate to contribute, collaborate, and help the organisation compete well in the marketplace. In this chapter we have considered the need to improve the way projects are supported through technology and investigated the options in Office 365 such as SharePoint and Planner. We have also looked at key behavioural aspects in running team projects and debated the pros and cons of having private, public, and semi-private project spaces.

In Chapter 10 we investigate the final core opportunity in using Office 365: to support thinking productively.

A project-based approach to business has become popular over the past couple of decades.

¹ Forrester Consulting for Adobe Systems, *Building the Future of Collaboration*, September 2009, at www.adobe.com/content/dam/Adobe/en/products/acrobat/pdfs/Building_The_Future_Of_Collaboration.pdf.

² AIIM, *The SharePoint Puzzle—Adding the Missing Pieces*, AIIM Market Intelligence, July 2012, at www.aiim.org/Research-and-Publications/Research/Industry-Watch/SharePoint-2012.

³ Gilberto Garcia, *Shift Changes the Way CEMEX Works*, Management Exchange, July 2011, at www.managementexchange.com/story/shift-changes-way-cemex-works.

⁴ These are commonly noted benefits for online collaboration; see for example the experience of TitanFile with embracing online collaboration. Tony Abou-Assaleh, *Five Ways You Can Benefit from Online Collaboration*, TitanFile Blog, February 2013, at www.titanfile.com/blog/five-ways-you-can-benefit-from-online-collaboration/.

⁵ Jeff Teper, *The Future of SharePoint*, Office Blogs, May 2016, at blogs.office.com/2016/05/04/the-future-of-sharepoint/.

⁶ Search for “Planner” on the Office 365 Roadmap, at fasttrack.microsoft.com/roadmap. The results mentioned were displayed in mid-May 2016.

⁷ Dan Holme, *Announcing Planner: Office 365's Answer for Teams, Tasks and Project Management*, IT Unity, September 2015, at www.itunity.com/article/office-365-planner-task-and-project-management-announced-2608.

⁸ UserVoice for Office 365 Planner, at planner.uservoice.com/forums/330525.

⁹ Charles Duhigg, *What Google Learned From Its Quest to Build the Perfect Team*, The New York Times Magazine, February 2016, at www.nytimes.com/2016/02/28/magazine/what-google-learned-from-its-quest-to-build-the-perfect-team.html. For a shorter version with the highlights, see Stéphanie Thomson, *Google's Surprising Discovery About Effective Teams*, World Economic Forum, December 2015, at www.weforum.org/agenda/2015/12/googles-surprising-discovery-about-effective-teams/.

¹⁰ Microsoft, *Richland Police Department*, Microsoft Customer Stories, January 2016, at customers.microsoft.com/Pages/CustomerStory.aspx?recid=25225&InReview=true.

¹¹ Kyle Gray, *How we effectively use Trello for project management*, WP Curve, January 2015, at wpcurve.com/trello-for-project-management/.

¹² This is the line of thinking I presented in my keynote speech at SHARE 2012 in Atlanta. If you want to watch the video, see *Winning the Right to Seek Executive Support*, The Eventful Group, April 2012, at michaelsampson.net/keynotes/keynote-share2012/.

Chapter 10.

Thinking Productively

Senior professionals drive most of their activity from a hard-nosed focus on what's important, almost despite the work coming at them.¹

David Allen

We have talked a lot about productivity in this book, and rightly so since that concept is in its very title. In light of the demands coming at us, we have a great need for being productive (for getting the work done), but a much greater need for getting the right things done (making choices, determining priorities, choosing the best mission for our lives). Executing on the first of these requires an ordered and settled approach in the second. Without the second in place, the first very quickly becomes hollow, without meaning, and without forward contribution. And so, in the last of the eight scenarios in this book, let's look at how to think productively. What are the tips and tricks—or more to the point the deeply effective practices—that can help us to think productively?

In this chapter, we will:

1. Think about what it means to be productive over the long term.
2. Review some of the research on creating productive habits.
3. Consider the capabilities in Office 365 to help with thinking productively.
4. Learn how other people are using Office 365 capabilities in their work to stimulate productive thinking.
5. Evaluate the behavioural aspects of thinking productively.

The Big Idea

Doing productive work has to be built on a core of knowing what's important, what your priorities are, and what you should be doing today. However, the doing aspect of productivity can quickly devolve into the mere knee-jerk reaction to the next thing that is front of you in your immediate environment, thereby avoiding doing the work on the important projects. Everyone needs something in their regular practice of work and life to pull them back from the precipice of wasting time and life on the unimportant. And indeed, without careful thought and appropriate use, the many glorious ways offered in *Office 365* for connecting people, highlighting forward momentum, and divining what is important for you to read next can quickly turn you into a fool who can't get the right things done. The need to think productively, therefore, is a prerequisite to its use.

The doing aspect of productivity can quickly devolve into the mere knee-jerk reaction to the next thing that is front of you in your immediate environment.

Thinking productively is built on a foundation of a few key practices:

- **Invest Time and Energy into What's Important.** There is always more to do than we can do—and therefore a deliberate choice is required. We live in a world of abundant opportunities and never-ending possibilities for learning, contribution, addressing needs, and even pursuing entertainment. Select what is important to you and focus your time and energy on those activities. Don't get sidelined by squandering your efforts on the unimportant but urgent issues—being busy without a connection to a deeper purpose.
- **Regularly Review the Bigger Picture.** If you do a survey of the major productivity gurus of our time, one of the most frequently recommended practices is a regular review of the bigger picture. David Allen champions the weekly review, Mark McCormack talked about each day having one critical one hour (the one you spend planning your schedule for tomorrow and the days ahead), and even Dale Carnegie talked about the power of a review on a weekly basis.² To implement this practice you will need to schedule it by adding it to your calendar, having a plan for carrying it through, and blocking the world out while you focus your attention on the core review of what you need to be doing.
- **Think with Ink.** Writing with ink—preferably with pen and paper, but digital if you must—provides a means of externalising your thinking in a form you can review later on. It allows you to transform the ephemeral swirl of mental ideas into a physical representation, thereby capturing ideas, clarifying thoughts, and improving focus and concentration. Writing in sentences isn't essential, however; lists, mindmaps, and other graphical forms of conveying the shape of an idea are all extremely useful.

- **Link Now to Next.** Deliberately aligning what you work on now with your longer term goals and objectives allows you to make progress on the important things every day. This can be achieved by working backwards from the goal to specific actionable tasks, and also by working forwards from specific actionable tasks to the larger goal. The trap to avoid, however, is quickly accepting the linkage between a proposed task and your longer term goals. A given task may indeed move you forward, but not as much in comparison to another task of greater weight. Choose carefully.
- **Embrace Pareto.** The Pareto principle states that, generally speaking, 80% of the results come from 20% of the effort. Many businesses have found, for example, that 80% of their profits come from 20% of their client base, and many professionals have been able to greatly increase their performance by limiting the amount of time and energy they spend working in the ineffective zone. As you become more experienced in the dynamics of your work, invest in discovering the 20% of input that drives the 80% of output, and then redouble your efforts on the 20%.
- **Say No to the Unimportant.** This chapter opened with a quote from David Allen—“*Senior professionals drive most of their activity from a hard-nosed focus on what's important, almost despite the work coming at them.*” Perhaps the reason the word “senior” is used at the beginning is that, firstly, it takes a while to understand what is important, and secondly, only once you have proven your ability to deliver do you have the political clout to say no to the unimportant busywork that is pushed your way. But in order to work on the important things you have to say no to the unimportant. In some situations this will involve delegating the task to someone else—some tasks are important to your organisation but not important to you. In other situations it will involve the rejection of the task entirely—when it is unimportant both organisationally and personally.
- **On Doing Nothing.** In one of Jeff Davidson’s books he wrote, “*Sometimes the best way to be productive is to sit at your desk doing nothing—at least, nothing that looks like anything to people walking by. Reading or looking out the window in contemplation could be the single most important and productive thing you do in a day.*”³ Be careful in case your relentless productivity today undermines your capability for productive and effective contributions in the future. It is good to grasp both.

As you become more experienced in the dynamics of your work, invest in discovering the 20% of input that drives the 80% of output, and then redouble your efforts on the 20%.

Thinking productively is the essential first step to performing productively, as we have explored above. The doing of productive work requires the thinking to take place first.

Research Findings

Many authors have written on being productive. Without doing justice to the wealth of material available on thinking productively, here are some of the highlights:

- **How to Be More Productive (Nicholas Bate).** Nicholas addresses the importance of thinking, prioritisation, and evaluation as a discrete set of activities. *"The real top line answer is more on the philosophy and less on the mechanics. There is no shortage of systems for getting things done. But there is a danger: the more we focus on getting things done, the less time we have for thinking, prioritising and evaluating and the less we consider whether we are indeed getting the RIGHT things done. The more we automate and reduce to a system of mechanics our productivity approach the more we perhaps detach ourselves from what is actually vital. To spend more time thinking. To be more of a philosopher perhaps, allows the soul to remind us—quite naturally—of that which needs attention. Our health perhaps. A longer term vision for the organisation perhaps. And out of those reminders of which the mind is always aware so long as its consciousness hasn't been knocked out of it through sheer draining busyness, tactical plans can be developed. More philosophy, less mechanics."*⁴
- **Get the Right Things Done (Marc Chernoff).** In his list of ten choices that stand the test of time, Marc writes about the importance of getting the right things done. *"The world does not owe you a living. You owe the world a life. So stop daydreaming and start DOING. Develop a backbone, not a wishbone. Take full responsibility for your life—take control. You are important and you are needed. It's too late to sit around and wait for somebody to do something someday. Someday is now; the somebody the world needs is YOU. Focus on being productive, not being busy. Don't just get things done; get the right things done (and this includes things in your personal life too)."*⁵ It would be fair to assume that getting the right things done requires that you know what those things are; they have to be worked out.
- **Live Beyond Efficiency (Stever Robbins).** Living efficiently is a worthwhile pursuit, but it is an incomplete answer. In an article on defeating overwhelm, Stever lists other worthwhile pursuits and priorities. *"Rather than worshipping productivity and efficiency, remember that there's more to life than living it efficiently. There's family, quality of life, joy, love, spirituality, and community, for starters."*⁶
- **Write Down Your Goals.** Committing your goals to writing—and then reviewing and acting on them regularly—makes it much more likely that you will achieve them.⁷ If you have the clarity of mind to write down a specific goal, you will act with much greater intention than if you only have a vague sense of where you are heading in life and work.

Living efficiently is a worthwhile pursuit, but it is not the complete answer.

- **Focus on the Important (Stephen Covey).** Stephen Covey conveyed the stark differences between activities that are driven from urgency and importance (see Figure 10-1). Focusing on Quadrant 2 activities is at the heart of personal effectiveness.⁸

Figure 10-1. Covey's Time Management Quadrants

	Urgent	Not Urgent
Important	Quadrant 1 ACTIVITIES <ul style="list-style-type: none"> ○ Crisis ○ Pressing problems ○ Deadline-driven projects 	Quadrant 2 ACTIVITIES <ul style="list-style-type: none"> ○ Prevention, capability improvement ○ Relationship building ○ Recognising new opportunities ○ Planning, recreation
Not Important	Quadrant 3 ACTIVITIES <ul style="list-style-type: none"> ○ Interruptions, some callers ○ Some mail, some reports ○ Some meetings ○ Proximate, pressing matters ○ Popular activities 	Quadrant 4 ACTIVITIES <ul style="list-style-type: none"> ○ Trivia, busy work ○ Some mail ○ Some phone calls ○ Time wasters ○ Pleasant activities

Managing yourself in order to focus the majority of your time in Quadrant 2 was what Covey saw as the heart of personal effectiveness. Reducing and minimising time in the other quadrants was essential.

- **Use Feedback Analysis (Peter Drucker).** In Drucker's 1999 article entitled *Managing Oneself*, he writes about the use of feedback analysis as a way to discover your strengths. *"The only way to discover your strengths is through feedback analysis. Whenever you make a key decision or take a key action, write down what you expect will happen. Nine or 12 months later, compare the actual results with your expectations [Feedback analysis produces a] steadfast focus on performance and results Practiced consistently, this simple method will show you within a fairly short period of time, maybe two or three years, where your strengths lie—and this is the most important thing to know."*⁹ This speaks to the need to have somewhere to write down your decisions, actions, and expectations, along with the habit of reviewing past decisions on a regular basis.

With this research snapshot in view, let's look at how Office 365 supports productive thinking.

Office 365 Capability

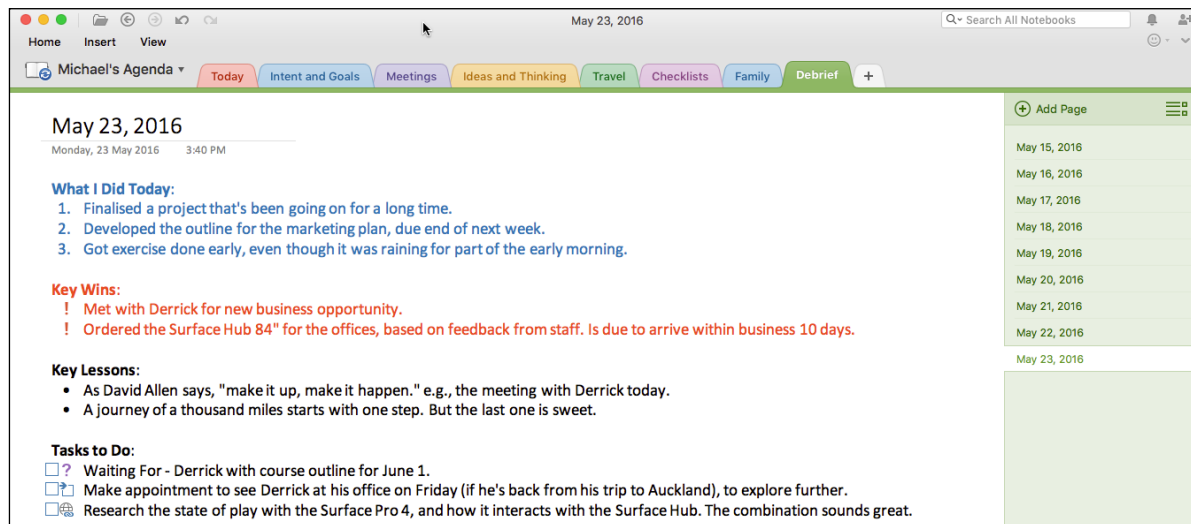
The call to think productively about your work can be done effectively using tools available in Office 365. Let's review what's on offer.

Microsoft OneNote

Create a OneNote notebook for yourself. Call something like "My Journal" or "My Agenda" or "My Thinking." But the notebook is just for you, and is not intended to be shared with others unless you decide at some point to share a page of thoughts (see Figure 10-2).

- **Write a Daily Debrief.** Write a debrief at the end of each day, noting what you did, key wins, key lessons you can take forward into your work and life, and any new tasks you need to see to. You could use a page per day, or a page per month ... the exact division doesn't really matter since OneNote isn't going to run out of pages. But get down what happened and your thoughts about it.

Figure 10-2. OneNote for Thinking Productively



Use a OneNote notebook for your own thinking, journaling, evaluating, and decision analysis.

- **Store the Notebook in OneDrive or Your Own SharePoint Site.** Create your notebook either in your personal OneDrive account, your OneDrive for Business account, or in a SharePoint site that you have control over. There are three essential reasons for creating the notebook in one of these locations: first, it will not be tied to any specific device; second, it allows you to use the notebook across all of the devices you use; and third, it's your journal of reflections, so you need control over it. Storing it in your own OneDrive account, for example, means that you don't lose access to it when you shift jobs or roles, although you will need to be careful not to take any proprietary information in your OneNote journal that could cause legal trouble for you downstream.
- **Ink Your Way to Insight.** If you have a Surface Pro or Surface Book with a stylus, or an iPad Pro with the Apple Pencil, you can ink your way to insight instead of typing. Some people find the act of writing to be more effective in getting their thoughts and ideas down compared to typing. Black text on a white screen can become too sterile and impersonal, while handwritten notes give something much better.
- **Draw Your Way to Insight.** Typing or writing sentences of text can seem intimidating when you are playing with ideas. Try drawing them instead—using mind mapping for example—to start with a less conceptually draining way of getting the thinking out of your head.
- **Review Daily.** Since you have your OneNote notebook accessible to you on any device, review daily your list of priorities and your current key tasks. This will keep what is important to you in front of mind and guide your planning during the hours of each day. Making deliberate linkages between your priorities and key tasks ensures you are moving forward on what is truly important, not just what happens to be urgent right now.
- **Everything Else is Just Mechanics.** In a way, once you have determined what's most important in your work, it is just mechanics to get the work done. As Charles Kettering, the American inventor, said, "*A problem well defined is a problem half solved.*" We face the onslaught of such amazing opportunities and a world filled with meaningful contributions to make. Deciding where to focus your time and effort is a decision worthy of decent thought and attention, but once you know the major game you are playing and have a good sense of where to from here, get on with the work. But keep coming back to review your thinking, your plans, and what you are learning. OneNote can be your friend during this process.

Some people find the act of writing to be more effective in getting their thoughts and ideas down compared to typing.

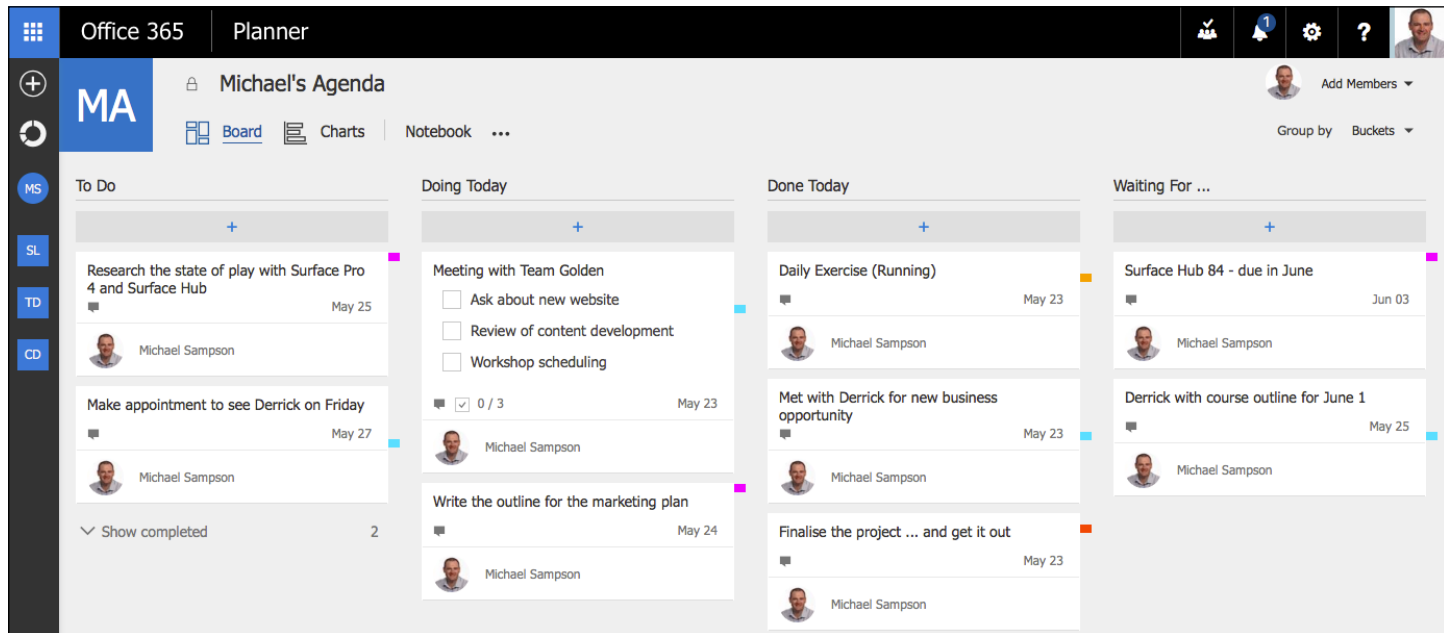
OneNote offers a wealth of capability to support thinking productively.

Office 365 Planner

We investigated the capabilities of Office 365 Planner in the previous chapter as a way of supporting team projects. Its capabilities can also be used by an individual to support thinking productively (see Figure 10-3).

- **Create a Plan for Yourself.** Create a new plan just for yourself—a place where you can think alone about your work, what's coming up, and what you should be working on in the moment. You could start with the three traditional Kanban categories for your cards: To Do, Doing, Done. Use the To Do bucket to capture possibilities, Doing to signal current action, and Done to celebrate success.

Figure 10-3. Office 365 Planner for Thinking Productively



Create a Plan for yourself—for visually structuring the major components of your work, tracking current tasks, and staying clear on what you are working on the present moment.

- **Create Cards for the Things You Care About.** Capture new ideas, thoughts, and reflections on new cards and put them in your first bucket (for example To Do, which is the bucket you use to signify possibilities, not immediate action). Getting the idea out of your head is the first step to making it happen or, if you decide to take it no further, to at least stop it from running in an endless mental loop and getting mixed up with other ideas (although that can sometimes be useful for creativity).
- **Update Current Cards with New Ideas.** The act of scanning your card collection will stimulate new ideas or remind you of something you need to do related to a card; capture it then and there. Your idea can be added to the card description, the checklist, or as a comment. Some ideas will be immediately actionable, while others will act as a reminder when you commit to moving ahead on the task. Having a place to capture good ideas when they happen will give you a tremendous head start when it's time to act. And if the idea is a checklist item that you can do immediately, do it and check it off—you'll be reminded about what you have done already to move towards completion for the overall card.
- **Create Links to Other Plans You Are Working On.** Use your plan as the launching board for the other projects (plans) you are involved with. A card offers the ability to create a link to a Web page, so copy and paste the link for the plan onto a board. Perhaps in the future Microsoft will offer the ability to create a link more directly to a specific plan, but in the meantime, it's a manual process. Now you will have a card in your plan that reflects the totality of another plan; positioning the card for the other plan where it makes most sense (to do, doing, done).
- **Review and Update Daily.** Schedule some time each day to review your board and make plans for the day ahead. Move completed tasks to the done bucket. Move tasks you are going to work on today into the doing bucket. In the closing moments of your day, update any cards with new ideas and possibilities, and move cards around for tomorrow to give you a head start on having a productive day.
- **Colour Code Cards to Highlight Different Roles and Responsibilities.** A card can be assigned one of six colours, and you can assign a label to each colour. You could use each colour for a different role at work, or if you are using your plan to manage all of life, to show the different roles and responsibilities you hold across work, home, play, and society.

The act of scanning your card collection will stimulate new ideas or remind you of something you need to do related to a card; capture it then and there.


Be aware that since Planner is made available through your firm's Office 365 tenant, you will lose access to it when you shift firms. Microsoft may introduce import and export capabilities in the future, which would mitigate this challenge.

Other Capabilities to Help You with Thinking Productively

While the capabilities above are two of the core ones in Office 365 to help you with thinking productively, the following complementary capabilities are on offer too:

- **Microsoft Outlook Calendar.** Use your calendar to schedule a daily debrief with yourself and a longer weekly debriefing and forward planning session. Get these appointments with yourself onto your calendar as soon as possible so the urgent tasks of day-to-day work and life don't crowd out these important but not urgent ones. If you set these appointments a few weeks in advance, it will also decrease the ability for other people to schedule meetings at those times, as your time will show as busy during the hours you have set aside.
- **Calendar (Redux).** At least one person has said that your calendar reveals what is truly important in your life. What you are spending your time on—by default or deliberately—says something about what you value. Every day or at least once a week review your calendar and look over your recent choices for the meetings you have attended, the tasks you have worked on, and the people you have engaged with. Evaluate whether these choices are aligned with the core priorities you should be working on ... or are a distraction, hindrance, or plain waste of time. Adjust accordingly.
- **Microsoft Word.** Before there was OneNote there was Microsoft Word, and Word can be used to keep a chronological journal of ideas, projects, meetings, and tasks. The benefits of planning by externalising your thinking can happen just as effectively in Microsoft Word; the discipline is in doing it. If OneNote doesn't appeal to you as command central for your planning and thinking activities, use a Microsoft Word document. Just ensure you store it in a place where you can get access from all of your devices (for example, your own OneDrive account, or OneDrive for Business).
- **Yammer Groups and SharePoint Communities.** As you identify the areas you want to focus on going forward, look for current Yammer groups or SharePoint communities within your firm that are already learning together in these areas. Observe what is being discussed. Contribute your thoughts and experiences. Step up to lead particular topic-based discussions when the right opportunities are presented. Make connections with other like-minded people across your firm, building a band of brothers and sisters to take effective action. If there are no current groups or communities, consider starting one.



Your calendar reveals what is truly important in your life. What you are spending your time on—by default or deliberately—says something about what you value.

 **Delve Analytics on Comparative Performance.** Delve Analytics is currently available in Office 365 E5 and as an add-on for other Enterprise plans. It displays some information that an individual can use to ascertain the state of their work, such as focus hours (how often an individual had two or more free hours between meetings during the week), key contact people, and meeting effectiveness. For people with access to Delve Analytics, reviewing these insights and the explicit and implicit recommendations they portray should be part of at least your weekly analysis of yourself. If Microsoft rolls Delve Analytics into other plans as a default capability, even more people will be able to learn from an analytics-based interpretation of their work style.


If Microsoft rolls Delve Analytics into other plans as a default capability, even more people will be able to learn from an analytics-based interpretation of their work style.

Roadmap Intent

Microsoft's work on the future of Office 365 signals some pending changes to how the services can be used for thinking productively:¹⁰

-  **Roadmap for OneNote.** Most of the changes listed for OneNote on Microsoft's roadmap address capabilities that don't deal with thinking productively. A couple of items add some level of support: grouped inking (for organising and rearranging inked notes), new ink effects (ink in gold or glitter to highlight something very cool), and smart lookup (for easily getting information into OneNote from the Internet that's related to a current topic). OneNote is a fairly mature tool now, so the real secret in using it is to just use it.
-  **Roadmap for Planner.** Planner is a much more recent addition to Office 365 and therefore has more substantial items on Microsoft's roadmap, some of which will help its use for thinking productively. Key roadmap items are improved mobile web experiences, native apps for iOS and Android devices, and a timeline view. These will have implications beyond individual use for thinking productively using Office 365 Planner, but that's the nature of the offering given its collaborative intent.

While Microsoft hasn't indicated roadmap intent, people have been vocal about what they'd like to see in Office 365 Planner:

-  **Early Adopters Want More.** Early adopters have taken to UserVoice to share their feature requests.¹¹ Some of the requests directly impact on thinking productively, such as: integration with Outlook Tasks and Office 365 Tasks (which are currently two separate capabilities), viewing task due dates on a calendar, a multi-level access permissions model for external people, search, and task prioritisation, among others. It remains to be seen which of these Microsoft will action, but members of the Planner team are active on the UserVoice forum.

Analysis and Evaluation

We have looked at the capabilities in Office 365 to support thinking productively. We now turn our focus to think about some of the pros and cons in using Office 365 generally and how the capabilities of Office 365 can help and hinder the opportunity at hand:

- ✔ **Office 365 as Your One Place.** The breadth of capability across Office 365 for collecting, curating, and sharing information means it can become your integrated warehouse of all your material, documents, discussions, and content items. Although there are many individual capabilities and tools across Office 365 and many different ways of storing and sharing information, it can all live in there. Throw in an effective search tool—and some complementary discipline around findability, taxonomy, and information architecture—and you have the basis for an “everything work-related” system.
- ✔ **Aggregation of Possibilities Allows the Big Questions.** Having a single place where all of your work content is aggregated and available eliminates the need to spend time bringing it together. Being able to see the total inventory of what you are being asked to do means you can evaluate how much of it is truly worthwhile for you to do, what can be delegated to others, and what can be eliminated altogether. Vision should drive action, and requests for action can provide a starting place for evaluating whether those items align with your vision or not.
- ✔ **Office 365 Handles Efficiency; Effectiveness is Up to You.** The many capabilities in Office 365 provide a strong foundation for doing work efficiently—removing unnecessary steps, optimising contribution options, and connecting people across the firm. There is of course a learning curve for making efficient use of the various capabilities, but it’s pretty much all there (at varying levels of maturity). What’s missing however—and this is not Microsoft’s role nor responsibility—is the mental model for using the various capabilities for effective purposes. Microsoft is continuing to deal with the efficiency question, leaving people with the freedom to concentrate on the effectiveness side of the equation.
- ✔ **Some Early Groundbreaking Work with Delve Analytics.** Wearables are driving a new level of insight into personal physical activity and other contributors to wellness, and Delve Analytics will do the same at work. The capabilities currently available in Delve Analytics provide food for thought, and as Microsoft improves its analytical reasoning across Office 365, the story will just get better.

The breadth of capability across Office 365 for collecting, curating, and sharing information means it can become your integrated warehouse of all your material, documents, discussions, and content items.

- ❖ **Office Delve Shows Past and Current, Not Future.** Delve is a fantastic capability for highlighting people connections and content opportunities in light of your historical and current interests. Having Delve as a kind of personal assistant to ensure you don't miss anything of current relevance is a great use of machine learning. What Delve can't do, however, is to discern what you should be working on, tell you what you should stop doing, then make suggestions of new people to engage with who will support the future-oriented work you need to do. Therefore, use Delve to help you address your current work, but don't expect it to lead you to the next horizon.
- ❖ **Too Much Great Stuff Equals Overwhelm.** As people do more and more of their work in Office 365, the amount of available content multiplies. Search results and Delve findings increase too. It would be very helpful if the machine-learning capabilities in Office 365 could provide automatic summarisation of the key differences across multiple documents, thereby not returning more of the same, but doing semantic analysis on different points of view. Duplicates—or near duplicates—could be eliminated, leaving only that which provides a differing perspective.
- ❖ **So Many Rabbit Holes.** The beauty of Office 365 is its many rich ways of supporting content development, team communication and collaboration, and building of learning and expertise communities. It's also the downside of the offering. Having so much good stuff available can quickly consume all of your available time, and unless you are ruthless in focusing on only that which makes sense in light of your core contributions, your life will be consumed by the Office 365 vortex. There are many rabbit holes; tread carefully.

Delve can't discern what you should be working on, tell you what you should stop doing, then make suggestions of new people to engage with who will support the future-oriented work you need to do.

Finally, from the “wouldn't it be cool if” bucket:

- ✱ **Future-Oriented Delve Analytics for my Career.** Picking up on the comment above, “wouldn't it be cool if” Delve Analytics was able to provide prompts and suggestions for projects you should be involved with, discussions you should participate in, people you should connect with in light of the work you are currently doing and in relation to the other work that is happening across your organisation in Office 365. Since Delve can see the activity taking place across Office 365, if it was able to connect the dots between individuals and their stated goals for the future (which would need to be stated somewhere in order for this to work), it could act as a very well-informed mentor or coach. The creepy factor could be quite high though.

What People Are Doing

The act of thinking productively is a personal responsibility, so let's look at how some people—rather than firms as we have focused on in the earlier chapters of this book—are addressing the opportunity, with or without Office 365:

- **Jared DeCamp on OneNote.** Jared uses OneNote as his daily journaling tool because it is part of Microsoft Office (which he uses during his work day) and is available on all devices.¹² To ensure consistency in his daily journaling habit (and to drive productive thinking), Jared created a OneNote page template with six questions to ask every day, including What did I do today that I was proud of?, What one item on my to-do list made the most difference in the achievement of my goal?, and What did I enjoy doing the most? Jared creates a new OneNote page every day and works through his six daily questions. The answers provide fodder for acting differently in the future.
- **Derek Handley on Reclaiming the White Space.** Derek turned off his input firehoses, in order to get more time to think. *"I carved out major blocks of time dedicated exclusively to analog thinking and protected it fiercely. Every Friday morning from 8–11 it was just a pen, a notebook and myself deep in thought, reflecting on what has happened and what I learned, and what I think about what should happen next, planning, creating and imagining. I started this as a CEO of a company with almost 150 people in three continents and many people asked me where I found the time to which all I could respond with was: how could they not create the time? I have learned from seeing people around me in companies or non-profits I have helped build, that a lot of us operate on auto pilot—lemming-like into the office, laptops up, crashing into the inbox and fighting with it for nine hours straight punctuated by rushed in-person meetings that generate more inbox artillery, shrapnel cc'd everywhere and at the end of the day or the week a sense of— 'what did we achieve'? And are we happy with it, or ourselves? Often not a lot and no, not really."*¹³

To ensure consistency in his daily journaling habit (and to ensure productive thinking), Josh created a OneNote page template with six questions to ask every day.

With Office 365 Planner being such a new service, there are few case studies available on how people are making use of it for thinking productively. Trello is a similar service from another vendor; here's how one person is using it for thinking productively as an example of what's possible with Office 365 Planner:

- **Josh Earl on Trello.** Josh uses Trello for managing his tasks and finds the spatial dimension of the service much more effective than a flat or categorised list.¹⁴ He has set up a set of boards for managing his workflow and regularly updates the system. He writes,

"Anything new that I want to capture goes into the Inbox list. Several times a week, I process this list to zero. Cards from the Inbox will move to my context-specific lists if they are single tasks or to my Projects list if it's a multi-step project. When a task or project is complete, I archive the card. When I'm planning a small project, I'll brainstorm a list of tasks and put them into a checklist in the project's card. During my weekly review, I review each project card and convert the next checklist item into a card on [one of the boards]. If a project grows beyond a few steps, I'll spin off a standalone board to track all of the related tasks." Josh's weekly review of his system keeps it all together—visually and mentally.

Behavioural Aspects

Thinking productively is a behaviour; users can use OneNote and other tools in the Office 365 kit to support the behaviour, but it is behaviour first and foremost. Here's what the behaviour looks like:

- ★ **Ask the Right Questions.** The right questions are easy to state, but hard to answer. Ask them anyway. For example, what's working in my work and life today? What's not working? How can I resolve the issues I'm currently facing? Am I spending my time on the right priorities? What are my priorities? What should be my priorities? Where am I heading over the next five years? Where should I be heading over the next five years?
- ★ **Go Offline.** Turn off your input firehoses; thinking productively does not improve when you are facing never-ending streams of distraction and interruption. Get away from your desk and find a quiet meeting room, a nearby coffee shop, a beachfront café, a skyline restaurant, or an early morning vista in your car by the lake. Turn your devices to flight mode so you can't be interrupted. Concentrate on thinking.
- ★ **Connect with What's Important.** Being always on and continually responding to the next digital notification leaves people feeling anxious and disoriented. The root cause is a lack of connection to a deeper sense of purpose and to longer-lasting goals.¹⁵ Disconnecting from the buzz of the moment allows people to reconnect with what's important to them, to reflect on the current status of life and work, and to make plans for the future. These habits born of being still and embracing quietness lead to improved well-being.

Turn off your input firehoses;
thinking productively does not
improve when you are facing
never-ending streams of
distraction and interruption.

- ★ **Tell It How It Is.** Your written thoughts and plans are not intended to be read by anyone else, so be truthful with yourself on how things are going. Don't sugar coat the truth. Sometimes the mere expression of a difficult situation in written form can help you in reaching appropriate closure. Other times it will drive you to take appropriate action. Research studies have found that writing about difficult topics leads to improved physical health and wellness.¹⁶
- ★ **Review and Re-Read.** Having a place where you have captured your thinking, decisions, and dreams in written form gives you the opportunity to go back and see your old self through new eyes. Perhaps every three months or so give yourself an hour to review your journal. What were you thinking about a year ago? What have you accomplished in the past 6-12 months that you had forgotten committing to in your journal? What past goals or dreams are you ready to let go of in light of new opportunities? What do you still need to commit to moving forward—or re-commit to afresh?
- ★ **Think Productively Not Reproductively.** Thinking productively is about looking for new possibilities, new combinations, new ways of organising and thinking about a problem. Apparently, this is what geniuses do. *"Typically, we think reproductively, that is on the basis of similar problems encountered in the past. When confronted with problems, we fixate on something in our past that has worked before. We ask, 'What have I been taught in life, education or work on how to solve the problem?' Then we analytically select the most promising approach based on past experiences, excluding all other approaches, and work within a clearly defined direction towards the solution of the problem. Because of the soundness of the steps based on past experiences, we become arrogantly certain of the correctness of our conclusion. In contrast, geniuses think productively, not reproductively. When confronted with a problem, they ask 'How many different ways can I look at it?', 'How can I rethink the way I see it?', and 'How many different ways can I solve it?' instead of 'What have I been taught by someone else on how to solve this?' They tend to come up with many different responses, some of which are unconventional and possibly unique."*¹⁷
- ★ **Take an Extended Vacation.** Setting aside time to think deeply every week is an excellent habit that will reap significant benefits. But perhaps even more so is taking an extended vacation (for at least two weeks, if not more) and getting away from work altogether.¹⁸ Creating physical distance from the demands of the work day will create a psychological distance too, or the ability to differentiate the forest from the trees, the important from the urgent, the grind from the vision. Done right, an extended vacation drives tremendous long-term productivity and effectiveness, benefiting employees, their family and friends, and their employer or clients. Having the tenacity to keep going is a good character quality, but being unable or unwilling to plan for an extended vacation each year is just plain unhealthy.

Thinking productively is about looking for new possibilities, new combinations, new ways of organising and thinking about a problem.

On Improving Performance

Whether enabled by Office 365 or not, thinking productively is the key driver of improving performance. Specifically:

- **Cheaper.** One outcome of thinking productively is reduced costs in the future. Lessons from the past can be learnt once and applied to similar events in the future. Patterns of past behaviour can be identified in current activity and the appropriate response formulated quickly and easily when similar patterns emerge. Actions you took previously that proved to be ineffective can be eliminated, saving much time, effort, and money in the future.
- **More Effective.** Taking time to think is essential for doing effective work, which by very definition is working on the right things. You can't know if you are working on the right things if you don't think through the options, prioritise possibilities, make decisions, and formulate plans for achievement. Thinking about what's important allows you to focus your time—and thus contribution—on what's important, instead of being pulled into the vortex of urgency. Looking beyond the challenges of any given day ensures you keep your focus on annual goals and even the contribution you hope to make over your career and life.
- **Challenging.** Losing the connection with meaning and purpose is one of the causes of low engagement at work. When life becomes a never-ending stream of urgent tasks of unquantified value, people switch off mentally and emotionally. They may do the activity, but there is no spark of life—no passion, no enthusiasm. Thinking productively offers the opportunity to re-connect with what's important, to re-engage with meaning and purpose, and to light the fire of motivation and willpower. But it is challenging to get there, because it is much more difficult to figure out purpose than to engage in mindless activity. Thinking productively offers tremendous value, but it is hard work.

You can't know if you are working on the right things if you don't think through the options, prioritise possibilities, make decisions, and formulate plans for achievement.

Cheaper, more effective, and more challenging. That's something to get stuck into.

Summary

Being productive isn't merely about being busy—working feverishly to complete as many tasks on your task list before you drop from exhaustion at the end of the day. Productive work is built on a strong foundation of productive thought, focused on identifying opportunities, selecting priorities, and making plans to achieve those priorities through day-to-day tasks. This chapter has explored the opportunity to think productively using capabilities in Office 365, such as OneNote and Planner. We have also looked at the behavioural aspects essential to thinking productively and how some people are making this approach a part of their work and life.

This chapter denotes the eighth and final opportunity we will explore in this book. The next and final chapter concludes the book with a rear-view mirror review and a forward-facing map.

Productive work is built on a strong foundation of productive thought, focused on identifying opportunities, selecting priorities, and making plans.

¹ This is my all time favourite quote from David Allen, but I can't track the source reference now. I heard it in the mid-1990s, and it made a profound impact on my work then. It's still true. For David's work, see gettingthingsdone.com.

² See David Allen, *Getting Things Done*, Penguin Books, 2015; Mark McCormack, *Getting Results for Dummies*, For Dummies, 1999; and Dale Carnegie, *How to Win Friends and Influence People*, Pocket, 1970.

³ Jeff Davidson, *The Complete Idiot's Guide to Managing Your Time (Third Edition)*, Alpha, 2002, page 234.

⁴ Nicholas Bate, *How To Be (1) More Productive*, Strategic Edge, February 2011, at blog.strategicedge.co.uk/2011/02/how-to-be-1-more-productive.html.

⁵ Marc Chernoff, *10 Choices You Won't Regret in 10 Years*, Marc & Angel Hack Life, August 2014, at www.marcandangel.com/2014/08/13/10-choices-you-wont-regret-in-10-years/.

⁶ Stever Robbins, *Defeating Overwhelm*, Stever Robbins Inc., 2004, at www.steverrobbins.com/articles/defeating-overwhelm/.

⁷ There's a lot written on this idea. For one viewpoint (and a whole lot of discussion), see Michael Hyatt, *5 Reasons Why You Should Commit Your Goals to Writing*, January 2014, at michaelhyatt.com/5-reasons-why-you-should-commit-your-goals-to-writing.html.

⁸ Stephen Covey, *Seven Habits of Highly Effective People: Restoring the Character Ethic*, Simon & Schuster, August 1989, page 151.

⁹ Peter Drucker, *Managing Oneself*, Harvard Business Review, 1999, at hbr.org/2005/01/managing-oneself.

¹⁰ Microsoft, *Office 365 Roadmap*, Microsoft FastTrack, May 2016, at fasttrack.microsoft.com/roadmap.

¹¹ UserVoice for Office 365 Planner, at planner.uservoice.com/forums/330525.

¹² Jared DeCamp, *Microsoft OneNote as a Daily Journaling Tool*, jareddecamp.com, September 2015, at www.jareddecamp.com/blog/onenotedailyjournalingtool.

¹³ Deerek Handley, *Opting Out of Email. For Well and Good*, LinkedIn Pulse, May 2016, at www.linkedin.com/pulse/opting-out-email-well-good-derek-handley.

¹⁴ Josh Earl, *Rocking GTD with Trello*, joshuaearl.com, May 2012, at joshuaearl.com/rocking-gtd-with-trello/.

¹⁵ For one example of this line of thinking, see Louisa Pritchard, *Bring on the boredom - why being idle can be good for you*, The Telegraph, March 2016, at www.telegraph.co.uk/wellbeing/mood-and-mind/bring-on-the-boredom--why-being-idle-can-be-good-for-you/.

¹⁶ Karen Baikie and Kay Wilhelm, *Emotional and Physical Health Benefits of Expressive Writing*, BJPsych Advances, August 2005, at apt.rcpsych.org/content/11/5/338.full.

¹⁷ Michael Michalko, *How Geniuses Think*, The Creativity Post, April 2012, at www.creativitypost.com/create/how_geniuses_think.

¹⁸ Kristi Hedges, *The Best Reason Ever to Take a Two Week Vacation*, Forbes, June 2013, at www.forbes.com/sites/work-in-progress/2013/06/25/the-best-reason-ever-to-take-a-two-week-vacation/.

Chapter 11.

Final Comments and Next Steps

Microsoft has invested untold thousands of man and woman years in getting Office 365 ready for you and your organisation. Microsoft has done, is doing, and will continue to do its part in developing great technology, but it is over to you to make Office 365 a success in your organisation. You owe it to your organisation to spend an appropriate amount of time focusing on how to make it succeed.¹

Michael Sampson

There is a journey to undertake with the effective use of Office 365 in your organisation, and throughout the pages of this book I have championed a way of approaching that journey. We have looked in some detail at eight core opportunities for improving work through Office 365 and laid the foundation for an investigation into advanced opportunities. However, it is almost time to hand the reins of the journey over to you. Before our paths diverge for a while, let us look back on the journey we have taken together so far and consider where to from here.

In this chapter, we will:

1. Review the journey we have taken in this book around exploring the potential for using Office 365 in our work.
2. Ask and answer the question “How do you take the learning in this book and make it work at your organisation?”
3. Learn about workshops facilitated by Michael on driving effective use of Office 365 in your organisation.
4. Be invited to discuss your approach to re-imagining productive work with Office 365.

Review of Re-Imagining Productive Work with Office 365

The vision for this book was to create a helpful guide for people who are exploring how to improve their work in the new world of work. In alignment with the many changes in the working world—and indeed acting as an enabling power source for some—is Office 365. With an increasing number of organisations evaluating and moving ahead with Office 365, the real test of its value lies in the application of its capabilities within day-to-day work. This book explored, analysed, investigated, reviewed, thought through, and championed for eight core opportunities for doing so with Office 365.

Here's the journey we have been on throughout this book:

The vision for this book was to create a helpful guide for people who are exploring how to improve their work in the new world of work.

- **Chapter 1, on Office 365.** Office 365 is an expansive set of productivity applications and cloud-delivered services for organisations of all sizes. In Chapter 1 we reviewed the current state of Office 365, noted its context in recent IT history, as well as its alignment with current trends in the IT industry. We then explored its capabilities at a high level, covering aspects such as Office client applications, services for email and calendaring, and services for automatically discovering what's happening across your firm. We also reviewed current research data on Office 365 usage and adoption.
- **Chapter 2, on How to Think About Office 365.** To understand the possibilities available for improving work using Office 365, the opportunities approach was used throughout this book. The approach starts by identifying the situations in which people work today—such as storing and sharing files, co-authoring documents, managing meetings, and running team projects. For each of these work situations, we examined how Office 365 could be used to innovate beyond current practices. The intent of the opportunities approach is to explore what's possible and then take from those possibilities the ones that are relevant to your organisation; it's a descriptive approach, not a prescriptive one dictating complete compliance. Of course, if your people engage in all of these work situations, it is likely that you may choose to embrace them all. Chapter 2 laid the foundation for the opportunity approach.

With the scene set, we used the opportunities approach to investigate eight core opportunities for using Office 365. They were:

- **Embracing Hands-Off IT, in Chapter 3.** Rather than delivering IT services from on-premises servers, Office 365 offers the opportunity of cloud-delivered services and self-managing end user devices. We looked at the options available to simplify and streamline IT provision with Office 365 and related cloud offerings from Microsoft.

- **Storing and Sharing Files, in Chapter 4.** People create, work with, and reference many documents and files in their work. Office 365 provides new approaches for storing and sharing files, both for individual use and team and group use. We looked at the options available in Office 365 and how to make the transition from current approaches to the new alternatives productive and effective.
- **Profiling Employee Expertise, in Chapter 5.** People develop competence in specific areas of work, which other people come to rely on. As part of this cooperation, people need to identify others who have competence in related or complementary areas. We looked at the options available in Office 365 for profiling employee expertise, including some of the roadmap directions from Microsoft.
- **Co-Authoring Documents, in Chapter 6.** Developing a document, spreadsheet, or presentation in organisational life generally involves getting input from other people. Office 365 offers new ways of collaborating on documents of various kinds with other people, including real-time co-authoring across computers and devices. We reviewed what's on offer in Office 365.
- **Managing Meetings, in Chapter 7.** Effective meetings are the lifeblood of productive teams and organisations, while ineffective meetings are the death knell of employee engagement, motivation, and passion for work. We looked at how Office 365 can support more of the former, along with essential behavioural practices for effective meetings.
- **Holding Discussions, in Chapter 8.** Deciding on the way forward with a project or initiative relies on a strong foundation of discussion and conversation—exploring ideas, weighing pros and cons, and evaluating available people and the weight of their support. We considered the options in Office 365 for holding productive discussions in line with productive discussion behaviours.
- **Running Team Projects, in Chapter 9.** Many organisations divide work into projects with a group of people given the resourcing and responsibility for making something new happen. Office 365 provides various options to support the work project teams need to do by creating a shared space for the team to work together even if they can't be together in person.
- **Thinking Productively, in Chapter 10.** Re-imagining productive work is first and foremost grounded in productive thinking; without a foundation of productive thought, nothing better is likely to happen. We looked at the options in Office 365 to support the activity of thinking productively.

Clearly there are many other opportunities beyond the core eight above that can be addressed by Office 365, but these were beyond the scope of this book. A non-exhaustive list of some advanced opportunities is shown in Chapter 2.

What Do You Do Now? An Action Plan

You have almost worked through this entire book—congratulations! Success comes, however, from applying its principles, not by reaching page 240. The question, then, is what do you do now? How do you make best use of the learning available in this book? Here are four steps:

- **What Capabilities are Offered in Office 365?** You need to understand the capabilities offered by Office 365, so definitely review Chapter 1. However, you need to work with your IT department to understand which licensing level your firm has with Office 365, as this impacts the specific capabilities you have available. The technology of Office 365 creates an opportunity to re-imagine work situations, thus a grounding in the technology that is actually available to you is essential.
- **What are the Common Work Patterns at Your Firm?** After working through the eight work opportunities presented in this book, you should have an immediate sense of which ones are commonly done in your area or more widely across your firm. The opportunities in this book are descriptive, not prescriptive, so while it is possible that all eight opportunities will apply, it is very likely that some will not. Use Figure 11-1 to grade the applicability of each opportunity—as Low, Medium, or High—and note down some of the target groups for which these opportunities make most sense.
- **What Other Scenarios are Commonly Done at Your Firm?** The eight core opportunities presented in this book are commonly done across organisations, but not exclusively so. What specific work scenarios are commonly done in your area? How are they carried out today? What are the problems or issues faced by staff in using the current approaches? Building on your understanding of Office 365, how could these be improved or enhanced through a new approach? If you are unsure of other common work scenarios, start discussing with the various teams and groups in your firm about the work they do.
- **Engage with Your Identified Target Groups (for IT Departments).** Start a dialogue with the target groups you identified above about the opportunities you think have high relevance for their work. Seek to understand what is and isn't currently working for them and provide opportunities for them to learn about how the work scenarios of high value can be re-imagined in Office 365. As their awareness of the possibilities increase, test the concepts with selected groups, assess the improvements, make any modifications required, and introduce it more widely.

What specific work scenarios are commonly done in your area?
How are they carried out today?
What are the problems or issues faced by staff in using the current approaches?

Figure 11-1. Rank Your Work Activities

Work Activity	Low Value	Medium Value	High Value	Target Groups for High Value Activities
Hands-Off IT				
Storing and Sharing Files				
Profiling Employee Expertise				
Co-Authoring Documents				
Managing Meetings				
Holding Discussions				
Running Team Projects				
Thinking Productively				
Other Activity 1				
Other Activity 2				
Other Activity 3				

Rank the value of each of the eight core work activities for your area and more widely across your firm. Identify target groups that would get high value from each. Also rank any other work activities that are commonly done at your firm.

Host a Workshop on Office 365 with Michael

As a collaboration strategist I run in-house workshops with organisations on cultivating productive collaboration. These workshops are designed to help organisations gain a rapid boost towards being effective with collaboration and collaborative approaches. Three of the workshops I offer are Re-Imagining Productive Work with Office 365, Getting Your Organisation Ready for Office 365, and Driving Effective Use of Office 365.

Re-Imagining Productive Work with Office 365: The Workshop

The Re-Imagining Productive Work with Office 365 workshop is all about exploring the possibilities of using Office 365 in business and work. It explores the real-world applicability of Office 365 by looking at key opportunities in day-to-day work that can be improved by using the capabilities on offer in Office 365. The workshop is a mix of “here’s what’s possible with Office 365,” and “what makes best sense for our organisation in light of our work and needs?”

The workshop is presented over two days, giving ample time for exploring each of the opportunities and for developing a draft strategy for introducing Office 365 at your organisation. The general schedule for the workshop is as follows:

- The workshop opens with introductions, followed by a presentation to set the scene on collaboration.
- Each of the opportunities available with Office 365 is explored, along with live demonstrations to bring each of the opportunities to life. Workshop participants hear the ideas, debate their relevance, and think about how to make effective use of Office 365 in their work.
- The second half of day two is focused on thinking about how to effectively use Office 365 in your organisation by identifying leading opportunities to embrace in the initial phase of usage. This is a facilitated conversation, and the intent is to quickly develop an initial sense of where to go for your organisation in its use of Office 365.

The Re-Imagining Productive Work with Office 365 workshop is all about exploring the possibilities of using Office 365 in business and work.

This workshop is based on this book and other subsequent material prepared by Michael.²

Creating the Organisational Context for Achieving Value with Office 365: The Workshop

Achieving value with Office 365 requires clear thinking on how to create the best organisational context for its introduction and effective use. The Creating the Organisational Context for Achieving Value with Office 365 workshop is designed to develop clarity on the purpose of embracing Office 365, create a phased plan for introducing the capabilities in Office 365, and to build competence in developing the supporting organisational constructs to drive success. This workshop is designed for intranet managers, knowledge managers, Office 365 Project Managers, solution architects, collaboration strategists, IT decision makers, and others involved in using Office 365 inside their firm.

The workshop is presented over two days. The general schedule for the workshop is as follows:

- The workshop opens with introductions, followed by a presentation to set the scene on creating the organisational context for achieving value.
- The effective use of Office 365 by individuals and teams requires the presence of supporting organisational structures—if the organisational context isn't right, the use of Office 365 in the moment-by-moment work won't be right either. The workshop explores these supporting structures, including business value, executive support, business engagement, methods of handling frequent change in Office 365, guidance for individuals and teams on how to best leverage the capabilities in Office 365 in their work, and how the IT team or department needs to change to make Office 365 a success. These are weighty organisational change issues that flow on from the implication of embracing Office 365.
- The second half of day two is a facilitated discussion to bring together the ideas, concepts, and strategies discussed during the workshop in order to forge a plan for moving ahead at your organisation. For your organisation, this is likely to include a stream of further work to put the ideas discussed into practice through new groups, teams, and responsibilities.

This workshop is based on Michael's work over the past decade on developing the organisational constructs essential for supporting new ways of working.³

Achieving value with Office 365 requires clear thinking on how to create the best organisational context for its introduction and effective use.

Driving Effective Use of Office 365: The Workshop

The Driving Effective Use of Office 365 workshop is designed to help organisations develop a strategy for incorporating appropriate Office 365 capabilities into the day-to-day work of staff. During the workshop you will learn what effective use looks like, and what needs to be put in place in order to lead users to this outcome. This workshop is designed for intranet managers, knowledge managers, Office 365 Project Managers, solution architects, collaboration strategists, IT decision makers, and others involved in using Office 365 inside their firm.

The workshop is presented over two days, giving ample time for exploring the concept of effective use, sharing experiences in driving effective use of Office 365, and developing a draft strategy for driving effective use of Office 365 at your organisation. The general schedule for the workshop is as follows:

- The workshop opens with introductions, followed by a presentation to set the scene on effective use.
- Each of the strategies available for driving effective use is presented, discussed, and evaluated within the four stage effective use framework (drivers for effective use, developing competence for effective use, strategies for cultivating effective use, and extending effective use). Case study examples of how various firms around the world have used the respective strategies are also presented to prompt thinking and the evaluation of potential new strategies.
- The second half of day two is focused on applying the learnings of the workshop to your organisation—how people in your firm should use Office 365 and how to lead them to this place of greater effectiveness. This is a facilitated conversation, and the intent is to quickly develop an initial sense of how to proceed with driving effective use of Office 365 in your organisation.

The Driving Effective Use of Office 365 Workshop is designed to help organisations develop a strategy for incorporating appropriate Office 365 capabilities into the day-to-day work of staff.

This workshop is based on Michael's work over the past decade on driving effective use of new tools and approaches to work.⁴

Summary

Throughout the pages of this book we have explored the features of Office 365, examined the opportunities approach for evaluating what's on offer, and used the approach to analyse eight core opportunities available to organisations from Office 365. In this chapter we have briefly reviewed the highlights of the book, developed an action plan for applying the approach in the book to your organisation, and covered three workshops to further extend your learning and effectiveness at work.

Thanks for the opportunity to present these ideas to you; I wish you every success in your forward journey. If there is anything I can do to add value to your work, please contact me at michaelsampson.net/contact/.

Now it's your turn. Go and do great work!

Thanks for the opportunity
to present these ideas to
you; I wish you every success
in your forward journey.

¹ Yeah, I say this. Any time I run a workshop on Office 365, you are almost certain to hear me say this at least once. Great technology is essential and necessary, but even more so is the great application of that technology to the world of work. And that's not a vendor responsibility—it's yours in your firm.

² For the workshop flow, agenda, and further details on the Re-Imagining Productive Work with Office 365 Workshop, see michaelsampson.net/workshops/office365reimagining-workshop/.

³ For the workshop flow, agenda, and further details on the Creating the Organisational Context for Achieving Value with Office 365 Workshop, see michaelsampson.net/workshops/office365context-workshop/.

⁴ For the workshop flow, agenda, and further details on the Driving Effective Use of Microsoft Office 365 Workshop, see michaelsampson.net/workshops/office365effectiveuse-workshop/.

Appendix 1.

Detailed Table of Contents

I provided a visual Table of Contents on page 7 and a quick overview on page 8. Here's the full Table of Contents for reference.

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About the Author

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