



## Future Tech Trends in Office 365

Has the world of productivity apps already been conquered? Microsoft explores new vistas in Machine Learning and, with Google in its wake, eyes its newest challenger... Adobe.





## testing the waters

Throughout history, groups of people have sought to expand their influence. In the heyday of empires, rarely did a leader say, “Okay, I think we’ve grown enough. Let’s stop now.” On the contrary, the urge to keep on growing and exploring new uncharted territory has been a driving force in human endeavors. With this historical analogy in mind, we turn our eyes to Microsoft.

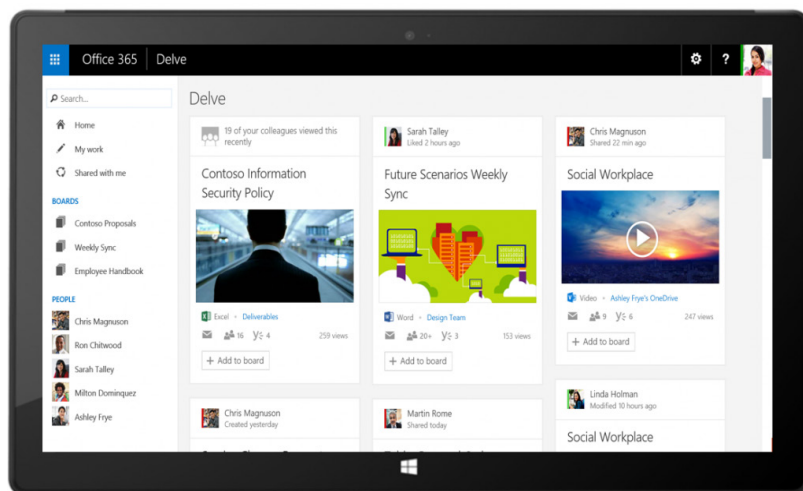
If you’ve been listening to IT buzz throughout 2015, then it won’t come as a surprise that Microsoft Office 365 has been growing... and growing... with no end in sight. Google Apps has been [left in the dust](#); Office 365 licenses have grown by over 66%, reaching 18 million subscribers and counting. With Office 365’s success seemingly assured, Microsoft has shifted its attention towards new initiatives outside of the traditional realm of productivity software: Machine Learning and Creativity apps.

## getting to know you

In March of 2015, a new pair of apps were formally rolled out to all Office 365 users: Office Graph and Office Delve. Office Graph, the brawn of the duo, uses machine learning and predictive analytics to map connections between people and information. Graph retrieves, cleanses, parses, and formats a tremendous amount of raw data using Office 365 environments as its source pool — specifically, SharePoint, OneDrive for Business, Office 365 videos, e-mail attachments, user actions, and Yammer. All of that information is then mapped to individual Office 365 users, effectively connecting together vast quantities of knowledge with all of the people who somehow interacted with that knowledge. Between October 2014 and March 2015, Office Graph mapped over 6 billion actions and interactions.

Graph’s little brother, Office Delve, is the brains of the pair — its job is to elegantly present selected content to Office 365 users. The type of “selected content” is special because it is highly relevant to individual users. For example, if Michelle has a meeting at 11am, Delve will proactively retrieve all content that is related to that meeting and then present it to Michelle in a dynamic card-based interface before the meeting starts. This saves Michelle the effort of having to search through e-mails, organize files, and assemble notes. It has all been done for her already.

Meetings are just one example of using an event as a presentation trigger — Delve also leverages user searches to present relevant content. In addition, users can click on content filters to view highly specific information, such as “shared with me,” “liked by me,” “modified by me,” “viewed by me,” “presented to me,” and “trending around me.”





## the tip of the iceberg

Continuously producing predictive insights improves the overall accuracy and reliability of a machine learning system, particularly when user feedback is taken into consideration. With maturity, the back-end (Graph) becomes more efficient, user data grows, and the front-end (Delve) can present more refined content.

Data science, as a whole, is a rapidly growing field that is applicable across a wide range of industries and in a surprising number of real-world situations, from [genome mapping](#) to [Formula One racing](#). The amount of data generated on a global basis is huge; corporations continue to discover new ways to filter out valuable data from the noise and to present it in a meaningful manner.

Microsoft is no different. Given its “cloud-first” policy, Microsoft is in the favorable position of having access to vast amounts of user-generated data that it can collate, format, and package in the form of highly marketable apps — in this case, Graph and Delve. Right now we are viewing the tip of the iceberg: over time, accessible APIs will enable Office Graph to map data from third party sources.

In the future, Delve may not only display Office 365-derived insights, but will convey knowledge that reflects each user’s unique interactions with data-driven apps. For example, a Graph/Delve integration with [Microsoft Intune](#) might enable Office 365 admins to view predictive analytics about mobile usage, deployments, and employee usage of corporate assets, all from the Delve interface. Partnerships with financial institutions may enable employees to view “what-if” scenarios so that they could make informed decisions about their corporate stock or 401k allocations.

With the right partnerships and accessible APIs, Office Delve could feasibly become a dashboard that features predictive content from all aspects of a user’s life, both in and out of the corporate setting. The possibility of securing access to such a wide range of valuable user data is assuredly a hot-topic in Microsoft strategic business meetings as its vision of a mobile, cloud-first world slowly comes to fruition.

## the big “if”

Office Graph and Office Delve have the potential to become significant game changers in the Office 365 universe. The apps are a tag team with the muscle to perform predictive analysis and the finesse to convey results in an accessible medium. But there is still a lot to prove. At the moment, Delve is limited by its scope as an intranet social media platform. It displays Office 365-centric information and provides some nifty social features that enable users to engage more directly with their colleagues. It falls into the uncomfortable category of being “something to do while waiting for your lunch break to end.” After all, if users really want an interactive social media experience, they’re going to turn to Facebook or Twitter, and not a company intranet portal.

So far there is an abundance of coulds, woulds, and mights... and all of them are predicated on some big ifs: If APIs are developed, if 3rd party accessibility is pursued, if Microsoft management thinks outside of the Office 365 ecosystem, if Delve can break out of the “social media intranet” stereotype, and so on.





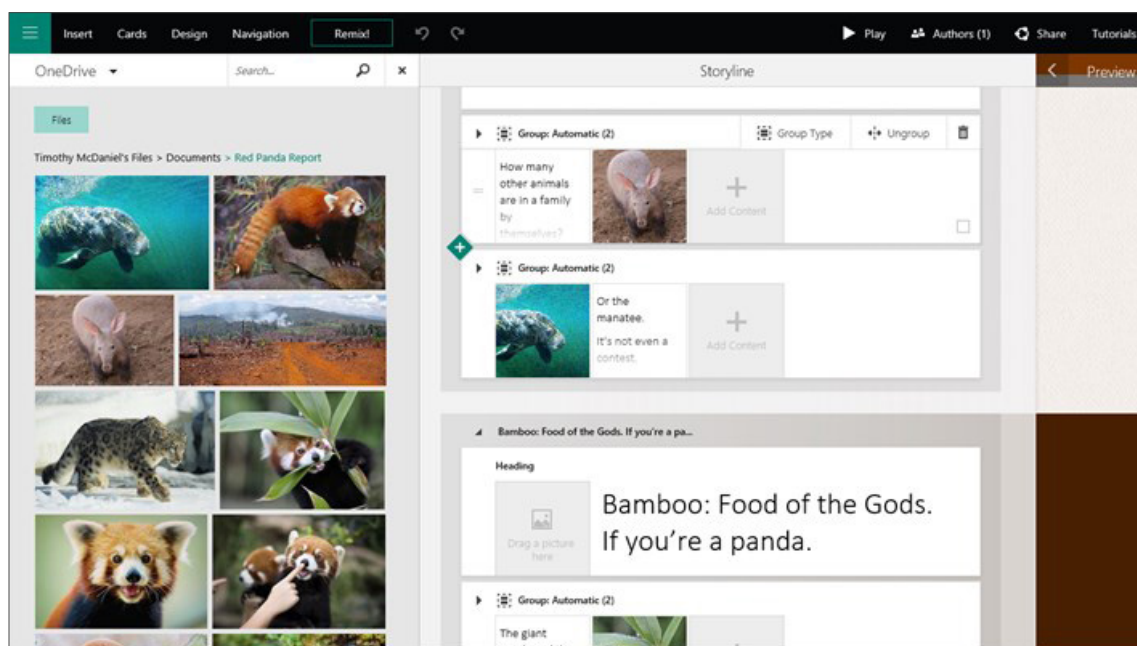
Right now, all of the ingredients are in place: cloud infrastructure, access to huge amounts of data, the capability to map data points to people, and a tool to bring it all together in a visually engaging manner. Will Graph and Delve be real game changers? Or will the apps be forgotten? Time will tell.

## charting a new path

When someone says “Microsoft Office” three things come to mind: Word, Excel, and PowerPoint — this Power Trio of productivity apps has defined Office for decades. Over time, a platform was created to support the sharing of content between teams: SharePoint. So far, so good... these are all solutions that facilitate productivity in a corporate setting and are used by a majority of business users globally. In 2014 and 2015, however, apps were introduced that broke out of the traditional mold and are now helping Microsoft to re-define its family of products: we’re talking about [Office Mix](#) and [Office Sway](#).

Office Mix is a PowerPoint add-in for Office 365 that enables users to record audio and video, add interactive content, polls and quizzes, drawing capabilities, and presentation tools. The add-in is marketed specifically for the education sector, but its capabilities are varied enough to warrant its use in any environment. In short, it’s the Microsoft version of Adobe Captivate.

Office Sway, on the other hand, is a bit more difficult to succinctly explain. Sway is branded as a “digital storytelling” platform and is benefitting from significant attention from Microsoft, with roughly 13% of all new Office 365 development being Sway-related. It is a presentation app that enables users to add a variety of content from nearly any online source or from a device such as a smartphone or tablet. Sway then uses its algorithms and design styles to format, arrange, and present the content based on user-supplied preferences (e.g., giving priority to certain photos). Suggested end products include reports, presentations, newsletters, and personal stories. To summarize, Sway is a blank canvas with intelligent design mechanisms working behind-the-scenes — you supply the content and Sway makes it beautiful.





Office Sway combines multiple rich-media functionalities in the same way that the Adobe Digital Publishing solution uses content to create interactive mobile-centric experiences. In fact, the number of similarities between new Office 365 products and existing Adobe solutions makes one wonder — is Microsoft looking to expand into the world of creative solutions? Now that Google Apps has been [surpassed](#), is Adobe next?

## 2016 and beyond

All signs are pointing to a big “Yes!” — Microsoft is, indeed, seeking to conquer new territory by developing solutions that have traditionally been the domain of other organizations (who are now its competitors).

2015 saw Office 365 surpass Google Apps in terms of adoption rate, which is an amazing story considering that in October 2014, Office 365’s adoption rate was less than half of Google Apps. The momentum is now in Microsoft’s favor. As 2016 approaches, development work will likely turn more towards cloud-based apps that target corporate marketing and other non-business sectors, such as education and the public sector.

With the kind of resources that Microsoft has at its disposal, it has ample reason to pursue non-traditional projects that break the mold of what is expected. **Increasingly, Office 365 is transcending its role as a productivity suite and is becoming a solution-based cloud platform.** Over time, the line between traditional productivity apps (e.g., Excel) and flexible solution-based apps (e.g., Sway) will become more and more blurred. Here’s our take on the comparative trend:

- **Traditional Productivity Apps:** Apps that focus on a single solution-set. For example, Microsoft Word, Microsoft Excel, Microsoft Outlook, etc., all focus on a singular goal — creating docs, spreadsheets, e-mails — they do it very well.
- **Solution-based Apps:** Apps that address a need, but are not focused on singular feature-sets. For example, Microsoft Sway is a creative platform enabling users to design presentations, websites, photo montages, and so on. Communication tools such as Skype for Business and Outlook are becoming more tightly integrated over time, with users able to communicate from within their Inbox. The continual integration of individual productivity apps eventually results in new solution-based apps capable of handling multiple tasks.

With the growth of the cloud and specifically, Office 365, comes an ever-increasing focus on creating 100% cloud-based solutions that meet user needs and enhance the online experience. Traditional productivity apps are not going away any time soon, but their appearance and functionality is changing to reflect a growing dependence on the cloud. Office 365 users of the future will not rely solely on singular apps to create highly specific deliverables; more and more, they will use broader solutions that are multi-tasking, multi-functional, and tightly integrated within a cloud ecosystem.





Crow Canyon Systems

W: [www.CrowCanyon.com](http://www.CrowCanyon.com)

E: [sales@crowcanyon.com](mailto:sales@crowcanyon.com)

T: 1-888-706-0070