

## SURVEY

### What Comes After BYOD: Early Results from the IDC Mobility and CIO Summits

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#### IDC OPINION

According to the IDC *CIO Survey for ANZ*, the top ICT priority for 2013 is mobile device management and mobile security. This is followed by policies around bring your own device (BYOD) with the need to develop mobile business apps in third place. Through many surveys and face-to-face conversations, it is apparent that many organisations are still struggling on how to implement BYOD and grappling with a vast range of issues around security and device management. IDC does not expect them to go away, but is finding that businesses are looking forward and anticipating the next wave of requirements as enterprise mobility solutions evolve.

Key findings of this study are:

- ☑ Mobile device management (MDM) appears to have had its role in providing some quick fixes, especially around BYOD; however, it is not the panacea. This, in turn, is driving the conversation to address broader topics around enterprise architectures moving the discussion beyond endpoint security.
- ☑ Mobile security is a high priority in 2013, but the market appears to be as fragmented as ever. Enterprise IT managers appear to be selective in both what features of products they want to deploy, as well as the number of employees they want to include. Likewise, vendors are positioning in the market in many different ways. This includes PC adjacencies, hardware-based, architecture plays, software, and device based. Consolidation in past years (e.g., Intel and McAfee) has blurred the boundaries further.
- ☑ Mobile applications are high on the agenda. For the first time, mobility ranks above concerns around cloud that dominated the past years. Even Big Data analytics and social media integration have taken the backseat. CIOs are looking at mobile apps to increase productivity, support lines of business (LOBs), and even as a new channel to supplement online, social, and bricks and mortar.
- ☑ In the world of mobile app development, there is often a trade-off taking place between native app development, which offers feature richness and quality of experience, and HTML5. The latter offers broad-based availability at a lower price point using Web apps. IDC believes that most organisations will opt for hybrid environments.



## IN THIS STUDY

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### Methodology

This study is the result of several surveys IDC conducted at enterprise summits. This included the IDC Mobility Summits held in 2013 in Sydney and Melbourne. IDC also ran the survey again at the CIO Summit in Perth. The results from these surveys were also cross-referenced with face-to-face interactions, content presented at the summits from CIOs, as well as numerous roundtable discussions.

### SITUATION OVERVIEW

Enterprise mobility is evolving rapidly. Organisations still struggle with BYOD and are trying to find ways to best implement it typically through MDM solutions. The MDM market is morphing into application, content, and information management. Ultimately, this may drive convergence between MDM and mobile enterprise application providers (MEAPs) that are using a similar middleware of platform-based approach to deploy and manage mobile apps.

Mobile security is also becoming a hot topic, given the need to extend the same policies and protections from a PC-centric environment to a mobile one. However, the mobile workforce and related location independence are also moving the security debate away from a discussion around the perimeter. This type of security posture tends to centre on the firewall, which was traditionally hosted onsite, carried out individual policy lookups, and enforced compliance on one site or branch location. Mobility is driving a model of security, which is context aware (e.g., device, location), roles-based, and policy enforced through stronger automation tools that aim to deliver a consistent policy, regardless of network connection (e.g., mobile or fixed).

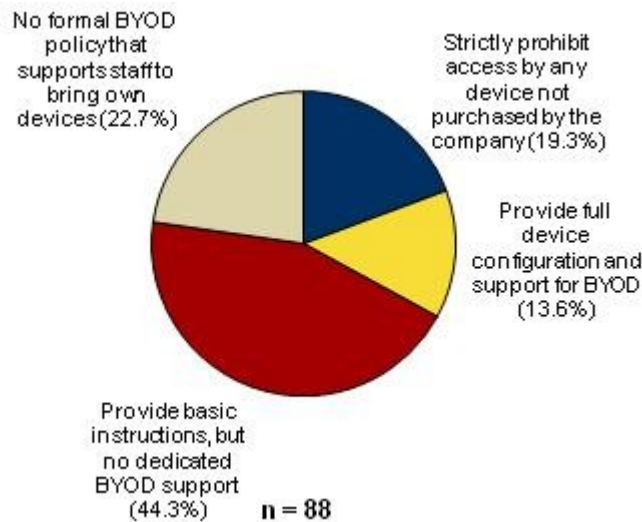
Enterprises are also looking for a strategy around mobile applications and they are not quite as simple as legacy apps. One cannot repackage a feature-rich enterprise application for a mobile device. App development tends to take many forms and there are major trade-offs among in-sourcing (e.g., deciding what should be carried out internally as opposed to external suppliers). There is also the trade-off in building apps. On the one hand, HTML5 provides IT the ability to build apps to scale at a low cost per user. On the other, native apps tend to offer richer features, better performance, and better access to capabilities such as location, on device storage, and camera. The latter can drive up overall costs. Most businesses try and strike a balance between the two.

The issues around mobility are not going away anytime soon, this report provides a synopsis of attitudes from Australian CIOs and IT managers on mobility.

**FIGURE 1**

**Current BYOD Policy Description**

Q. How do you describe current organisation BYOD policy?



Source: IDC, 2013

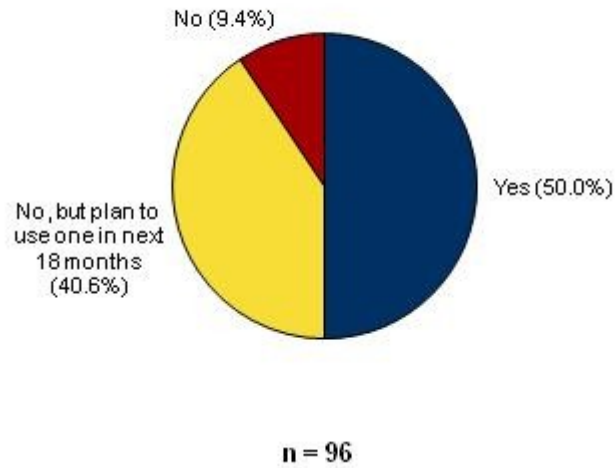
Figure 1 shows the lack of coherency with regard to BYOD. Approximately 80% of the respondent companies surveyed have the phenomena of employees bringing their own devices to work.

- ☒ Nearly 23% report having no policy whatsoever, which is a sharp decline from that in previous surveys. In another survey published by IDC in 2013, about 50% of respondents reported no policy for BYOD. This suggests CIOs and IT managers are progressing with some form of strategy. This has been driven by a combination of market awareness, business needs, and maturity of vendor solutions.
- ☒ Nearly 20% strictly prohibit employees bringing personal devices for work usage, which is a sharp increase from that in previous surveys. Enterprises appear to be hardening their stance on BYOD. It is very difficult to implement. IT departments are not fans of trying to keep track of every device and form factor and finding a way of managing this complexity.
- ☒ Other hidden costs. The real costs for IT departments in supporting BYOD have yet to be quantified. They are often called in to provide de-facto support, which takes away resources from other areas. This also includes resource constraints on the network in pushing content and applications to devices.

**FIGURE 2**

**Mobile Management Solution in the Organisation**

Q. *Does your organisation have a mobile device management/mobile application management (MAM) solution in place today?*



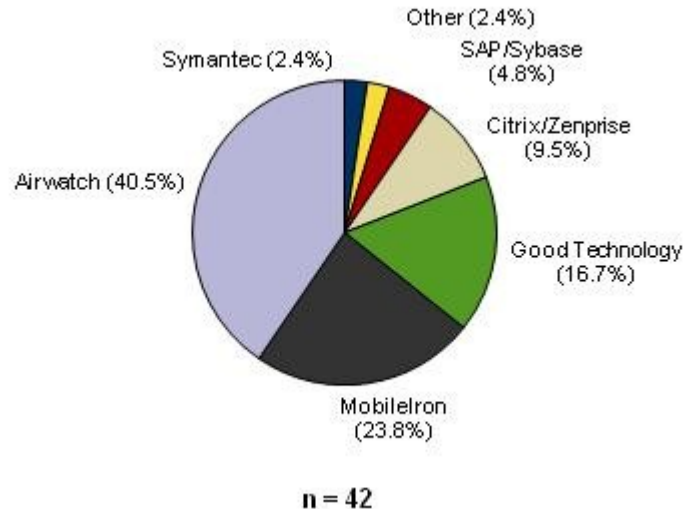
Source: IDC, 2013

Figure 2 shows nearly 50% of the enterprise has some form of, or have an, MDM and/or MAM solution in place. Another 40% plans to follow this path within the next 18 months, which shows the market is poised for future growth.

**FIGURE 3**

**Mobile Management Solution Vendor**

Q. What MDM or MAM vendor are you using today?



Source: IDC, 2013

Figure 3 highlights the current vendor preferences amongst the CIOs and IT managers. In this survey, Airwatch has a strong lead, and this correlates well with IDC's supply-side research. The vendor has been very aggressive with sales and in building a strong ANZ operation. IDC estimates Airwatch to have 500 business accounts in the ANZ region. Mobile Iron has been in the market much longer, but appears to be losing some steam. Citrix is picking up market share to reflect broader capabilities it can offer in MDM or MAM, as a result of the Zenprise acquisition, a better product road map, and partnership with Cisco. We expect Citrix to be successful in large enterprise deals where mobility is considered as part of underlying enterprise architecture as opposed to a point solution. Vendors, such as VMWare and Juniper, appear not to be gaining any traction in spite of new products, sales initiatives, press releases, and thought leadership exercises.

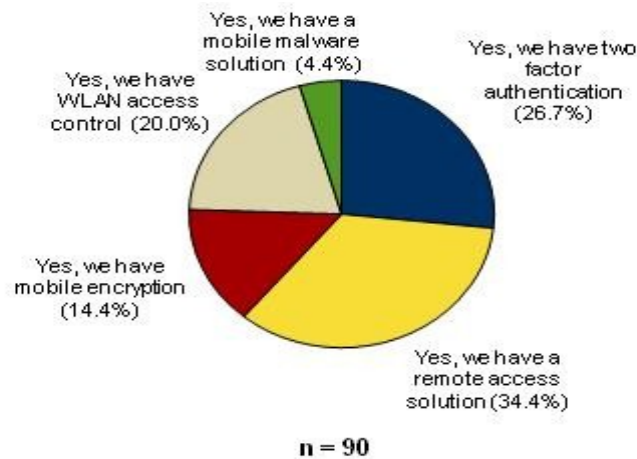
Two specific views IDC has for the future:

- ☑ Mobile device management will become a default requirement for any enterprise embracing a mobility strategy. The MDM market will gradually disappear and will be seen more as a feature, not a product or solution set. MDM vendors realise this and are quick to build mobile app and information management solution.
- ☑ Enterprises are looking beyond the management of devices to the management of applications and information that move within the data network. This move will also lead to a shift in market share, as the market will need to accommodate new entrants that focus more on enabling HTML5, native, and hybrid apps.

**FIGURE 4**

**Mobile Security Solution in the Organisation**

Q. Does your organisation have a mobility security solution in place now?



Source: IDC, 2013

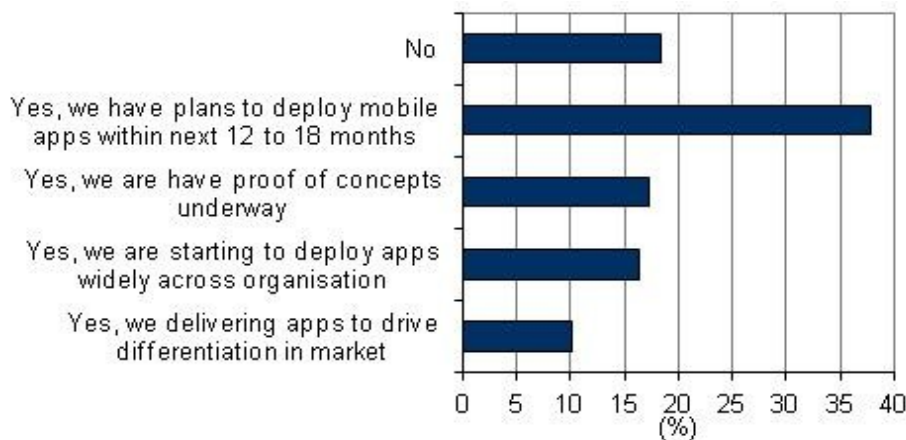
- ☒ Whilst Figure 4 records the different types of mobile security solutions in play, it does not show the "no responses." Some 26% of survey participants do not have a mobile security solution in place today.
- ☒ The 74% of responses that report having a mobile solution in place is a significant increase from previous years. The *IDC Security Insights* survey 2010 showed that only 12% of respondents had a security solution for mobility. (This was the first year we surveyed). 10% were unaware and 38% were not interested. The remaining responses were interested, but cautious (16%), frustrated (16%), and motivated (8%).
- ☒ IDC believes there is still a lot of room for growth in this market. Security in the mobile world will have the same importance (or more) than with laptops and PCs. There appears to be some hesitancy around the need to deploy mobile security solutions. The market is relatively new, vendors solutions fragmented, some have over-promised and under-delivered. Businesses are likely to be looking to better understand the issues before buying a solution.
- ☒ Different security solutions also reflect the diversity of employee requirements. For example, employees in management roles are more likely to use remote access solutions to access email whilst working outside the office. Two-factor authentication tends to be incorporated into LOB apps or support secure transactions such as payments. Mobile encryption is often linked to MDM and WLAN are often asked to deliver secure guest access control. Mobile malware is an issue too, but does not seem to have the highest priority. Google reported over 1 million malware incidents that took Microsoft well over a decade to reach the same point.

- ☒ Security solutions, when deployed, are not distributed to all employees. 53% of respondents report that security has been rolled out to 25% or fewer employees. Only 17% of respondents have a solution in place for more than 75% or more employees. This suggests that there is perhaps some debate over the extent security solutions needs to be distributed.

**FIGURE 5**

#### Mobile Application Deployment Plans

Q. *Is your company currently deploying or has plans to deploy mobile applications within the next 12–18 months?*



Source: IDC, 2013

Figure 5 shows that there are some extremes when it comes to mobile apps. There are still significant contingents that believe that they will not deploy mobile apps and do not foresee plans in the future. There are also companies that plan to deploy mobile apps within the next 12–18 months and seem to be genuinely excited about the topic.

In the middle, there are respondents that have proof of concepts (POCs) underway. These are companies that have deployed several apps, testing that they are able to achieve the right outcomes and drive value back into the business.

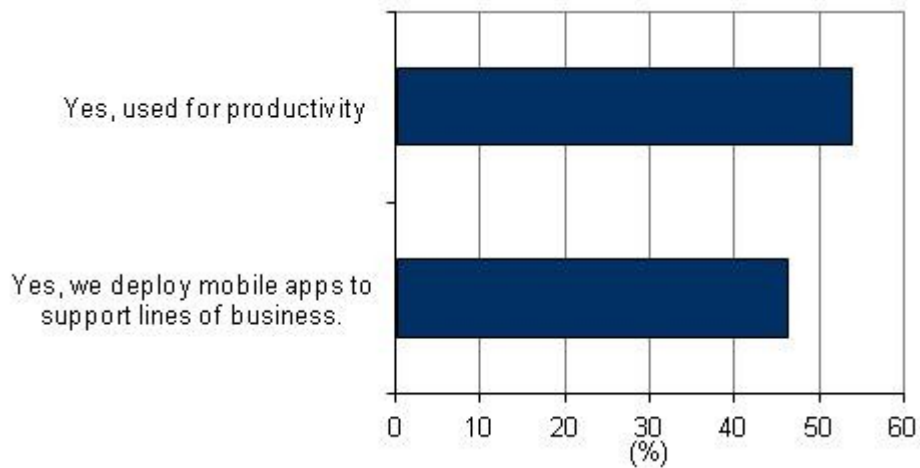
- ☒ Just over 15% have identified that deploying mobile apps is the way to go and considering ways to deploy to scale. This is often met with other considerations around resources whether in-house or through sourcing arrangements (nearshore, offshore) through to finding the software development methodologies, such as Agile.
- ☒ 10% are looking to drive differentiation with mobile apps. This is often met with developing apps that provide feature richness as a form of differentiation. Typically, this group will be developing a mobile channel that complements existing bricks and mortar.



**FIGURE 6**

**Internal Deployment of Mobile Business Applications**

*Q. Is your company deploying mobile business apps internally for employees?*



Source: IDC, 2013

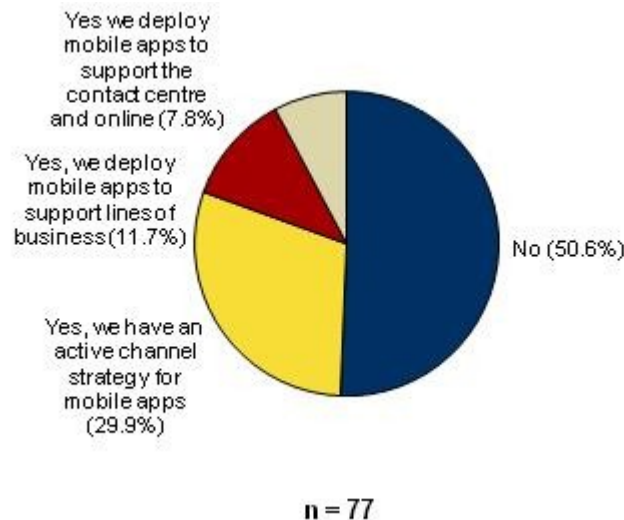
Figure 6 shows how mobile apps are being deployed internally for employees, which are typically split between the more horizontal productivity and vertical LOB apps. Enterprises that are using mobile apps for productivity tend to have their use cases around travel and expense management, messaging, conferencing, and collaboration. Productivity apps tend to promote the reduction of human latency times in the business process.

LOB apps tend to be around sales force automation, field force automation, customer relationship management (CRM), and asset management. Most of the use cases are coming from organisations that have a large field force. They typically come from sectors such as government, healthcare, construction, education, transportation, distribution, and logistics. A lot of these types of apps tend to drive the elimination of paper-based processes by using online forms for better data collection. There are also LOB apps that extend the existing CRM or enterprise resource planning (ERP) environments to mobile devices. This tends to be more prevalent in supporting employees when they are outside the office.

**FIGURE 7**

**External Deployment of Mobile Applications to Users**

Q. *Is your company deploying mobile apps to users externally?*



Source: IDC, 2013

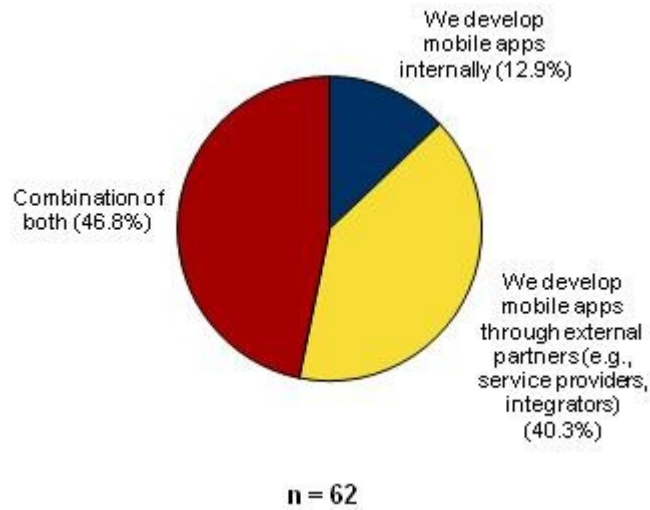
Figure 7 questions the extent in which mobile apps are deployed "outside the firewall." This is to gauge the activity of mobile business-to-consumer (B2C) services in Australia. Whilst half of the respondents are not deploying apps externally, 30% of respondents have an active mobile channel strategy. A number of IT managers and CIOs have also noted that investment in classic Web services is flat or declining with more funding and priority heading to the mobile channel.

- ☒ **Hyper-personalisation.** Using mobile apps as a channel is appealing to business, especially industries in transformation, as they attempt to improve customer service and user centricity. Being able to collect information, such as location, search history through mobile apps, and integrate with other data such as buying history is driving new types of engagements. U.S.-based Walmart offers its shoppers one application when they are in-store, which differs from the apps and content outside the store. This is all in an effort to getting the right messages out to customers at the right time. SAP/Hana is working on commercial offers centred on precision retailing that draws on Big Data analytics to drive micro marketing in near real time.
- ☒ **Replacing interactive voice response (IVR).** Enterprises that have chosen to implement mobile solutions within a contact centre environment find that mobile apps replace IVR systems, promote self-service, and zero contact resolution. Interactive Intelligence, for example, offers advanced features such as ability to schedule a call-back to prevent callers having to wait in queue.

**FIGURE 8**

**Development of Mobile Applications**

Q. *How are you developing mobile apps?*

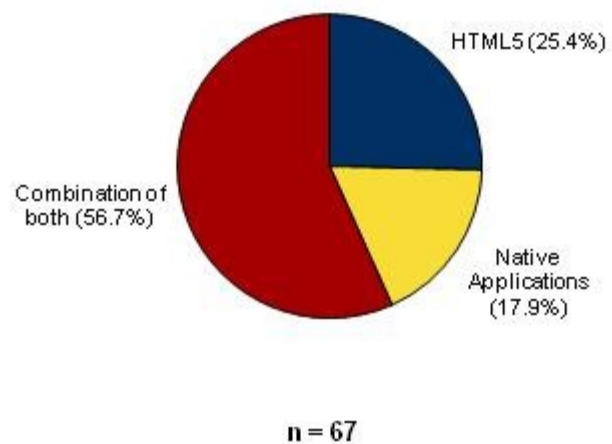


Source: IDC, 2013

**FIGURE 9**

**Platform for Mobile Application Development**

Q. *What platform are you developing your mobile apps on or planning to develop?*



Source: IDC, 2013

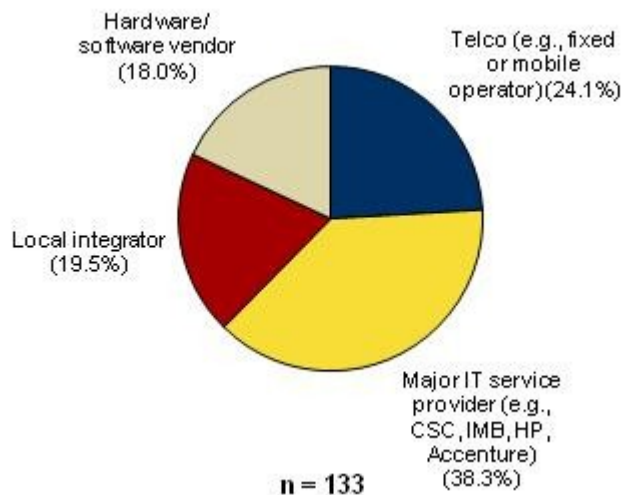
Figures 8 and 9 ask questions around how enterprises are developing mobile apps in terms of resources, as well as probe for the types of platforms that are currently used.

- ☒ It is generally very costly for organisations to try and develop apps purely through in-house capabilities. IDC tends to only see organisations take this approach when they are looking to drive competitive advantage within an industry (e.g., banking, retail). In these situations, incumbent suppliers are asked to step to the sidelines as an internal team invests significant capital and resources into driving innovation. In most other cases, the preferred approach is working through a partner exclusively or a combination of internal or external support.
- ☒ In terms of preferred platforms, over one-quarter of respondents will work with HTML5 and nearly 18% only with native apps. However, the trend in the market appears to be using a combination of both to drive hybrid deployments. Whilst HTML5 is important for delivering speed and scale, advanced features, such as location, camera, augmented reality, analytics, tend to require additional lines of code and client-side development, which means more costs. Most organisations will take a hybrid approach going forward.

**FIGURE 10**

**Managed Mobility Solution Partner**

Q. Which type of partner would you trust to deliver a managed mobility solution?



Source: IDC, 2013

Figure 10 considers the type of vendor enterprises would consider for delivering a managed mobility solution.

- ☒ Major IT service providers (SPs) ranked the highest and it is likely due to the fact that many large organisations in enterprise and government were surveyed. They tend to have an existing commercial relationship with the likes of IBM and HP, and would therefore consider existing suppliers in areas around mobile app deployment, mobile security, and BYOD.
- ☒ Telecom providers are the second largest group and are likely considered second choice as a group, due to the fact that their enterprise mobility strategies are relatively new and not well understood by the market. It is important that carriers shift messages away from voice and data topics and start to position professional services and best-of-breed partner solutions.
- ☒ Local integrators tend to rank high in areas such as responsiveness, flexibility, and support than larger organisations, but often lack the resources and scale to support large deployments.
- ☒ Software vendors have the mindshare for extending their environments to a mobile workforce. LOB does not necessarily want to tender new vendor products, but want a solution they know well to work in a mobile environment. Their first port of call is therefore typically existing suppliers.

## FUTURE OUTLOOK

- ☒ **Mobile device management is a feature, not a product.** Whilst MDM had gained a lot of market momentum in response to the BYOD trend and the need to provide better endpoint security, the market requirements are rapidly evolving to application and information management. Once organisations are able to manage data, applications, and content holistically, the actual endpoint (e.g., tablet, PC, smartphone) is less relevant. We expect enterprises to look at additional solutions such as identity and access management and data loss prevention, in response to the multi-device or OS world that is becoming the norm.
- ☒ **Mobilising apps to employees and customers.** There are many hidden opportunities around mobile app deployments, and businesses will find new ways to improve workflows, increase productivity, and improve customer service through personalisation. Industries that are going through systemic change are likely to adapt mobile apps to drive transformation. Given the number of devices and form factors, there will be major trade-offs in providing the richness of a native app versus the ubiquity of HTML5 to ensure availability.
- ☒ **Mobile architectures.** There are several different mobile architectures to consider as part of a mobile app strategy. This ranges from a thin client (data and apps are 100% virtualised), thick client (data and apps on device and nothing is virtualised), to a rich client (data is virtualised; app sits on device). Whilst basic features, such as data entry, are suitable for thin-client deployments, advanced features (e.g., camera, location, touch, gestures) tend to be more suitable for thick clients. CIOs and IT managers will need to match mobile architectures with their own app requirements. They will also need to consider bigger issues such as data governance (including sovereignty), risk, and compliance.

## ESSENTIAL GUIDANCE

- ☒ **Demystifying BYOD.** Whilst this piece highlighted few trends around MDM, devising and "successfully" implementing a BYOD strategy is proving to be difficult than the other reasons. LOBs, such as human resources and legal departments, have found difficulties in creating a policy around the separation of personal and corporate data that can gain acceptance amongst employees. Despite signing disclaimers, some employees have sued and won against their former employers on this issue. There are other issues in the finance department and well-known examples of user acceptance to technologies such as location tracking. BYOD will need to address many soft issues to be successful.
- ☒ **The power shift outside IT.** LOBs are influencing more IT decisions than they ever have before, and some individual units, such as CMOs, are making their own independent procurement decisions. Whilst mobility is perhaps too big to be owned by the CIO, it is important for IT to play a role in engaging LOBs and building the right underlying framework that can drive desired business outcomes. Making technology decisions in isolation can be dangerous and ended up costing a lot more in the long run. The role of a CIO may evolve to decision maker as well as power broker.
- ☒ **Bet on hybrid mobile app development.** Whilst perhaps nothing can beat a native app in terms of feature richness, few businesses are willing to invest to deliver such an experience to every single type of device. There is a trade-off between HTML5 that can deploy apps to a larger audience at lower cost per user and native apps that offer quality of experience. Businesses will attempt to get the best of both worlds through hybrid deployments.
- ☒ **MEAP solutions will pave way for hybrid deployments.** Given the complexity of deploying mobile apps to the business for reasons mentioned earlier, IDC expects to see MEAP to accelerate. In getting the best of both worlds, businesses will start to turn to providers that can offer a one-to-many platform-based approach to mobile app development — one that provides modularity and repeatability. IDC believes that most businesses will not want to write lines of code to individual devices and will adopt a platform-based approach that promises a "write once, deploy anywhere" model. The emerging MEAP market will consist of traditional providers such as IBM (which acquired Worklight) and SAP (which acquired Syclo and Sybase) to newer entrants such as BlinkMobile, Kony, Antenna Software, PhoneGap, and Appcelerator, notwithstanding Apple and Google.

## LEARN MORE

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### Related Research

- ☒ *BYOD in Australia: Perceptions and Policies on Smartphones, Tablets, and Laptops* (IDC #AU3054103V, February 2013)

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## **Synopsis**

This IDC study is the result of several surveys IDC conducted at its enterprise summits. This included the IDC Mobility Summits held in 2013 in Sydney and Melbourne. IDC ran the survey again at the CIO Summit in Perth and cross-referenced with face-to-face discussions. We asked questions around the current state of bring your own device (BYOD), mobile device management (MDM), and application management through to mobile security. We also collected data on the current vendor preferences for MDM or mobile application management (MAM) and probed more into the types of mobile security solutions being deployed. The second part of the survey then considers the enterprise journey towards mobile apps that include current state, preferences on how to build, as well as views on current platforms (HTML5 versus native apps).

"BYOD, mobile device management, and mobile security are still the top priorities for CIOs in Australia in 2013, outranking every other issue," says Dustin Kehoe, associate research director, IDC Australia. "However, enterprises are also asking what is next. They are considering how best to harness the advantages of mobility has to offer. This includes streamlining business processes and improving productivity. Surprisingly, some 30% of respondents report having an active business-to-consumer mobile channel strategy."

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