

# Mobility, Mobile Apps, and Corporate Apps Deployment

A Roundtable Overview

Americas Chapter Discussion

Roundtable  
*on* Digital Strategies

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**Thought Leadership Roundtable on Digital Strategies**  
*An executive roundtable series of the  
Center for Digital Strategies at the Tuck School of Business*

*The Americas Chapter of the Roundtable on Digital Strategies convened for a day-long discussion on the present and future of mobility and mobile apps in the enterprise. Corporate IT is coming under tremendous pressure as more and more workers expect to conduct their business lives on these devices, with the same intuitive interfaces and ease-of-use as they have in their personal applications. These expectations pose questions for IT departments and their business-unit partners: What are the major technology and policy decisions required to enable this new way of working? Where do ideas for corporate mobility applications come from, and how should they be evaluated and prioritized? What are the right governance and support models for BYOD? For provisioning of corporate applications? And what does all this mean for the future of the IT department and its role within the corporation? Participants in the session, held at the headquarters of Brown-Forman in Louisville, Kentucky, included CIOs and directors of technology from American Express, Brown-Forman, Chevron, the Dachis Group, Eastman Chemical, Eaton Corporation, IBM, Sysco, Time Warner Cable, and YUM! Brands.*

## Key Insights Discussed in this Article:

- **Security is a chief concern to consider when deploying mobile applications and devices.** Neither devices nor apps are enterprise-ready for security and privacy; companies need to explicitly evaluate the balance among innovation, productivity, and security... 2–4, 6, 10, 12–13
- **Governance models for development, deployment, and usage of mobile applications are still a work in progress.** No one’s yet sure of the best approaches to governance, from who gets what devices to how to provision corporate app stores..... 3, 5–6, 9, 10–11, 14
- **Developing and deploying mobile applications is not solely a technical issue.** Cultural and organizational issues pose concerns and challenges as important as software development and integration ..... 2–5, 9, 12, 15
- **Mobile technology is pervading the enterprise, even without clear ROIs.** Companies are evaluating mobile applications based on everything from hard-dollar ROI to strategic imperatives to the value of learning and experience. .... 4, 6–8, 10–11, 12–15
- **Mobile may be a greater game-changer than the internet.** Even more than the impact of the web a decade ago, mobile technology is changing IT, from strategy to organization and talent acquisition to its role in the business. .... 2, 4, 7-8, 10, 15, 16

## **Introduction**

Mobile cellular devices surely rank as one of the most pervasive technological innovations of all time: As of March 2012, the number of cellular subscriptions in the world (6 billion) nearly equal the number of humans on the planet (7 billion). Almost literally, *everybody* has one. More than one billion of these devices are smartphones with active broadband data plans—thereby giving people the ability to consume information and transact business of all kinds while on the move. Meanwhile, over the last two years, the tablet market has taken off, led by Apple’s iPad, which sold 55 million in its first two years—and then 3 million more in the iPad3’s first 30 days.

As more people acquire the devices and embrace the mantra of “one life, one device,” legions of iPhones, Androids, and iPads are joining Blackberries inside the corporate firewalls, with expectations to join the corporate network, to use email and browsers, to conduct transactions and consume real-time information—at any time, from anywhere, with the same speed, ease of use, and intuitive user experience as they enjoy when they update Facebook or kill time with online games in the lunch line. Technology has combined with these expectations to fuel an amazing explosion in the variety and capability of mobile corporate applications—everything from simple productivity tools to mobile implementations of core business systems to specialty applications in safety, time-keeping, weather observation ... the list is lengthy, and is growing with no end in sight.

This proliferation of devices and applications has caused all the same problems for IT departments as every other computing platform change has for decades: How to ensure privacy and security while enabling productivity? How to prioritize applications for development among all the competing priorities? How to develop, deploy, and support these new kinds of applications? And after all of these questions are answered, what’s the end assessment of mobile applications? What do they contribute to business, and how?

John Gallant, Chief Content Officer of IDG Enterprises and the session’s moderator, kicked off the discussion by asking the group about “the big mobility decisions that companies are considering today. What are the things on the minds of executive management and IT management, the things that you’re wrestling with?”

## **First Comes Security...**

Keith Sturgill, VP and CIO of Eastman Chemical Company, answered with a theme that the group would visit throughout the day:

The consumerization of IT can’t be over-emphasized: There is an expectation that it should be just as easy for people to access and use corporate information from a mobile device as it is for them in their personal lives. But as a corporate entity, we value our intellectual property, and we are taking a slower approach than some of our business unit partners might prefer as we try to balance this dynamic between productivity and security.

TJ Graven, VP and CIO of Brown-Forman, echoed the sentiment: “You can make these devices so secure that they’re almost unusable. How do we balance utility vs. usability vs. security? It’s tough to figure out.” Graven’s colleague Jennifer McClinton, Director of Technology Development, expanded on the situation at Brown-Forman:

We’ve struggled with what apps to support as a corporation. People post in our social network, “I’m using Drop Box”—we don’t *want* you using Drop Box! If policy is wide open, how do we protect our corporate data when people are downloading whatever app and putting our corporate data wherever?

“Well, this is the Facebook generation,” pointed out David Held, Director of Global Standards and IT Business Processes for YUM! Brands. “They aren’t going to stop and think that it is corporate information going in Drop Box because they’re going to turn around and spend three hours a day putting everything about their whole life onto Facebook.”

“We’ve sparked the fear in our senior executives and our lawyers and finance folks that there was too much information being shared too quickly with too many people,” Graven agreed. “So we’ve done a new information handling policy, along with training, beyond our traditional code-of-conduct and insider trading-type material: ‘What is corporate information, and how to handle it.’ We addressed social media, we addressed mobility, and all of our internal collaboration.”

Eric Johnson, Tuck Professor and Director of the Center for Digital Studies at Tuck, asked if this was going to be sufficient in the new mobile computing workplace:

There are so many more subtleties—Drop Box is pretty obvious: “Don’t put stuff in Drop Box”—we could at least write that down. But a crazy thing about the iPad and the app world is that many things are not clear to the user anymore. For example, you have a PowerPoint deck and you want to show it to somebody on your iPad, and this cool free app called SlideShark converts PowerPoint into something you can use for that.

But then you look at SlideShark a little bit, and you realize SlideShark’s really a cloud service, and it’s taking your PowerPoint and setting it up in who-knows-where in the cloud. You may not even realize that the deck’s not on your iPad anymore. There’s no clue. How effective can policy be in this realm?

Eastman’s Sturgill characterized the line that IT currently has to walk to reduce the security risks caused by mobile devices and applications:

Somebody has to be the gatekeeper and define the guardrails on the highway so that if you do something really bad, at least you can bounce off a guardrail and not destroy your corporate life. Like it or not, we in IT have to define the rules for the mobility space. We’re trying to lean toward the enabler side, but not relinquish our role as gatekeeper. The company trade secrets are our responsibility—we have to make good business decisions on what risks we are going to take. We try to improve the awareness of our partner organizations about the tradeoffs, like “Why is putting your corporate trade

secrets in Drop Box not a good idea?” Yes, it makes you more productive, but you need to understand the risks.

Frank Boncimino, Senior VP and CIO of Time Warner Cable, agreed with the issues, but described TWC’s very different approach to the same problem:

Security issues are very serious, and so you have to weigh the balance of risk. I asked our Information Risk Governance Committee, “We can all have these devices. People are bringing them anyway. But can we attach them to our network? There’s a risk. It’s going to take six months to a year to get better security on these devices. What do you want to do in the interim?” We said “In the interim, let it happen.” We’re watching carefully, but it’s allowing us to see the technology and to play with the technology and to experiment. It’s allowing everyone to innovate and to think differently about mobility.

### **...Or Is It “Mobility First?”**

Why is a company like Time Warner Cable making this call? Boncimino explained:

Within our overarching strategy we have a theme we call “The Four Anys:” *any* content or service, *anywhere*, *anytime*, on *any* device. Once you have a theme, the whole company rallies around it. Legal gets involved. Marketing gets involved. Agencies get involved. To reflect this theme within IT we’ve started something called ‘Mobility First.’ It’s a rallying point, and once we get IT people all over the country to say ‘Mobility First,’ I’m expecting a whole host of ideas and projects to be presented.

Dion Hinchcliffe, Executive VP of Strategy for the Dachis Group, brought another perspective on why mobile is making such an impact in the enterprise:

What’s remarkable about the smart mobility shift is the ‘pull factor.’ The audience that’s bringing these applications in is often senior executives demanding service delivery. They see how easy mobility makes things. They go to the app store and see a flood of apps that show what’s possible, what the user experience can be, and the fact that they can get it anywhere. So they want IT applications and corporate data on these devices, and they don’t want to wait a year or even a few months.

“What these mobile devices do that our other IT doesn’t,” Hinchcliffe continued, “is that they break down barriers, they collapse the distance between us and our customers, between us and our workers—geographic distance seems to go away. Even the barrier between us and our IT systems seems to be broken down because you’re always connected if you want to be.”

Sturgill agreed, but asked whether breaking down so many barriers was always such a good thing: “We are so connected and we have access to information 7x24x365. There is a growing question, ‘At what point does the fact that people are connected all the time hinder our productivity as a corporation, because people never turn it off?’ Maybe we should be working at more of the cultural aspects of this, not just the technical aspects.”

Hans Brechbühl, Executive Director of the Center for Digital Strategies, extended Sturgill's point about the potential loss of corporate productivity to the potential cost to the individual:

It's one thing to decide to make the devices available or not available. It's a different thing to get some agreement in the company as to what the culture is. The problem is often one of somebody expecting an immediate response as a result of all this being out there. The individual has to make the decision what he's willing to sacrifice or not in his personal life. The problem comes when there is no agreement in the organization, and people have varied expectations as to what "always on" brings.

Don Harrison, Senior Director of Mobile Technologies for Sysco, suggested that the responsibility has to lie with the employee:

Yes, it requires discipline to decide when to put the device down, but having information available when they want it is important. I went on vacation, and it was great because I was out of coverage for most of the time, but in the middle I had reception. So I was able to look at my e-mail, make sure everything was fine, and then go back off the grid and relax, rather than being out of pocket for eight days without knowing anything. So we have to make it available as much as possible and let people decide when they want deal with it. As long as we aren't saying, "You must," or, "You have to," then they should use their own discretion.

Harrison tied together the two pieces of the discussion:

We really do want to be an enabler, not an inhibitor. There may be some things that we stop people from using, but we aren't trying to be the control cops to disallow things that people want to do. But you do have to have some balance. The way that you communicate is important, because you're already viewed through negative eyes with regard to wanting to control everything, wanting to lock down everything.

### **"Mommy, Where Do Apps Come From?"**

The group moved to the question of *how* IT can be an enabler in the new mobile world. As Matthew Robinson, CTO emeritus of American Express, posed the question,

Do you let things just evolve? If you're going to be a true innovator in the tech marketplace, do you just let everybody go and build their apps and the best one wins? Or, do you try and control it all centrally and say, "Bring us your ideas, but we in IT are going to choose." That's the debate IT is really struggling with.

IBM has taken a crowd-sourced approach, according to its Internet Strategist Christopher Perrien:

There are a lot of smart people in IBM, but the challenge we really have is our size: People in hardware may have good ideas about software, but there's no structured way for a hardware person to give input to the software side of the house.

So we created the Technology Adoption Program, which people can opt into. Someone might submit the use case, “I don’t want to download the whole expense program, or log in three times a night in the hotel. Could I just batch it up while I’m sitting in a cab?” and it becomes a very low-priority IT project. It’s collaborative and boot-strapped, and it doesn’t take a lot of money to push 10 ideas forward.

The CIO of Chevron’s Global Upstream business, Bill Braun, described something similar:

Our plan is to make the development tool kit widely available and say, “Do what you want,” to anybody, well beyond the boundaries of IT. Our control point’s going to be the app store. So when you want to deploy it at scale, that’s when we would look at it for security risk, compatibility, etc., just to make sure that it’s okay.

“Will you enforce it through policy?” Tuck’s Johnson asked.

“There’s nothing to enforce,” Braun replied. “They don’t have the ability to get things into the app store, except to come to us, so that’s the enforcement part. We don’t want IT to be the only way we do things. We will do our own internal apps, but we know that there’s going to be more than we can do, so we’re anticipating needing to allow more activity to happen.”

Hinchcliffe added insights from Dachis’ consulting practice:

There’s another governance issue, because if you don’t have consistent usability standards, and every app operates differently, you have productivity and efficiency issues. The lesson seems to be that you want decentralized local action enabling mobile IT delivery—development and delivery—but providing very clear usability standards saying, “This is how our apps are going to look and work, and here are very clear guidelines about what they need to do. Now go off and do something great.”

These comments raise an interesting question: What is “something great” in this new world? What, in fact, *is* a mobile application?

Brechbühl from CDS observed, “When I first started thinking about apps, it was the *mobile* part that I thought was neat. Over time, I’ve come to the conclusion that it’s actually the ability to do single discrete tasks well, quickly, and efficiently that’s unique. I think that ability will spill back into our other desktop environment and laptop environments.”

Tom Hageman, VP of Solutions Development and Support at Time Warner Cable, suggested there are actually three different kinds of mobile applications, and that IT should be involved in only one of them:

If we’re calling brochure-ware an app, then Marketing’s going to build them, throw them out there incredibly fast and everyone’s going to love it. The pace is going to be tremendous.

If a guy in Accounting wants a better calculator and he can build it on the iPad, IT's not going to stand in the way and say, "Hey, stop doing that." So these single-function apps not tied to important data or a lot of integration points are not going to happen in IT. I *pray* no one comes to me and says, "Build me a calculator."

The definition of an app means it's integrated back to data somewhere else. Take invoice approval. Give it to them where it's always on. You're riding on the train. You open it up, pop in, knock the approvals out. Now you hit work. What are you going to do with that time that you've just saved yourself? Allow people to do the mundane work when they want to do it, so that they're more creative and can do the essence of their job when they're *at* the job.

Hinchcliffe picked up on Hageman's 'strict' definition of an app and the challenge of back-end integration:

We consistently see two types of apps in enterprises. One is "CRM-lite," which allows the sales team and the sales manager and some executives to see what's happening in the CRM pipeline. Usually, they come out of the sales call in the field and want to get the record updated. That's the use case we see over and over again.

The other one is business intelligence dashboards. That's for the executive suite: They want to see what's happening in their organization. They want it in their pocket all the time. We've designed a number of these, and they are surprisingly challenging because access to the data always becomes Issue No. 1.

### **So What Apps Are Being Developed?**

Participants outlined various apps that their companies had developed, starting with the more consumer or end-customer-facing apps.

*ChefRef*, from Sysco's Don Harrison:

*ChefRef* is a recipe app, but it has a lot of other functionality. It was built with the customer and the consumer in mind, so for example, one feature finds restaurants within a certain range of the user. A red pen for non-Sysco customers shows the name of the restaurant, the address, and that's it. For Sysco customers, a green pen shows name, address, phone number, and a lot more information.

We look at this app as helping to drive business to our customers, so then ultimately our customers do more business with us. It's created a lot of buzz. It's another channel to get information out there. It's a neat little tool, which boils down to enhancing our brand and creating that 'cool' factor.

*TWCable TV*, from Time Warner's Boncimino:

We developed an app where from pretty much any device, you can look at your channel lineup, click on the channel you want to watch, and stream content to the device. We added DVR control so that you can program and manage your DVR, and watch what's on your DVR from all these different devices. Over a million customers have downloaded and proliferated the TV app. We're trying to get things that will make people smile. We're just trying to delight our customers, to make things simpler for them, to do very creative things for them.

*Nutritional info and mobile transactions*, from YUM!'s David Held:

We're very early on. At Taco Bell you can look up nutrition; a Pizza Hut app helps you find a store, order pizzas, and pay. But this is a device that *everybody's* got in their hands, and they want to communicate with our brands that they love. We can capture information about them. We can send messages to them, e-mail, text. We can coupon drop. We can segment the market. In the past, we've never had the ability to do that.

*Jack Daniels Bar Call*, from Brown-Forman's Jennifer McClinton:

You're at the bar, there's usually a line, and you're in back and sandwiched in-between people. You call up the app, you pick a number of drinks and what drink you want. So you want two Jack on the Rocks, and then you hold it up at the bartender. It's just a fun app to give your drink order to the bartender. Another one is *el Jimador Party Planner*. There's a Chambord information app, for any recipe you want to make with Chambord.

One class of commercial apps help sales people, distributors, or B2B customers themselves better understand and place orders for products. Eaton's *PowerSource* is an iPad-based catalog for Eaton's sales force, distribution partners, and customers that contains information about and cross-reference capabilities for more than 200,000 hydraulic products and has amazing capabilities. Updated weekly, it is available both online and offline. Several participants also described current or planned tablet-based inventory system apps.

A third class of apps support internal operations. Safety is a key enterprise application of mobile technology. Hinchcliffe from Dachis described a safety application based on mashing up private and public location-based data: "A major oil company needs to know if it's safe to send people out to ocean rigs, so they can give workers a thumbs-up or thumbs-down: 'Do I get on the ferry? Is it safe?' It's a life-critical situation. The decision requires dynamic information from ferry schedules to weather reports to the locations of the rigs." Tuck's Brechbühl, echoed a similar use of mobile for safety at Schindler, the elevator and escalator manufacturer, that alerts them if an installer or repairman stops moving.

Business intelligence dashboards constitute another common category of corporate apps. Brechbühl described one developed by Bechtel, the engineering and construction firm for its execs:

You can bring up a map on the iPad, and the pins on the map each represent a Bechtel project somewhere in the world. You can select a pin, pull up the project, and get all the vital statistics about that project: How close to completion, budget, project health, etc. It lets them monitor all of Bechtel's projects worldwide from anywhere.

### **Follow Which Leader?**

Dion Hinchcliffe from Dachis offered an estimate of the scale of the impact of mobile apps on IT:

Every company winds up with two- or three- or four-hundred internal apps in the next few years, and probably several *thousand* external apps. That's 10 to 100 times more IT than we're currently managing and governing and securing.

Tuck's Johnson built on the implications of Hinchcliffe's numbers:

Something like 500,000 jobs are now somehow related to the app economy. Dion was saying that in two years each company will have 100 internal and 1,000 external apps. If you take that across the Fortune 500, that's 500,000 apps pretty quickly. That's *a lot* of apps. That's a lot of economic activity which will create jobs and interesting kinds of opportunities for many people.

Robinson asked if this orders-of-magnitude change in volume "is changing the way we source IT, because it's a big opportunity to use much more outside help, rather than taking it through the IT business process. Is anyone doing that, or are you just slugging away with your own IT department?"

TWC's Boncimino pointed out another source of difficulty faced by internal IT organizations:

When you think about intranet versus mobile apps and the format, accessing the web services, the web applications—it could be a total different UI, that is totally intuitive to our employee, and that's a whole different skill set for IT.

So you have to really take a step back and say, "What is the mobile strategy and what are you trying to achieve?" Intuitiveness is a very important component, and the UI may not be the same on your mobile devices. It could be a whole different experience.

Brechbuhl agreed based on CDS' research:

Because of consumerization, people are getting used to a certain quality and a certain type of UI, and a substandard UI or a substandard experience is no longer tolerated in a corporate environment just because it's not a consumer app.

"We don't want to be in the apps business," responded McClinton from Brown-Forman. "We know we don't have the time. We definitely outsource all of our app development, and by going externally, we can leverage their experience with other companies and all the other apps that

they've built and everybody in their group develops—whereas if we hire two or three people, then they're locked into their experience of our company.”

David Held from YUM! Brands described the problem with outsourcing at this point:

Mobile's coming on five times faster than the Internet. No question, there is a steep learning curve in developing mobile apps, and a parochial IT organization that doesn't already have wide experience in developing them is going to be expensive and time-consuming. But, the part that seems difficult to outsource is the connection to back-office systems. A lot of the apps are their own islands and have a hard time accessing live corporate data. We have to open up those systems, and that's something you really can't effectively outsource even now. We've got to be able to reach into the back of our organizations and get to that data so that we can take advantage of mobility.

Robinson commented on how difficult it will be for traditional IT to meet this challenge:

You can't generalize within industry or within a company because the IP that's exposed is very different, depending on the role of the individual. You need to stratify who has access to which data, which is a new demand upon IT to be much more smart about data classification, information security, and who gets access to what in corporate systems.

This mobile platform is a catalyst for so many things. The capabilities of the apps also capture moving from structured data to unstructured data. You've got to embrace unstructured big data. If you've got commercial field salespeople in front of big corporate clients, then the ability to mash up a bit of Hoover data and a bit of Dun & Bradstreet and a bit of your own data on the spot and create new insight for a customer is huge, but it's something that's very hard in the old code world.

Integration of new applications on new platforms is hardly an unfamiliar challenge to IT organizations. Eastman's Fraley highlighted what is provided by this 'second chance' after the proliferation of web apps a decade ago:

There's an opportunity to not repeat some of the sins of the past in terms of putting a tool in someone's hand with no understanding of the information. The tool is very easy to use, but the result can be very unpredictable. As these tools become more corporate, IT has a bigger role to play in terms of making sure we have good understanding of what the data means within the corporation in our back offices.

Another vector of mobile applications development is speed, or time-to-market. As Eaton's Kershaw said, what's needed is an “an IT organization that gets moving, and starts delivering quickly, at the pace of your business.” Brechbuhl described the change in mindset that's necessary: “To do it right, you should probably learn to fail fast, and that's something IT has not been willing to do, for many reasons.”

YUM!'s David Held agreed, but urged caution in certain situations:

You really have to think about the business problem you're trying to solve. On some you can fail fast, and some are going to be business-critical, and you have to stratify what you're trying to solve and apply the best process against it. Failing fast is fine on simple internal applications, but it's not okay when we're suddenly stuck in the middle of a consumer transaction 10 billion times a year, which is the number of transactions we do. It's not okay to fail fast.

“Or fail often,” Boncimino pointed out with a laugh.

Gallant asked if any of these issues suggested dividing IT groups between traditional processes addressing legacy applications and new processes addressing mobile applications.

Robinson was skeptical:

You've got to differentiate between corporate apps like HR and finance and approvals, and apps that support the business—a function or a business process. The corporate apps already have an IT team stacked against them, thinking about whether the vendor's going to come out with an app, or whether I need to or could build an app. But on the business process side, the shift is just going to be an extension of those apps to mobile to help that business presence be more effective. I've not seen success where you make a separate group: In the early days of web, you had a separate web team and the old app team. In the end they had to come together, because the web team didn't know anything about the applications.

Sysco's Harrison emphasized the complexity of the challenge: “You actually have several decisions to make. Whether you're going to do native apps, or you're going to take a mobile web approach, or a hybrid model. All of it leads into ‘How do I need to staff it?’ If you go out and try to hire a bunch of guys to write apps, that gets really expensive really quickly.”

Gallant asked to what extent companies could rely on their traditional IT vendors for supporting development and implementation of mobile applications—“How well are your strategic vendor partners supporting your mobile and BYOD strategies?”

“Terribly,” responded Eaton's Kershaw, speaking of traditional hardware and systems vendors.

Terribly. They're simply not supporting mobile strategies. Apple has a strategy, they have a plan, they have a product, and it's a good one, and we've applied it to create value. The others come in with PowerPoint slides and lots of talk, but there's no product, they're not really learning how to do mobile solutions. They're even behind *us*, and we're not anything great. It's disappointing—the relationship has always been based on their being ahead. Now, they're not.

“So a company that historically had no intention of serving the enterprise is becoming a very strategic part of IT?” Gallant asked.

“It will be interesting to see if Apple succeeds at taking the company into the enterprise,” Kershaw continued. “The consumers love Apple, the kids love Apple. But this hasn’t been a company-level relationship for us so far. You call up IBM, they’ve got it nailed, company-to-company. They’ve been doing this a long time. Apple, not so much.”

Sysco’s Harrison gave the major enterprise software vendors a middle grade: “They’re making a big bet, and it looks like they are headed in the right direction. We aren’t far enough along in using any of these things where I could say, ‘Yes they have it right,’ or ‘No, they have it wrong.’” Sturgill from Eastman elaborated: “The enterprise ISV value proposition has been around integrating a highly customizable business services platform, and in mobile they’ve delivered on that. What they have always struggled with is the ability to deliver highly intuitive user interfaces, and I’ve yet to see if they’ll be able to accomplish that.”

TWC’s Boncimino looked at the question with a whole different lens:

To throw some controversy in here, I would give them all “A’s”. There are security issues across all these different platforms. We made a business decision to give out the devices because we think the risk is low right now. The risk would be really high if the vendors were actually ahead of the security, and if I had a ton of applications I could put out there. That wouldn’t make any business sense at all. So I think they’re going at the right pace. They’re pacing their R&D with the pace of innovation to support this platform for the back office. You can’t be faster than the ecosystem.

### **Pick a Smartphone, Any Smartphone**

The conversation moved to the mobile devices themselves—for which platforms are all these applications being developed? Apple’s iOS was the overwhelming top choice among the specific applications mentioned during the day by the Roundtable. Chevron’s Bill Braun identified one of them: “We’re an Apple shop. We ruled out Android and Windows devices fully for security reasons, until they can meet some different requirements.”

Brechtbühl added information from a research project at Tuck:

If you’re going the native apps direction, you have a lot less to plan for if you go iOS because you don’t have different versions like you do with Android. What also became clear is that Android is the much bigger security problem. The best quote we had in the whole set of interviews was from the global head of mobile technology for a G500 company: “I struggle to build anything on Android. It is a cesspool where anybody with \$99 can distribute malware.”

Internally, TWC allows any device, including Androids, but “As soon as you allow Android, your support level has to change. It’s just too costly because of the different versioning,” said Hageman. Externally with its mobile TV application, “a company needs to go where its customers are. If your customers are on Android, you have to figure out how to get to Android,” added Boncimino. Also on the consumer side, Sysco initially released its *ChefRef* application on iOS, “But the biggest question we get is, ‘When is this going to be available for Android?’ We’re

working on it,” Harrison explained. “We’re not really worried about the other devices, simply because if you look at the market share for iOS and Android, you’re pretty much going to hit everybody.” For internal apps, however, Harrison agreed with the rest of the group: “It boils down to iOS devices because you have one or two form factors, versus all of the different variations that you have with the Android platform. Plus, 96 percent of tablets are iPads.”

Brechbühl summarized the exchange: “Although it’s the Android market share that has increased so rapidly in the last few years, by far more projects have been initiated on iOS in terms of mobile apps. So even though you have the one growing much more rapidly, all the development is happening on iOS. We had exactly one company among those that we interviewed that also developed on Android. It would seem that this room is pretty reflective.”

Once devices are in and applications are developed, the next challenge is how to make them available in a fashion that fits the desired degree of control. Hinchcliffe laid out the problem:

What organizations want to do is turn off the public app store, put up their own app store, and then be a conduit for all the public apps that they “approve”—a white label, black label model. The problem is, IT departments can’t possibly keep up with the flow of apps. The whole point of the app store is that there’s hundreds of thousands of these things, and what you want to do is have people self-serve and find the solution they need to their problems. It eliminates a huge amount of backlog and work from IT.

But someone’s got to review these things, and the enterprise app store vendors are getting pressured to have policy-based controls. For example: the ability to turn off “everything that stores data in the cloud. Enabled applications are only to store data on the local device.” Companies want to be able to do that so they don’t have to check every app, since pretty soon there are going to be over a million apps in the iOS apps store. No question that app stores are going to be the distribution model and the control point for IT, but can we find the right model?

“Is there going to be one app store with all the apps, both public and internal corporate, or will there be two app stores, the consumer one that everyone has access to, and then the corporate one?” asked Held. “In the BYOD example, it is going to be the latter.”

“You don’t want to force a situation where employees have to carry two devices,” commented Boncimino. “That situation would be dead on arrival. Employees should have one device, with personal things on it and company things. You can’t buck the trend.”

“It seems like what would emerge,” Brechbühl continued, “is that the company will insist, and rightly so, on being able to control, wipe, and manage the apps that are theirs.”

## **Challenges, Challenges**

How to provision app stores is only one of the troublesome issues created by the BYOD trend:

“We don’t allow it.” – “We’ve accepted it.” – “I wouldn’t say we’re comfortable with it.”—“We’re accepting the inevitable.” – “There was more angst six months ago.” – “It’s not ‘Bring your own device,’ it’s ‘Bring your own iPhone.’” – “No, it *is* bring your own device. We’ll *support* an iPhone.” – “It’s *your* device, not ours. *You* support it.”

These were some of the immediate, conflicting, and overlapping responses from the participants when moderator Gallant asked about corporate policies on BYOD. The group briefly discussed some of the many issues that make BYOD such a complicated topic:

Boncimino from TWC highlighted a technical issue: “We allow bring-your-own, and it could be anything. That broke our automated process for password reset, for almost 100 percent of our mobile devices and iPads. So you had to go in and do something manually for all your devices.”

Harrison from Sysco described how “when we distributed the iPads to all the officers, we had to manually set up the connection to Exchange, set up the wireless—everything, from soup to nuts. As more and more of these devices come in, the time and effort is going to be overwhelming.”

Jeff Fraley, Director of Administrative Systems and Applications Services for Eastman Chemical, brought up the issue of user authentication, and how “to have confidence that it’s truly who it’s supposed to be when someone tries to access a Sharepoint site or an application.”

Chevron’s Braun raised legal concerns: “In the BYOD world, how liable are we for software license compliance? MDM systems will see the full set of applications. We may not want to see them, because of privacy. Also, we require the right to wipe the device if it’s connected, and that doesn’t seem to be something we’re going to be able to hold up worldwide. The international implications of these rules are just horrific, and are likely going to slow us down the most.”

## **The ROI of Mobility**

Moving from “How” to “What and Why,” Moderator Gallant asked, “Is there a sense of trying to prove an ROI for an app right now?” Sysco’s Harrison replied:

That’s an interesting question. One app is not going to really bring you enough ROI to justify things. It’s more about the collection of the apps that you put together. So we’re marching down the path to bring as much value as possible, even though I cannot prove to you what the ROI on ChefRef is going to be. But the fact that 10,000 people have downloaded it, and we are going to continuously add content and track the usage—that’s going to tell us a lot about whether it’s doing what we want it to do or not. But being able to track ROI on a lot of these things is next to impossible.

Hinchcliffe from Dachis agreed: “Many large companies want to experiment to build competency and capability, and they don’t necessarily need to knock it out of the park with the early apps—they’re trying to learn. It’s an opportunity to get funding and a mandate to do real business transformation. It’s probably the last big opportunity to rethink our processes and support businesses much better than we have in the past.”

Eaton’s Kershaw expressed the opposite viewpoint:

Why would I do something if I can’t figure out whether it adds value or not? I feel very strongly that fire me, get rid of me, get somebody else in the job if I can’t bring investment to the function that’s justifiable to the bottom line, the P&L, and the balance sheet. Our projects compete for the same capital dollars and expense dollars as a new plant piece of equipment. If I can’t out-return the other investment, then you *should* invest in that, and my thing’s going back on the shelf.

Kershaw continued with an illustration why Eaton’s PowerSource *did* make the cut:

The VP/GM of a \$1 billion business unit said, ‘Justin, make my cross-reference available 24x7 live, in any place anywhere in the world.’

Imagine a pump that goes in a John Deere tractor, or a Boeing 737. It has all kinds of configurations. “I need a displacement of X and a flow-through of Y.” We search them in the app and boom! “This is the pump you need,” from thousands of different types of pumps. “And we’ve made it before. We make it at this plant, and the lead time is this. Here’s the engineering drawing. Here’s the data that goes with it in an e-mail.” Now the customer embeds it into his system. He sees it. “I can use that.” This cycle time used to take weeks, and we’ve shrunk it down to a couple of hours. We had an engineer in a design session do a product cross-reference right there, and he made a \$470,000 initial sales deal. It would have never happened without the app.

Perrien from IBM described a scenario where the ROI is less quantifiable, but very real nonetheless:

One of our financial customers outfitted all their financial advisors with iPads, which they thought would be really effective because typically a financial analyst’s concluding remark is, “Here are your 10,000 pieces of paper.” They produced less paper for sure, but they found out something else, too: A PC introduces a third thing to the conversation, and so now we’re both talking to the PC. But with the form factor of the tablet—now I’m shoulder-to-shoulder talking with you, and the close rate went higher because of this intimacy.

And some use cases such as safety just have different criteria. “Mobile capability, more than a computer or even a checklist, can be brought in and people will understand right away, ‘Wow, we can all see the issues. They’re more transparent,’ Kershaw said. “The more transparent, the more learning there is. The more learning you have, the fewer incidents you have. It’s a strategic imperative—which means it can leapfrog over financial-level justifications.”

## **Back to the Future**

After discussion on these and many other mobility topics, IDG's Gallant asked about the future: "Is mobility an opportunity to not make mistakes we have made in the past in how we approach technology? When the Internet came out, we made big mistakes by just dumping everything on the Web. As you look at mobility, what are lessons we learned in the past that IT can now do differently?"

TWC's Hageman identified IT's new and different role in the mobility revolution:

Unlike other things that have happened *to* IT, this is different because we're actually *in* it with everybody else: We're using it. We're downloading apps. There's not the natural tension that's always been between IT and the business because the business wants more—this time, we want more, too. We're consumers of our own stuff now.

Sturgill agreed: "We will see IT and the business functions grow closer together. The boundaries will become blurred between IT and our business, and that's a very good thing. The skill sets in demand will be those that can take a set of very powerful tools and use them in deep business context. It's *not* a technical issue—it's solving business problems with technology."

Graven from Brown-Forman continued on the theme of new skill sets within IT:

In many other ways we are just reacting, in part due to our people and our skills. We've got great ERP experts. We know business process. We can code all sorts of things. We see that collaboration in our business could change things, and using information faster will make us smarter, and knowing our consumers better can achieve good things, but we don't have the great educators and evangelists that you need in this space. That is the struggle for IT right now, and so we're trying to include those people in the next generation of digital natives walking our halls.

Chevron's Braun had the final word on how IT's role will change yet again:

Mobility is commoditizing the front end and back end of the IT function. We're hiring geologists and petroleum engineers into IT for the same reason as Brown-Forman: so that we can move more into where the workflow is, and less into classic IT work. You absolutely move closer to the business as the workforce shifts. There was a rift between business and IT over the last few years, and mobility is helping because it's such a disrupter. The businesses are now coming back to IT saying, 'Help us. We know this is a big change. There's a lot of opportunity here. We don't know how to do it. Come back and help us figure it out.'

**Participant List**  
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