

MINI CASE

Consumerization of Technology at IFG³

"There's good news and bad news," Josh Novak reported to the assembled IT management team at their monthly status meeting. "The good news is that our social media traffic is up 3000% in the past two years. Our new interactive website, Facebook presence, and our U-Tube and couponing promotions have been highly successful in driving awareness of our 'Nature's Glow' brand and are very popular with our target demographic—the under-30s. Unfortunately, the bad news is that our competitors at GPL are eating our lunch with the new mobile apps they've developed."

Everyone frowned at the mention of Grocers' Products Limited, their fiercest competitor, which had the largest chain of integrated food and retail stores in the country and whose Premier Choice products were showcased on their shelves, making it increasingly harder for IFG to get prime space for their top brands.

"Our web and social media presence has helped us to begin to develop a relationship with our customers," Josh continued, "but our Marketing folks are very worried that we're going to be falling behind, isn't that so Tonya?"

Tonya James, manager of IT Marketing, nodded her head. As the IT person working directly with marketing, it had been under her watch that IFG had transformed its dowdy online presence into something that was hip and trendy. Together, she and Josh, now manager of IT Innovation, had begun experimenting with new media, creating an innovation process that took a large number of new technologies and ideas for products and services and created a protected "sand box" that enabled trial implementations for employees only. Feedback and experience at this level then helped Josh and his business colleagues select the best ones for development in full "heavy-duty" production mode for the public, complete with privacy and security protection and following all architectural standards. Only then would the chief technology officer, Rick Visser, who was charged with protecting company data and systems, allow new technologies to be fully integrated into IFG's internal technical environment.

Mark Szabo, the newly appointed head of IFG's Business Intelligence (BI) team reported next. "As you all know, our executives are all screaming for more and more information to help them but it's not going to be easy. What we have here at IFG is a data mess and it's only going to get worse from what I can see." The picture wasn't pretty he warned. IFG had thousands of traditional systems all of which produced data and reports. The problem was that each used somewhat different definitions of important company concepts, like "in stock."

³ Smith, H. A., and J. D. McKeen. "Consumerization of Technology at IFG." #1-L11-1-002, Queen's School of Business, December 2009. Reproduced by permission of Queen's University, School of Business, Kingston, Ontario.

"If our goal is to improve the stocks of our products on the shelves, we'll have to go back to rewrite many of these systems. Some of them believe that a product is 'in stock' when it's on the shelves; others when it's in our back room waiting to be put on the shelves; still others when we have received the order from the supplier or when it's arrived at our regional distribution centers." He went on to describe similar problems with varying understandings of such core company data as "customer," "supplier," "employee," and others. "It's hard to tell our executives how 'sales' are going when we don't have a single definition of what 'sales' are!" he said with frustration. "Right now, I've got two people working full time on spreadsheets trying to reconcile data to answer the questions we continually get from the 37th floor," he concluded referring to the executive suite. "We can't tell them we don't have the information but we need a better way to get it, that's for sure."

The meeting droned on with the CIO, John Ahern, calling on all his managers one at a time. As far as most of them were concerned, it was "business as usual" in IT. Josh didn't say anything else in the meeting but he cornered Mark as it broke up. "Have you got time for a coffee? I think we need to talk."

"Sure, what's up?," Mark asked as they headed toward the company cafeteria.

"I liked what you had to say in the meeting about BI," said Josh. "You seem to be one of the few managers here who understands that what we do in IT is going to have to change dramatically over the next few years. And that a lot of our work is going to focus on information—getting it; analyzing it; and delivering it in packages that people can use for their work. I believe that there's a data tsunami rapidly heading our way and we haven't got a clue how to deal with it."

Mark grimaced as he filled his cup with what the cafeteria called "coffee." "I know, I know," he agreed. "I've only been in BI a couple of months but all those articles and books out there about competing on analytics and analyzing unstructured data, like emails and tweets and blogs, are making my head spin. If we can't agree on what a 'customer' is, how are we *ever* going to manage the rest?"

Josh made a sympathetic face. "You've got that right, but I'm afraid it's even worse than you think." Over the next thirty minutes he described what he was seeing out in the field as he looked for innovative new technologies and applications that could help IFG.

"You think we have problems with our existing systems, but there are guys out there in our business units buying full-scale applications from the cloud with company credit cards!" He went on to tell Mark about the pressure he was getting from the sales guys to buy everyone iPads so they could write up orders on the road. "We've already been forced by our C-team to buy them and the board iPads and so far, we've kept them locked down tightly, but that's going to change very soon."

Users were also creating local "data marts," which included copies of core company data as well as external data feeds, and then building complex spreadsheets with information derived from these.

"Our business units don't use the centralized company reports anymore," he stated. "They create their own. We've got the 'wild west' out there!"

Mark looked shocked. "What about our company data warehouse? Isn't that what they're supposed to use?" He had spent a few years building the warehouse a while back and the team had put a lot of thought into making it the best they could.

Josh was aware of this but ploughed on. He and Mark needed to be on the same page about this if these issues were ever going to be resolved. "The world has changed,"

he said gently. "Our business guys are online all the time now; software vendors are targeting them directly and because of the low costs involved they can afford to make an end run around IT; there are literally thousands of free data sets out there; and computing power and storage cost aren't an issue any more with the cloud. Our data warehouse is seen as a dinosaur. It's inflexible because we insist on reviewing all the data that goes in there for quality and provenance and it takes forever (i.e., 30 seconds) to get a response."

Mark looked down at the table and sighed. "So what you're saying is that all my work in BI is too little, too late?"

Josh thought for a moment before replying. "That's not exactly what I've been saying, Mark. What I meant to point out is that we in IT are caught in the middle between two opposing trends. The first is the trend to analytics and business intelligence that you're working on. That's important. The execs want to get at more information to run the company and it has to be based on good, trustworthy data. There are whole businesses out there that are winning because they've found a way to do this.

But the *other*, opposite trend is what I'm seeing. And it's important too. Everyone working in our business is also a consumer of technology and when the devices and applications they can use in their personal lives are more powerful and flexible than those in their business lives, they naturally want to work around the clunky technology we provide them with and use their own. And, since we're now trying to build relationships with our customers, we are going to have to start thinking and working like they do."

"In some ways, this is just like the 'old days' in IT," Mark smiled. "I'm a lot older than you and I remember when those new-fangled PCs came in and everyone in IT was worrying about how we were going to handle people working on their own computers at home. And then when the web first hit business, we had people running around saying 'the sky is falling' and developing their own personal and localized websites. We don't handle new stuff well around here, do we?"

Josh grinned. He was notoriously frustrated with the IT "powers that be" that always wanted to lock everything down and wrap it in layers of privacy and security before allowing it out there. "Well, let's just say that we've got some way to go before I believe we can be as innovative as I'd like us to be. We've got to be aware of these trends and how they're going to hit us. Or our business model could change and we'll be out in the cold. Where are all the book stores, video stores and music stores these days? What happened to those companies?"

"You're right of course," said Mark "but we have to get more people involved in figuring out what we need to do here. This is a HUGE issue and we can't 'boil the ocean'! Somehow we need to get our arms around the most important things to do so we can make some sort of progress. Otherwise, we're spinning our wheels and the situation's just going to grow more and more out of control."

"I'll tell you what," said Josh. "Let me speak with Tonya. She's terrific at stick-handling these situations. I'll get back to you with a plan." And with that, they began to talk about the upcoming company softball game as they cleared the table and headed back to their respective cubicles.

Josh laid the situation out for Tonya at the first opportunity he could find in her busy schedule. "So you see," he concluded. "We need the discipline and rigor of BI and all of the good things we in IT can do for our executives and employees if we get them better and more trustworthy information. But we also need to keep moving ahead in the mobile and social space for consumers without putting handcuffs on us. And we need to

recognize that the business is likely already doing their own thing on the cloud without IT and using their own personal devices, because it's so cheap and easy to do and we don't help them! If we don't somehow figure out how all this stuff fits together—especially the data—we'll never be able to use what we know either operationally or strategically."

"You've done a good job articulating the challenges we're facing," Tonya said. "I know that the Marketing people are putting lots of pressure on me to help them with better information and tools. In my experience, when business is in turmoil they want everything right away and they'll do whatever it takes to get it *now*. What would you say our biggest need is right now?"

Josh fiddled with his pen for a moment. He had hoped Tonya would tell *him*. "Well..." he said slowly. "We need to be seen to be doing *more* in this space. It's okay to work on the big systems and core data. In fact, that's our main job. But we also need to help the business help itself. With my tiny innovation team, I can't possibly deal with all of the ideas and technologies that are out there. And the business guys are seeing many more opportunities than I can deal with. It's really hard to tell what's going to work and what isn't until they play with things. I can provide some of this in my 'innovation sandbox' but I don't think that's going to be enough. And..." he said as another idea popped into his head, "we don't have the right people to do some of this work. We need information analysts, mobile developers, visualization specialists and lots of business people to work with us and teach us about the business. I don't have all the answers here but we can't stick our heads in the sand and let the world change around us. Are we going to be reactionary or visionary?"

Tonya smiled. "There's never a dull moment around here is there? You've got an important point of view here but I think Rick Visser does too. Just in IT alone, we've got a number of groups that need to have some input on this, in addition to my area. We have to get ahead of this 'tsunami' of yours and be proactive in a way we've never been before. This doesn't mean that we throw all our tried and true practices out the window but it also means that we should do *some* things differently around here and that means John has to be involved. We need a plan to manage all these new trends and he's in the best position to help us because there are going to be a lot of cultural, organizational and structural changes involved, not just for IT but for the whole business. But we can't dump this in his lap. We need to do our homework first. I'll talk with him and tell him what we're doing and try to identify the stakeholders involved. Can you come up with some key issues and preliminary recommendations about what you think we should be doing and how we should do it? Sit down with Mark and get his ideas too. Then we'll see if we can get everyone in a room together to 'talk turkey' and hammer out a more proactive IT strategy for handling this mess."

Discussion Questions

1. Describe the problem at IFG as succinctly as you can. Use this description to identify the main stakeholders.
2. IFG can't afford the resources to identify, define, cleanse, and validate all of its data. On the other hand, building yet another data mart to address a specific problem worsens the data situation. Propose a solution that will enable IFG to leverage a key business problem/opportunity using their BI tools that does not aggravate their existing data predicament.