MINI CASE
Innovation at International Foods[2]

Josh Novak gazed up at the gleaming glass-and-chrome skyscraper as he stepped out of the cab. "Wow!" he thought to himself. "I've hit the big time now." The International Foods Group (IFG) Tower was a Chicago landmark as well as part of the company's logo, which appeared on the packages of almost every type of food one could imagine—breakfast cereals, soft drinks, frozen pizza, cheese, and snack foods, to name just a few. Walking into the tower's marble lobby, Josh could see displays of the company's packaging from its earliest days, when its dairy products were delivered by horse and wagon, right up to the modern global entity it had become.

After signing in with security, Josh was whisked away to the 37th floor by an efficient attendant who walked him down a long hall of cubicles to a corner office overlooking Lake Michigan. On the way, Josh passed display photos of the company's founder, old Jonas Wilton looking patriarchal, and several of the family scions, who had grown the company into a major national brand before the IPO in the 1980s had made IFG a public company. Josh, having "Googled" the company's history last night in response to this summons, knew that IFG was now the largest purveyor of food products the world had ever known. While many decried the globalization of the food business, IFG kept right on growing, gobbling up dozens of companies each year—some because IFG wanted to stomp on its competition and others because it wanted their good ideas.

Josh's own small company, Glow-Foods, a relative newcomer in the business, was fortunately one of the latter, but Josh was a little puzzled about this command performance. After all, he himself wasn't anyone important. The owners of the company all received multiple millions and were sticking around—as per contract—during the transition. The next level, including Josh's boss, had mostly jumped ship as soon as the "merger" was announced. "This isn't my thing," drawled Nate Greenly over beer one night at the local pub. "Corporate America isn't going to let us stay as we are, no matter what they say. Get out while you can," he advised. But Josh, with a freshly minted MBA in his pocket, thought differently. And so here he was, walking into the CIO's office hundreds of miles away from the cramped loft in Toronto where Glow-Foods was headquartered.

As the office door swung open, two people dressed in "power suits" turned to meet him. "Uh oh, I'm not in Kansas anymore," thought Josh as he mentally reviewed his outfit of neatly pressed khakis and golf shirt, which was a big step up from his usual attire of jeans and a T-shirt. A tall man with silver hair stepped forward with his hand held out. "You must be Josh," he boomed. "Welcome. I'm John Ahern, and this is my associate, Tonya James, manager of IT marketing. Thanks for coming today. Please, have a seat." Josh complied, slinging his backpack over the corner of the leather chair

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[2] Smith, H. A., and J. D. McKeen. "Innovation at International Foods." #1-L09-1-002, Queen's School of Business, December 2009. Reproduced by permission of Queen's University, School of Business, Kingston, Ontario.

while taking in the rich furnishings of the office and the panoramic view. After a bit of chitchat about the weather and the prospects of their respective baseball teams, John pulled out a black leather folder.

"Well, we won't keep you in suspense anymore, Josh. As you know, when we took over Glow-Foods we decided to completely align our processes, including IT. It doesn't make any economic sense to run separate data centers and applications, so we already have a team in place to transfer all your hardware and software to our centralized corporate systems over the next month. We'll be replacing your Macs with PCs, and everyone will get training on our ERP system. We're going to keep a small team to deal with the specifically Canadian issues, but other than that we see no need for an IT function in Toronto any more." Josh nodded glumly, thinking about his friends who would be losing their jobs and all the fun they'd had during those all-nighters brainstorming new ways to help Glow-Foods products go "viral." *Nate was right*, he thought glumly. *They don't really get us at all.*

"That said," John continued. "We are very impressed with the work you and your team have done in using social networking, mashups, and multimedia to support your marketing strategy. Your ability to reach the under-thirty demographic with technology is impressive." He turned to Tonya, who added. "Here at IFG, we have traditionally marketed our products to women with children. We have a functional Web site—a place where customers can find out about our products and where to buy them. More recently, we've added their nutritional content, some recipes, and a place where customers can contact us directly with questions, but it's really unidirectional and pretty dry."

Josh nodded in agreement with this assessment. The difference in the two companies' approaches was night and day. Although not everything they had tried at Glow-Foods had worked, enough of it had succeeded that demand for the company's products had skyrocketed. Young adults and teens had responded en masse to the opportunity to post pictures of themselves drinking their Green Tea Shakes in unusual places on the Glow-Foods Web site and to send a coupon for their favorite Glow-Foods product to a friend. Serialized company mini-dramas popped up on YouTube and viewers were asked to go online to help shape what happened to the characters—all of them using Glow-Foods products extensively. Contests, mass collaboration in package design, and a huge network of young part-time sales reps linked through Facebook all contributed to making the brand hip and exciting—and drove sales through the roof.

John adjusted his French cuffs. "We want to tap into the youth and young adult market with IT, and we think you're the one who can help us do this. We're going to give you a team and whatever resources you need right here in Chicago. With our global reach and much larger budgets, you could do great things for our company." John went on to outline a job offer to Josh that sent tingles down his spine. "I really have hit the big time," he thought as he signed the documents making him a team manager at IFG at a salary that was almost double what he was earning now. "I can't wait to get started."

Six weeks later he was being walked down the same hall by Tonya, now his immediate boss, and into her office, a smaller version of his with a window looking onto another high-rise. "What's next?" he asked. "I've booked a meeting room for you to meet your new team at ten-thirty," Tonya explained. "But before that, I want to go over a few things with you first. As the manager of IT Marketing, I am personally thrilled that we're going to be experimenting with new technologies and, as your coach and mentor at IFG, I'm going to make it my job to see that you have the resources and support that you need. However, you may find that not everyone else at this company will be as encouraging. We're going to have some serious obstacles to overcome, both within IT and with the larger company. It will be my responsibility to help you deal with them over the next few months as you put your ideas together. But you need to know that IFG may have different expectations of you than Glow-Foods. And you may find you will get a better reception to your ideas if you look a bit more professional." Josh winced and nodded. He'd already ramped up the wardrobe for his first day with a sports jacket, but clearly he needed to do more. "Finally, I'd like you to come up here every Friday afternoon at four o'clock to go over your progress and your plans. My schedule is usually fully booked, but if you have any questions you can always send me an e-mail. I'm pretty good at getting back to people within twenty-four hours. Now let's go meet your new team. I think you'll be happy with them."

An hour later Josh and his new team were busy taking notes as Tonya outlined their mandate. "You have a dual role here," she explained. "First, I want you to work with Ben here to develop some exciting new ideas for online marketing. We're looking for whatever creative ideas you have." Ben Nokony was the team's marketing liaison. Any ideas would be vetted through him, and all proposals to the individual product teams would be arranged by him. "Second, I need you to keep your eyes open and your ears to the ground for any innovative technologies you think might work here at IFG. These are our future, and you're our vanguard." Josh glanced around at his team, an eclectic group. They seemed eager and enthusiastic, and he knew they were talented, having had a say in choosing them. With the exception of Ben, all were new to IFG, experienced in using a variety of new media, and under thirty years old. They were going to do great things together, he could see.

The next couple of weeks were taken up with orientation. Ben introduced each of the major product divisions to the team, and everybody had come back from each meeting full of new possibilities. Tonya had also arranged for the team to meet with the chief technology officer, Rick Visser, who was in charge of architecture, privacy and security, risk management, and the technology roadmap. Rick had been pleasant but cool. "Please remember that we have a process for incorporating new technology into our architecture," he explained as he handed over a thick manual of procedures. "In a company our size we can't operate without formal processes. Anything else would be chaos." The team had returned from that meeting full of gloom that their ideas would all be shot down before they were even tried. Finally, they had met with the IT finance officer. "I'm your liaison with corporate finance," Sheema Singh stated. "You need to work with me to develop your business cases. Nothing gets funded unless it has a business case and is approved through our office."

Finally, having dragged some chairs into Josh's eighteenth-floor and marginally larger cubicle and desk, the team got down to work. "This is ridiculous," fumed Mandy Sawh, shuffling her papers on her lap. "I can't believe you need to book a conference room two weeks in advance around here. Who knows when you need to get together?" "Okay, team, let's settle down and take a look at what you've got," said Josh. One by one, they outlined their preliminary ideas—some workable and some not—and together they identified three strong possibilities for their first initiatives and two new technologies they wanted to explore. "Great work, team," said Josh. "We're on our way."

The problems began to surface slowly. First, it was a polite email from Rick Visser reminding them that access to instant messaging and Facebook required prior approval from his group. "They want to know why we need it," groused Veejay Mitra. "They don't seem to understand that this is how people work these days." Then Ben got a bit snippy about talking directly to the product teams. "You're supposed to go through me," he told Josh's team. "I'm the contact person, and I am supposed to be present at all meetings." "But these weren't 'meetings,'" Candis Chung objected. "We just wanted to bounce some ideas around with them." Next, it was a request from Sheema to outline their proposed work, with costs and benefits, for the next fiscal year—beginning six months from now. "Can't we just make up a bunch of numbers?" asked Tom Webster. "We don't know how this stuff is going to play out. It could be great and we'll need lots of resources to scale up, or it could bomb and we won't need anything." Everywhere the team went, they seemed to run into issues with the larger corporate environment. Tonya was helpful when Josh complained about it at their Friday afternoon meetings, smoothing things over with Rick, helping Josh to navigate corporate procedures, and even dropping by to tell the team they were doing a great job.

Nevertheless, Josh could sense his own and everyone else's frustration as they prepared for their first big project review presentation. "They want us to be innovative, but they keep putting us in a straight-jacket with their 'procedures' and their 'proper way to go about things,'" he sighed to himself. Thank goodness, the presentation was coming together nicely. Although it was only to the more junior executives and, of course, John and Rick, he had high hopes for the vision his team was developing to get IFG out and interacting with its customers.

"And in conclusion, we believe that we can use technology to help IFG reach its customers in three new ways," Josh summarized after all of his team members had presented their ideas. "First, we want the company to connect directly with customers about new product development ideas through an interactive Web site with real-time response from internal staff. Second, we want to reach out to different communities and gain insights into their needs and interests, which in turn will guide our future marketing plans. And third, we want to implement these and other ideas on the 'cloud,' which will enable us to scale up or down rapidly as we need to while linking with company databases. Any questions?"

There was a moment of stunned silence, and then the barrage began. "What's the business value of these initiatives?" asked Sheema. "I can't take them upstairs to our finance committee meeting without a clear commitment on what the benefits are going to be." Ben looked nonplussed. "We don't really know," he said. "We've never really done this before, but we like the ideas." "I'm concerned that we don't bite off more than we can chew," said John thoughtfully. "What if these customers don't like the company or its products and say bad things about us? Do we have any procedures for handling these types of situations?" "There's definitely a serious risk to our reputation here," said Rick, "but I'm more concerned about this 'cloud' thing. We haven't even got cloud in our architecture yet, and this plan could make company intellectual property available to everyone in cyberspace!" Sheema spoke again. "I hate to mention this, but didn't we do something like this community project about ten years ago? We called it knowledge management, and it flopped. No one knew what to do with it or how to handle the information it generated." On and on they went, picking holes in every part of every idea as the team slumped lower in their seats.

Finally, Tonya stood up. "I'd like to thank you all for raising some legitimate and important concerns," she said. "And I'd like to thank Josh and his team for some fine work and some excellent ideas. Marketing was looking for creativity, and we have delivered on that part of our mandate. But now we have a more important job. And that is innovation. Innovation is about more than good ideas; it's about delivering the best ones to the marketplace. We're in a new world of technology, and IT can't be the ones to be saying 'no' all the time to the business. Yes, we need to protect ourselves, and we don't want to throw money at every half-baked idea, but we've got to find a way to be open to new ideas at the same time. We know there's value in these new ideas—we saw it work at Glow-Foods. That's why Josh is here. He has a proven track record. We just have to find a way to identify it without taking too much risk."

The room sat in stunned silence as Tonya looked from one to the other. At last, John cleared his throat. "You're right, Tonya. We want creativity and innovation, and we need a better way to get it than we have now. I think what we need is a process for creativity and innovation that will help us overcome some of the roadblocks we put in place." As Josh mentally rolled his eyes at the thought of yet another process, Tonya replied. "I think you're partially right, John. Processes do have their place, but we also need some space to play with new ideas before we cast them in concrete. What I'd like to do over the next two weeks is speak with Josh and his team and each of you and then develop a plan as to how we can, as an IT department, better support innovation at IFG."

Discussion Questions

1. In discussion with Josh, Tonya foreshadows "some serious obstacles to overcome." Describe these obstacles in detail.
2. How can Josh win support for his team's three-point plan to use technology to help IFG reach its customers?

MINI CASE

Consumerization of Technology at IFG[3]

"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."

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[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.