IT Governance Roundtable:

IT Staffing Challenges
IT Governance Institute®
The IT Governance Institute (ITGI™) (www.itgi.org) is a nonprofit, independent research entity that provides guidance for the global business community on issues related to the governance of IT assets. ITGI was established by the nonprofit membership association ISACA in 1998 to help ensure that IT delivers value and its risks are mitigated through alignment with enterprise objectives, IT resources are properly allocated, and IT performance is measured. ITGI developed Control Objectives for Information and related Technology (COBIT®) and Val IT™, and offers original research and case studies to help enterprise leaders and boards of directors fulfill their IT governance responsibilities and help IT professionals deliver value-adding services.

Disclaimer
ITGI has designed and created this publication, titled IT Governance Roundtable: IT Staffing Challenges (the ‘Work’), primarily as an educational resource for control professionals. ITGI makes no claim that use of any of the Work will assure a successful outcome. The Work should not be considered inclusive of all proper information procedures and tests or exclusive of other information, procedures and tests that are reasonably directed to obtaining the same results. In determining the propriety of any specific information, procedure or test, control professionals should apply their own professional judgment to the specific control circumstances presented by the particular systems or information technology environment.

Disclosure
© 2008 ITGI. All rights reserved. No part of this publication may be used, copied, reproduced, modified, distributed, displayed, stored in a retrieval system or transmitted in any form by any means (electronic, mechanical, photocopying, recording or otherwise) without the prior written authorization of ITGI. Reproduction and use of all portions of this publication are permitted solely for academic, internal and noncommercial use and for consulting/advisory engagements, and must include full attribution of the material’s source. No other right or permission is granted with respect to this work.

IT Governance Institute
3701 Algonquin Road, Suite 1010
Rolling Meadows, IL 60008 USA
Phone: +1.847.660.5700
Fax: +1.847.253.1443
E-mail: info@itgi.org
Web site: www.itgi.org
Acknowledgments

Participants
John P. Pironti, CISA, CISM, CGEIT, CISSP, ISSAP, ISSMP, Chief Information Risk Strategist, Getronics, USA
John Ambra, CISA, CISSP, MCSO, 27001, LA—QSA, North American Regional Manager, Modulo Security Solutions, USA
Kenneth Doughty, CISA, CBCP, Senior Manager, Risk Management, ING Australia, Australia
Anthony P. Noble, CISA, CCP, Vice President of IT Audit, Viacom Inc., USA
Kenneth L. Vander Wal, CISA, CPA, Partner, Ernst & Young LLP, ISACA VP and ITGI Trustee, USA

ITGI Board of Trustees
Lynn Lawton, CISA, FBCS CITP, FCA, FIIA, PIJA, KPMG LLP, UK, International President
Georges Ataya, CISA, CISM, CISSP, ICT Control sa-nv, Belgium, Vice President
Avinash Kadam, CISA, CISM, CBCP, CISSP, Miel e-Security Pvt. Ltd., India, Vice President
Howard Nicholson, CISA, City of Salisbury, Australia, Vice President
Jose Angel Pena Ibarra, Consultoria en Comunicaciones e Info., SA & CV, Mexico, Vice President
Robert E. Stroud, CA Inc., USA, Vice President
Kenneth L. Vander Wal, CISA, CPA, Ernst & Young LLP, USA, Vice President
Frank Yam, CISA, FHKCS, FHKIoD, CIA, CCP, CFSA, FFA, Focus Strategic Group, Hong Kong, Vice President
Marios Damianides, CISA, CISM, CPA, Ernst & Young LLP, USA, Past International President
Everett C. Johnson Jr., CPA, Deloitte & Touche LLP (retired), USA, Past International President
Ronald Saull, CSP, Great-West Life Assurance and IGM Financial, Canada, Trustee
Tony Hayes, FCPA, Queensland Government, Australia, Trustee

IT Governance Committee
Tony Hayes, FCPA, Queensland Government, Australia, Chair
Max Blecher, Virtual Alliance, South Africa
Sushil Chatterji, Edutech, Singapore
Anil Jogani, CISA, FCA, Avon Consulting Ltd., UK
John W. Lainhart IV, CISA, CISM, CGEIT, IBM, USA
Lucio Molina Focazzi, CISA, Colombia
Roland Saull, CSP, Great-West Life Assurance and IGM Financial, Canada
Michael Schirmbrand, Ph.D., CISA, CISM, CPA, KPMG, Austria
Robert E. Stroud, CA Inc., USA
John Thorp, CMC, ISP, The Thorp Network Inc., Canada
Wim Van Grembergen, Ph.D., University of Antwerp Management School, and IT Alignment and Governance Research Institute, Belgium

ITGI Affiliates and Sponsors
ISACA Chapters
American Institute for Certified Public Accountants
ASIS International
The Center for Internet Security
Commonwealth Association for Corporate Governance Inc.
FIDA Inform
Information Security Forum
Information Systems Security Association

© 2008 IT Governance Institute. All rights reserved.
Acknowledgments cont.

Institut de la Gouvernance des Systèmes d’Information
Institute of Management Accountants Inc.
ISACA
ITGI Japan
Socitm Performance Management Group
Solvay Business School
University of Antwerp Management School
Aldion Consulting Pte. Ltd.
Analytix Holdings Pty. Ltd.
B Wise B.V.
CA Inc.
Consult2Comply
Hewlett-Packard
IBM
ITpreneurs Nederlands B.V.
LogLogic Inc.
Phoenix Business and Systems Process Inc.
Project Rx Inc.
Symantec Corporation
TruArx Inc.
Wolcott Group LLC
World Pass IT Solutions
In April 2008, I was actually lucky in Las Vegas! Not at the tables, but I did have the unique opportunity to meet with four esteemed colleagues to discuss a topic near and dear to our hearts: IT staffing. I was joined by:

- John Ambra, CISA, CISSP, MCSO, 27001, LA–QSA, North American Regional Manager, Modulo Security Solutions, USA
- Kenneth Doughty, CISA, CBCP, Senior Manager, Risk Management, ING Australia, Australia
- Anthony P. Noble, CISA, CCP, Vice President of IT Audit, Viacom Inc., USA
- Kenneth L. Vander Wal, CISA, CPA, Partner, Ernst & Young LLP, ISACA VP and ITGI Trustee, USA

Since I was the moderator for the discussion, I was able to set the goals for our one-hour session: (1) to determine if there truly is a shortage in IT staff, (2) to establish whether the shortage is in people or in specialized skills, and (3) to learn more about the real-life solutions professionals are using to address the situation.

We had this opportunity to exchange ideas because we were attending an ISACA conference on audit and assurance, information security, IT governance and compliance—apt subjects, given the focus of our conversation. Sensing that having these experts in one place at one time was an opportunity too good to miss, the IT Governance Institute (ITGI), ISACA’s research affiliate, arranged our gathering.

ITGI is extremely grateful to ISACA for hosting both the conference and the roundtable discussion on which this document is based. We also appreciate the willingness of our participants to give us time in their busy schedules and to engage freely, openly and candidly on a topic that is of concern to many enterprises around the world.

John P. Pironti, CISA, CISM, CGEIT, CISSP, ISSAP, ISSMP
Chief Information Risk Strategist, Getronics, USA
IT Staffing Levels

**John Pironti (JP):** Welcome to our roundtable to discuss IT staffing. According to a recent ITGI report,¹ “insufficient number of staff” was selected by the respondents as the most pressing IT problem of the past 12 months. We’re going to talk about that today, but let’s start by going around our table and introducing ourselves and where we’re from, and our basic thoughts on IT staffing levels.

**John Ambra (JA):** My name is John Ambra. I’m with Modulo Security. I have been with the company almost 10 years. We’re a spin-off of a Brazilian company that has been doing information security for almost 22 years. We are based in Rio de Janeiro, Brazil, and established an office here (in the US) in the last three years. We offer risk management products to help companies and partners in GRC (governance, risk and compliance). In Brazil, we have about 300 information security consultants.

**Anthony Noble (AN):** This is Tony Noble and I’m from Viacom. I work as a VP in the internal audit group and I have been there around 10 years. On IT staffing, one of my recent visits was to Harmonix, one of the companies Viacom has recently acquired. Harmonix is a video game company, the makers of the game Rock Band, just released, and they literally—last week—exceeded 200 members of staff who work on coding and animating and testing the game. They are definitely struggling to hire qualified video game developers.

**Kenneth Vander Wal (KVW):** I’m Ken Vander Wal. I’m a partner at Ernst & Young. I’ve been with them almost 30 years now and have focused my entire career at Ernst & Young in the IT audit and security practice. I am responsible for the response for the quality, globally, of our IT audit and security practice, and I head up our solution offerings, set around third-party reporting. I bring that second one up because it is really dealing with the whole outsourcing issue. One thing that might be interesting to consider is why people are outsourcing; is it because they can’t find qualified people or is it the cost factor?

**Kenneth Doughty (KD):** My name is Ken Doughty, senior manager, risk management, ING Australia. ING is a global company that has 120,000 employees worldwide. It’s Dutch-based. I have responsibility for risk management, and I have a background in IT audit going back to 1980. IT staffing is a real problem, particularly in a country like Australia where the economy has been booming for the last 12 years—particularly in the resource sector, where a large amount is being absorbed by China. The problem we are having is attracting qualified IT staff, particularly in our company, where we have a large number of legacy systems and want to migrate them. This has been a real challenge for us.

**JP:** My name is John Pironti. I am the chief information risk strategist for Getronics, the global system integrator. I have been involved in IT security, IT governance and audit for about 17 years. When I think about the staffing problem that we highlighted in our IT governance report, one of the things that comes to mind is that we have to understand that a certain maturity and segmentation have developed. I like to characterize it as a “blue-collar” and “white-collar” workforce in the IT community. There was not a clear-cut line 10 or 15 years ago, but now there are defined roles, responsibilities and requirements. And I think that, as we look at the information—the findings that I’ve researched and the ITGI report—we may find that the question may not be about an overall shortage, but rather a shortage of specific skill sets that are still in high demand, that we just don’t have training cycles for and can’t find fast enough. Or is it that individuals’ expectations have changed dramatically for firms in the US, Europe, Australia and Asia, now that we have introduced third-party firms in developing nations that offer a relatively cheap alternative? We are hoping to find reduced costs in our business in these markets as well.

---

¹ IT Governance Institute, *IT Governance Global Status Report—2008*, USA, 2008
IT Staff Recruitment and Training

JP: The first thing we should address, as we represent significant organizations on a global scale, is how we approach staffing. If we think about the shortage and the perceived lack of capability, what are we doing today to find resources? What are our tools? Are we still using the traditional recruiting methods? Are we training people internally as we are seeing in developing organizations or nations, where they have a huge internal development structure? What is it that we’re doing today to face that challenge, if you agree that the challenge exists?

JA: I would like to start talking about a little bit of history and why we developed our product. One of the reasons was that seven years ago we started to lose a lot of our employees to our clients because the information security world was growing and CSOs were going to bigger organizations. We were losing a lot of this knowledge—information security knowledge of bright people, who know how to do risk assessment. How could we keep this knowledge inside? We started to build a knowledge base that ended up as a software package that we started to sell in the market. In Brazil, we have three main businesses: the consultancy business, the product itself and the Modulo education center, to train new staff. Every time we hire new people we try to offer complete training on risk assessment and penetration tests, and we encourage attainment of all the US certifications such as CISA and CISSP. This helps us to build our staff and keep them updated to do our risk assessment jobs.

JP: In your organization and your client organizations, are they challenged by not being able to find people who are willing or have the basic skills required to be trained? Or is the time to train new staff too long before they can be effective in the organization? What are the limitations? If you look at the statistics we are discussing, they are speaking more to the fact that we can’t find people today with the appropriate skill sets, and the availability and capabilities to come on board within a reasonable window of time. A three- to six-month onboarding program would provide value to the organization. What you’re speaking about is a great program for internal development, which I think is an important conversation. Are you having trouble finding candidates with the basic skill set to bring them into that training?

JA: Yes. Many of our customers and end-user customers are facing that. They’ve installed the software, but don’t have the staff to manage it, so they end up hiring a third-party consulting company to use the software. This is another thing we decided to grow as a strategy, as a worldwide partnership; we don’t have a huge staff right now, but we have 70 partners on board that are trained with the software and can offer data services using our software.

JP: Great. Tony, we talked about the idea of how a consulting firm and a software product firm look at the world and provide services to clients who are staff-challenged. That’s what consulting firms do. You have a different perspective because you’re looking at it from the inside out, not the outside in. You’re trying to serve the organization with your own staff and capabilities. How do you characterize the problem?

AN: I think there is definitely an issue with hiring staff within the US. From my perspective, what we have done at Viacom is have many outsource contracts, mainly in India; last year we had contracts with 35 different outsource vendors in India to provide the software. The other way we are addressing the issue is by buying packages as opposed to custom-building packages; that way, the personnel we need within Viacom are not really development staff so much as, as you were saying, more on the white-collar side—the analysts, the requirements developers and the user liaisons—so we’re not attempting to develop any custom software in-house. The major custom development we have going at the moment was totally outsourced on the coding side to India, and the same for most of our web sites. The main one we are doing is Harmonix, a video game company that was already working in the space, and they are definitely having problems finding that kind of developer. They’re basically plucking people straight from college; that’s the way they’re hiring people, by being involved and being located very close to (in Boston) several colleges. They recruit and bring in the individuals on internships during their degree process and then hire them straight from college. By that time, they are already familiar with the game and the game process, and they start at the bottom level—for them, the blue-collar level—which is coding the games. Then they finally become a producer, managing the whole development of the release of the game.
**IT Governance Roundtable: IT Staffing Challenges**

**JP:** It’s a project manager role.

**AN:** Yes, project manager, but they also, even there, are actually outsourcing. Like for the Wii version of the game, they have outsourced the development.

**JP:** Would you say that it is a Viacom strategy to counteract the shortage of talent to look to third-party providers to provide IT?

**AN:** I think, as Ken Vander Wal was referring to, a lot of it is also from a cost basis. You know, for $35,000 a year you can hire a good developer in India, whereas they would probably cost $100,000 in the US.

**KWW:** Just a reaction to that—is that the extent of the expectations you have from the outsourcing?

**AN:** Bodyshopping?

**KWW:** Bodyshopping, as opposed to innovative ideas.

**AN:** No, I think those ideas are in-house because they are really driven by the business. For example, in the Harmonix case, the most technical, most advanced versions of the game, like the Xbox 360, which has the interactive online element, are developed in-house. The lesser versions, which are built on the base code of the original version, are outsourced.

**JP:** So the higher-level thinking is being done in-house?

**AN:** Yes.

**JP:** I think it’s a very good question that Ken’s asking, about the expectations of outsourcing. We’re seeing that trend on a regular basis. We’re already seeing that India is starting to lose that battle because what we thought two years ago was going to be a 10-year window is now shortened to a seven-year window and even a four-year window based on salary requirements and increases. Now we are going to places like China, where the quality of output may not be as high—not to say the Chinese people or people in developing countries are in any way less capable than any other. But, you have the working experience, the cost of the operation, all of the costs in interacting with these third-party environments that you don’t take on when you have an in-house capability.

**IT Staff Retention**

**KD:** Can I raise a point? The issue here is that we still haven’t addressed retention. What are we doing about retention of staff? That’s the biggest issue we have. We have very complex systems and the lack of system integration has increased over the years because organizations made the decisions many years ago. When organizations try to find data, they find that all the knowledge exists in the key people. What we find is that, with the mobility of staff these days, you’re lucky to keep anyone for two to three years. They come in, they take what they can get, and then they move up and out of the organization to another organization. For example, we have a vacancy in my department and I’ve interviewed something like 14 people and still can’t find someone with the right skill set. We look at the résumé and at their background, and we’ve noticed the trend that they never stay at one job more than two to three years before moving on, but the issue is that they really don’t have the depth of knowledge that supports this mobility. That’s what really concerns me. How do we retain those key resources? How do you identify those key staff in the organization and what are you doing about retaining them? If you’ve got them now, then keep them.
KJV: Generation Y and, to some extent, generation X often tend to be more focused on the short term versus the long term. When I joined our firm 30 years ago, I viewed it as a long-term career decision. Many people we hire now are looking over the next couple of years. It’s a culture change. One of the things we have really been focusing on is working at retaining the people we’ve got. If we work as hard at retaining our people as we do on hiring, it’s a pretty good investment.

KD: Absolutely.

KJV: We view it the same way with clients. We work really hard to get new clients so what’s wrong with putting that energy into retaining our existing clients? There are a couple of big benefits there. But I think the one thing that has really changed is that 30 years ago the experience you were looking for was not nearly as dimensional as it is today. I don’t know that dimensional is the right word, but now you need a Unix programmer/expert, a Windows programmer/expert. In fact, you need an expert for every component of your network. Tony, you were talking about being a systems programmer, and, as a systems programmer, you did all of that at one point: you set up the database and you get the network and you get the passwords to the operating system. Now, because of the multiplicity of the operating systems and so on, you need specialists for each of those. I think that has contributed to the mobility and the specialization around the people we are looking for.

JP: I disagree. I’ve been in consulting most of my career; I run a practice and I work with your firm and other firms like it and I often find that we haven’t set the behavior expectations around retention. I know firms like yours and others have dropped US staff and the US market in favor of third-party firms in other countries where you get the same skill sets for much less salary. I have been told that there are now more accountants in India trained in US accounting laws and practices than there are in the US because the accounting firms have started dropping people like crazy, saying “I can get cheaper resources elsewhere.” So, I wonder if we have set the tone in the organization for keeping people. We’re telling our clients “we’re setting up shops in India, we’re setting up shops in China,” and we have to, to fight our competitors, who claim to bring to the table the same level of service for a quarter or an eighth of the price.

KJV: I will agree that we’ve outsourced some of our work to India, but I do not believe as much as you are implying. From the IT audit and security world, having someone in India write an audit software program/CAAT may be reasonable and practical. However doing walk-throughs, testing IT controls and writing reports are more complex tasks to outsource effectively to another country.

JP: Well, I know we don’t set a tone for staff that says “we want to keep you,” whereas 30 years ago—I mean, I’m not old enough to know, but my father tells me when he went into his career, he stayed at the same company for 25 plus years before he retired. He went in there with the expectation that he would have a home whether he was being ultimately successful or not because there was a guaranteed pathway that employees were following, and they would rise in the ranks and get to some level. And, at some point, you might say you’ve gotten to the point where you can’t achieve more because your skill set is just not getting any better. I think, in our firms, with the instant gratification concept that the Gen Xers follow—and I’m a Gen Xer—there’s a feeling of “why should I look past the three-year horizon when the firms I’m going to work with no longer offer pensions, no longer offer long-term arrangements, are ‘at will’ in all their employment agreements?” Companies give very clear statistics that say “we love our employees,” but if those employees drop below a certain level of capability or level of service in any window of time—often, six months—they can essentially be told to find employment elsewhere.

KJV: Part of that is the expectation our clients have of our people.

JP: I agree.
KVW: That is why, in our case, we have to do that. They’re hiring us because of our expertise and if we don’t have people that can deliver that expertise, we’re hurting ourselves. But that is probably getting off the topic a little.

AN: Perhaps it gets a little bit off the topic, but it’s an example of the rush in this country (US) and other countries to profit, profit, profit, building up the share price, no matter what. Companies are almost forced to not become permanent employers of choice anymore because the marketplace won’t allow them to do that. That doesn’t really address the issue of whether people are being brought into the field. Does it really start at the education level, the colleges, where people are just not going into college to study IT?

**IT Staff Salaries**

KD: Here’s an example: in Australia there has been a school shortage in the trades—the plumbers, carpenters and electricians. We’re finding that they have a greater capacity for income in those trades than the more traditional white-collar jobs—IT and accounting and the finance sector. That’s what we’re finding in Australia.

KVW: So you’re saying that the plumbers can earn more money than the IT professionals can?

KD: Yes.

JP: There have been studies that have shown that the same thing is beginning to exist in the US and Europe. There is such a lack of talent in the blue-collar trades, and there’s more stability.

KVW: So what does that mean? Does that mean we’re not paying the IT folks enough? Or that we’re paying the plumber so much more than we did 20 years ago?

JP: I think that the image that has been created is that the dollar is the ultimate value of your worth, and I guess it is a reflection. It’s not the knowledge you gain, it’s not the experience, it’s not the longer-term career; it’s how quickly do I have wealth, how quickly can I gain income? And IT, for some period of time, especially during the dot-com period, was bringing people in from every sort of background during the late ‘90s to just come in and be an “IT guy” because we didn’t have enough people. We were doing the dot-com build, so we were grabbing the tradesmen to come and become IT people. We said “we’ll train you because we don’t have enough people.” Now, we’re telling a lot of these people their jobs don’t exist anymore, so they’re looking for safer trades. I go to colleges to do recruiting, and the younger people will tell you that one of their biggest concerns about getting into IT, in the US at least, is that they don’t see stability in their role going forward. I think other countries are facing some of the same things. There’s a view that the IT employee will be involved longer-term, that there’s more value going into this role in IT, and that it’s worth taking the extra time and gaining the extra education because the job will always be there in one way or another, in one firm or another. Another interesting point is how we find people in general. What are we going to do to reach out to people to say it’s a good thing to be in IT, it’s a good thing to invest your time? If you’ve left it because you changed jobs, you just couldn’t handle the stress anymore, or you couldn’t handle the needs or the ups and downs that IT has been in the last 20 years, what can we do to find those people now?

KD: Well, to give an example, at ING Australia, what we do—because recruitment costs are anywhere between 12 to 20 percent of the total salary package that you offer—is give employees a spotter’s fee for recommending a successful candidate for an internal staff position. So, if a job is advertised internally, employees are allowed to tell friends and others, and ING gives the successful spotter between $2,000 and $5,000, depending on the role filled. Another thing we’ve done, probably as a risk management function across the organization, is to go through and identify key people. We’re starting to look at how we’re going to retain them and what sort of benefits we are going to offer, and put them on a contractual basis. Employers are starting to move key people to specified contracts, where they have to give six months’ notice. So, that gives the employer six months of time to look for a replacement. What we’ve also been doing to
minimize the impact of losing key staff are the traditional things that are often forgotten, i.e., documentation and cross-training to retain what we’ve got. If we do lose staff, then we have a contingency in the documentation and cross-training giving us time to go searching for a replacement. The problem is we don’t have that time often, because employees are just taking a short gain, out the door and then they’re gone; they give you four weeks’ notice, then out the door.

**JP:** So what do we do with the jobs that are really hard to fill? We can have that blue-collar/white-collar conversation again that says the plumber in the IT world is the network guy, and the craftsman or the carpenter might be the application developer or the guy building the house and the frameworks, but what do we do for the skills, as in Tony’s instance, where you’re talking about very specialized skills? Game development is not the same as just writing code; it’s a lot more specialized. IT security tends to be thought of as the pinnacle of IT because it requires you to know all of the other features of IT to be able to do it effectively. Instead of retention, what new strategies can we follow to gain and to build?

**KD:** Well, a lot of people want to move to Australia because—besides the fact that it’s far from everywhere, so it’s fairly safe—it offers a lot of opportunities. So, what some organizations have done is actually start trying to source very qualified people out of the UK, out of Europe, out of India, to fill the roles.

**JP:** What about Americans?

**KD:** Oh, we do have a reasonable number of Americans wanting to move to Australia. They say it’s like 20 years behind the US, in terms of lifestyle.

**JP:** You’re actually relocating them to Australia?

**KD:** Yes, relocating and sponsoring them. In fact, one of my staff is from the UK—we sponsor her and, if she decides to become a permanent resident, or later a citizen, we will assist her as part of the program. We bring them in on good packages, and then sponsor them through to permanent residency, and if they want to take up citizenship, we also help with that.

**JP:** So you’re taking a higher cost in the business to try and find staff?

**KD:** Yes, and looking for long-term gain. You know, short-term pain, long-term gain, rather than the paradigm that’s happening today, which is a short-term gain and long-term pain.

**JP:** I’m assuming that you’re building in the contracts that the employee can’t leave after a short time.

**KD:** Yes. If we’re sponsoring someone from overseas, that’s what we’re doing: walking them through immigration, getting them on board.

---

**IT Staff Shortage versus IT Specialization Shortage**

**KVW:** This is probably a dumb question, but I’ll ask it anyway: do we have an IT shortage or do we have an IT specialization shortage?

**JP:** Good question.

**KD:** I think these days it’s probably the specialization.
**IT Governance Roundtable: IT Staffing Challenges**

**KWW:** I think so, too. There are probably plenty of people out there who would say they are in IT, but we tend to want the very specialized security person who knows Windows security or whatever the case might be. That’s maybe a little different type of issue than just the shortage of IT staff. So the challenge becomes how to get the specialists in that field. You go take them from us and we go take them from you, and it’s a win-win situation for the specialist, but not for the companies.

**AN:** Yes, one of the things we’re doing at the video game company is to provide free medical insurance, which we all know in America is a big issue. The employees don’t pay anything for medical coverage; even co-pays are paid by the company. They get free meals, too, the types of benefits given by Google, but there seems to be, with that kind of staff, an expectation that all those things will be there. And even though the rest of Viacom staff doesn’t get those benefits, that particular group gets them because that’s the industry standard.

**KWW:** That must be an interesting concept to sell.

**JP:** Actually, in the US, it would have to be incorporated as a separate corporation, too, because the HR laws don’t allow you to differentiate within a single corporation. In some ways, I think the laws in the US, and even in Europe in some cases, have challenged us because we’ve built so much into HR and policies that prevent us from being flexible. I find it quite interesting how that affects some of the conversation around staffing and how we deal with it. I run a consulting firm inside a services firm and we need to treat our consultants somewhat differently, but our HR policies don’t allow us to do that, so it stops me from being able to attract a certain type of staff because they’re used to receiving a higher level of benefit. I can give them more money, but I might not be able to give them better benefits than they are getting.

**KD:** So, Ken, from your position as a partner, and based on all the clients you serve, what particular IT positions are really hard to fill? Is it across the board?

**KWW:** You know, it really does vary. In some cases, people are having trouble filling their special demands around their ERP systems, the SAPs and so on, in terms of finding people to be the database administrator, for example, for their ERP systems and other specializations like that. Security—you’ve got the same issue with some specific needs around a specific area. Within the public accounting world, Sarbanes-Oxley created boom times for us five years ago, but that’s kind of gone away. We’ve been focusing more on the advisory side at this time and that’s allowed us to go out now and try to hire experienced people. During the Sarbanes-Oxley period we didn’t train people in the advisory side, we were having them focus on the Sarbanes-Oxley side, so we’re having a shortage right now with people that can serve as the advisory consulting side for us. That’s where our real shortage exists right now.

**JA:** I think one of the things that really is impacting the hiring of IT people is their capacity to update their skills. The IT world has been changing a lot. If you think about the training you get for security, five years ago it was completely different—not sufficient to provide for security today, so you have to continue training. I think it’s the same thing for regulations like Sarbanes-Oxley; that was five years ago, and now you have PCI, the second release of which is coming in September, new requirements, HIPAA, and other requirements changing every day, so you need a constant update. You can find an IT person, but not one with updated skills.

**JP:** So are we saying that the desire for instant gratification could be part of why we’re seeing this shortage? We’re not willing to invest in the staff to help them grow to be competent and capable; we’re more interested in getting people who are available to operate and help us be successful on an immediate basis. We’re even willing to pay extra compensation to get that.

**KWW:** The shortage is in those specialized fields. What are their career goals? They probably aren’t the ones looking to move up, to be the CIO in the company, right?
JP: I don’t know. I don’t think there’s been a career path. When you started 30 years ago in New York, they probably laid out a map for you to get to partnership. You probably had some direction.

KVV: Yes and no. There was some direction, but you learned a lot on the job regarding what it takes to be a partner. I am now about to retire—in fact, we have a mandatory retirement age. Now, why do we do that? It does tie back to what we were talking about. Within public accounting you know you must perform to keep progressing in the firm. For people coming up, they’ve got to know that there’s something for them. By having a way of creating opportunities for younger people, they know that there are openings that will arise and they can figure out what those are. So, they know who’s going to be retiring, where they’re working, and that between those that are retiring and new business, there are going to be career opportunities for them.

AN: Whereas in private business that doesn’t necessarily exist because you have no knowledge of when that CIO is going to move. So there is a lot less movement in general unless you’re in a rapidly expanding environment.

IT Career Paths

JP: I guess one of the things we would need to do to attract people to get into the IT world would be to have a more structured career path. I think of some of the college kids I meet with sometimes, and even some of the guys I mentor, who are coming in just recently out of school, or are very highly qualified, with great potential, who don’t ask where they are going to be in 20 years—they’re asking about five years. What skills should I be working toward in the next five years? Should I be getting an MBA? Should I be getting an advanced degree? Because in the IT world we’ve told a lot of people that advanced degrees don’t mean that much, that certifications are probably more meaningful in a lot of cases. Maybe that’s one of the ways we can help to resolve some of the shortage: to go back to a model of organizational investment in stability. That goes against the entrepreneurial nature of how business usually operates today, so I don’t know if the business would agree.

KD: But isn’t that part of the problem? I’ve lectured at the University of Technology in Sydney, and what I see there is that the courses need to change. Academia has been very, very slow to change. I’ll be teaching the same course for a number of years, and every time I try to update or change it, I get resistance from the academics because they’ve been there so long, they’re in their comfort zone. The young kids that are coming through are losing interest because it’s really boring. You’ve got to change and update it, and keep it fresh to attract them and give them industry experience. We do two years at university, one year in the industry—the university actually finds you a job for a year in the industry—and then back to university for the final year. So the students have a year’s experience when they go out. At the moment, kids are straight from the university, they have no experience and yet we want these skills straightaway. Well, sorry, it just doesn’t happen that way. We really need to change the courses to make them more modern and get the students some experience. It’s very much like an apprenticeship for a plumber or for a carpenter: they learn the job, learn the skills on the job, and then they go to the college once a week to do the theory side, the technical side of it.

AN: But the spanner [wrench] in the works is the outsourcing concept. How do you persuade someone to go into IT when they think their job could potentially be outsourced in three years?

KVV: What attracts people to IT in the first place? Why are people selecting IT in the universities?

KD: Well, a lot of students see it as a growth industry; there always seems to be demand out there, the pay is very high and there are good benefits packages.

KVV: But now the outsourcing threat is there. What impact, if any, is that having on the decision-making process?
KD: Well, after the first year, some are actually changing their major, moving across to engineering. It might be because in Australia we have a huge resources boom. Some of the people who are blue-collar with no skill sets are getting paid well over $100,000 a year. You know, with overtime, some of them are making $200,000 a year to drive a big truck in the large resource mines. How do you attract someone when they can go to North Western Australia for that sort of money, because of resources? So, they’re switching majors, moving out of IT into engineering, for example, or to accounting because they believe that there will always be a need for accountants.

IT Staff Outsourcing

JP: We need to finish the outsourcing conversation. Aren’t we just changing where the problem lies? One of the biggest problems we have in some of the countries we deal with is that they’re doing the outsourcing, but they don’t have people who are steady. They have some of the highest attrition rates out there.

KVW: It’s basically the last year or two. I think you’re right—I think now they’re just jumping firms out there the same way we’re doing here.

JP: We expect quality service, right?

KVW: Yes.

JP: So, we may move the problem or transfer the risk or requirement, but that doesn’t mean the quality of service will be there. Have you seen an actual drop-off in IT service delivery agility or an increase in operational incidents due to insufficient staffing or outsourcing? We had the conversation earlier about people taking and running with their knowledge after two or three years. Well, we’re using outsourcing firms for things we could consider commoditized services; turnover may not be as big a problem for those services, but it is as we start getting into the higher-level thinking, the programming side of the equation. These firms are trying to offer a higher level of service, so they realize that turnover works against them. Then, what are they going to do to find people? How are they going to retain staff? What are they going to do if the quality that they provide to their clients starts to drop dramatically?

AN: I think we haven’t seen an improvement, but then we haven’t really seen a huge drop-off. I think, because of the nature of outsourcing and the way it works, we just haven’t really seen any improvement. We have to test the programs in-house, so there’s not really a speed-up or a quality factor—you know, things going twice as fast and twice as defect-free—that’s just not happening.

KD: The thing is, if it’s a skill set staffing shortage, that’s the issue. I think some of the outsourcers, particularly in Australia, price it into their model. So, when they have operational incidents, staffing of skill set shortages is priced into the model. They tack on a service fee, but I believe they should have built that into their pricing model.

JP: Interesting. So, one of the things I want to bring us back to is, as we look back at the survey materials, they lead us to believe that we have a shortage of available talent as well as available skill.

KVW: The actual wording is staff with inadequate skills.

AN: That’s why we go back to this business of systems changing and new operating systems coming to the fore, new applications, SAP. Although SAP has been around awhile, it’s still going into a lot of places and finding people with the skill set on the latest release is always going to be difficult. It’s not necessarily insufficient skills, it’s outdated skills.
KVW: So, you’re going to put in an SAP system. What are you going to do? You’re going to put that in with your people who have been developing legacy systems? What are you doing to do? You’re not going to take the risk of not having experienced people involved in implementing that SAP system; you’re going to go out and try and hire some people that are knowledgeable in doing that.

JP: I think there’s another side to the conversation we haven’t even touched yet, which is something we experienced in 1999—the whole Y2K debacle. What do we do with the people who aren’t looking for the latest release, who are instead looking for the person who worked in mainframe in the ‘70s? We have these systems that have not died, even after Y2K. Most of the staff skilled in those systems is no longer there, but we are training the new IT staff in more interesting, newer technology. We have fewer COBOL programmers out there.

KD: The issue that keeps coming back is that personnel today are a lot more mobile—they’re staying only two to three years, and then they move on. In two to three years, they’re not getting a depth of experience. That’s the real issue. Let’s just say I’m looking for some staff at the moment in risk management areas to go over IT risk and project risk. What I’m finding is that people from the project background and the audit background have moved every two to three years, but they’re really not getting the experience that supports that change. I’ve always been one to encourage people to move on, to a certain degree, but it’s like a pie—you have to have that whole experience, go through all the slices. We’re not getting that anymore.

KVW: I started my career working for the US Department of Army developing application systems, and consequently had a lot of different opportunities because I could move around much easier. I was even a systems programmer for a while and I could do that very effectively because it wasn’t that complex. The operating system was MVS and I knew what was going on with the entire system even though I was only one of multiple systems programmers. I’m not sure it’s that easy to make those transitions today. I got gratification from making those moves and getting other opportunities—seeing the other side.

KD: I think that’s the issue: we’re not, within the organization itself, given the opportunity to move around and get the experience—e.g., application development, business analysis, project management. At ING, we have a graduate program; the decision has been made, with the support of the CEO, that a lot of new graduates are going to move into the risk management area. One of the graduates is a lawyer. He spent five years earning his law degree and he’s spending one year with my team as a risk analyst before he gets a chance to move into our in-house law department.

JP: What happens when they want a promotion, not just lateral movement? One of the things we’ve been taught to aspire to, especially in developing organizations, is to move up. You said it yourself: within the firm you know you need to move up or you get moved out. We’ve set the tone for that. Success is based on your ability to grow your salary, grow your responsibility levels, promote yourself within the organization. The idea of spending five or ten years rotating among different departments of the organization is not attractive to a lot of people.

AN: I was just remembering that 20 years ago, when I first came to America, management training was a big thing in the banking field. I was working for a big bank, and we got 20 or 30 management trainees every year. They rotated throughout the bank for three or four years before they were considered for promotion. I think nowadays they would just quit after six months because they didn’t get their first promotion. In Brazil, when you bring these people in and you train them, do you find that they’re leaving after one year or so?

JA: Yes. We have a lot of turnover, especially because the demand in IT is growing in Brazil; all of our customers are highly influenced.

AN: As long as you’re getting paid for it, then that’s fine. If they’re paying a finder’s fee, that’s good.
Final Thoughts

JP: I’m not sure we have solved whether there truly is a shortage, but I think we have definitely explored different avenues that help to flesh out the concept in a little greater detail. What I’d like to do before we close is go around the table and give each of you a chance to give your final thoughts based on our understanding that there is a shortage of IT staff and IT skills. What’s your perspective? Do you believe it’s a short-term or a long-term problem? Do you believe that finding is true? Do you believe that we are equipped to solve the problem in our organizations today or do we need to change the way we think about business to adjust to the fact that there is a new model that we need to follow?

JA: In reference to the consultant business, I think one of the things that we have to do is to keep updated. Modulo has a system of continuous consultant training. We have internal certification for all employees, no matter which area you are in. We have a lot of programs through the university and college to bring more people into IT. Another thing we are improving inside of our company is creation of career paths to try to keep our resources. But, of course, it’s not an easy task, even with all that. The alternatives are too tempting to keep all of our employees.

AN: I believe certain things become self-fulfilling. If we keep outsourcing jobs from a particular country to another country, then I think we take away the incentive of people in the first country to begin to consider entering that trade. And, in America, there’s a limit on the number of technical people allowed to be brought into the country, so we are almost forcing the technology companies, such as Microsoft and Oracle and everyone else, to outsource that work because they’re not allowed to bring those skilled people in—that’s the way they would argue it. But then, the question is, what are they doing to attract people from within the country to switch to that trade? I think it’s a very difficult balancing act. We hit the limit this year in three months—the whole year’s limit of technology people coming in was met within three months. There is obviously a demand to hire skilled people in this country, and if we can’t hire them here, then they are going to hire them elsewhere because of the way that the networks allow us to work from anywhere. We keep talking about setting up career paths, but it really hasn’t happened. A lot of big companies and big organizations talk a lot about setting career paths, but they just haven’t delivered on a strong enough one to really bring people in.

KVV: Yes, I think that there is a real problem, and I think that the survey tends to suggest it, finding people with adequate skills, specialized skill sets. I think it leads to a lot of company X taking a person from company Y and so on. So, what does that mean for company X? I know from our firm’s perspective, and to some extent we have results to prove it, we have been very focused on career planning and some of the other benefits of being with the firm. The surveys have tended to indicate that our firm is among the best places to work, so you’re looking at a broad range of issues. I think that’s going to be a key in terms of retaining people. Is it an IT shortage that companies are facing? Or, if it’s the IT retention issue they’re facing—and it seems it may be—when that IT person or that specialized skill set leaves, it causes more pain than when a salesperson leaves.

KD: I think we’ve all touched on a lot of issues today, and certainly it’s been thought-provoking from my point of view. First, I think the strategies to retain the skills you have are paramount. Second, I come back to career planning and the flexibility to move within the organization. A lot of our staff want to do the two to three years, but don’t want to be doing the same job five to 10 years later. They want some flexibility to move and opportunities for promotion. Another issue is giving staff flexibility in their working environment, how they work their hours and what they need to do. And the internal culture matters. One of the things ING does every year is run a comprehensive staff survey; 80 to 85 percent participate in the survey, and the outcome is benchmarked to competitors in the same industry and the same sector. I have been approached a number of times since I’ve been with ING with some fantastic incentive packages to leave, but what I like about the company is the company culture. The culture challenges us, the way we do things, and not just the management staff. That’s why I stayed at ING. I like working there. And if you get that, you’ll retain people.
KVW: Is that the tone from the top?

KD: Absolutely. The CEO is very committed to work-life balance. He’s really unusual for a CEO because he has really good soft skills. At a lot of large Australian companies where I’ve worked or consulted, there are CEOs who don’t have very good soft skills because they’re very driven by the market and delivering a profit. It’s the only way they see it, the only way they do it.

JP: Interesting. I wonder if other industries, during their early development, had some of the same problems and we just haven’t seen them. The information age is going through its maturation process. There were boom times for other industries in the US, for instance, when we knew we didn’t have enough people and we started creating the factory concept and doing heavy engineering. They knew the skills weren’t there; how did they overcome it then? Would they have the same conversation we’re having today about IT?

JA: I think earlier booms were for a more limited time, but IT is constantly updating and changing.

JP: But I don’t think it’s any different from architectural concepts or engineering concepts. Engineering is changing tremendously; the way we do aeronautics in space has changed tremendously. IT should not consider itself some special enclave. If we do, I think that’s where we fall into jeopardy. If we can learn from our previous endeavors in other industries, we might be more successful going forward. I think the introduction of globalization is the major change. The fact that you can go beyond your borders now is a new factor that wasn’t introduced in those earlier boom periods.

Thank you for taking the time to speak with us tonight. I know I learned a lot.