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David Gefen
Department of Management, Drexel University, gefend@drexel.edu

Arik Ragowsky
Wayne State University

Paul Licker
Oakland State University

Myles Stern
Wayne State University

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The Changing Role of the CIO in the World of Outsourcing: Lessons Learned from a CIO Roundtable

David Gefen

Department of Management, Drexel University

gefend@drexel.edu

Arik Ragowsky

Wayne State University

Paul Licker

Oakland State University

Myles Stern

Wayne State University

Abstract:

The increasing availability of readymade and supposedly ready to use IT packages is changing the way CIOs manage and the challenges they face. In this article we summarize the opinions of CIOs who attended a roundtable to discuss this issue. The CIOs report a shift in internal client attitude toward IT which, combined with the effects of budgetary cuts, is leading to a shift in the role of the CIO from IT service provider to business integrator. The description of what this sample of the industry actually does regarding outsourcing and what this means for CIOs presents a new picture compared with the current literature on outsourcing.

Keywords: outsourcing, in-sourcing, IT strategy, organizational behavior, political, practice

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I. INTRODUCTION

The changing role of the CIO continues to be a topic of much interest to industry [e.g., Chillingworth, 2010] and academia [Gottschalk, 2007; Hunter, 2010; Smith and McKeen, 2010a]. It is important not only because of the considerable changes in the nature of and market for IT, such as the increasing standardization and utility nature of IT [Carr, 2003], but also because of the double nature of the task of the CIO combining and connecting operational and business aspects of IT [Gottschalk, 2007; Hunter, 2010]. Current research reflects these changes, reporting a shift in the role of the CIO toward more involvement in strategic business decisions, and more acceptance in that position by the other c-suite managers [Gottschalk, 2007; Hunter, 2010; Peppard, 2007].

This article investigates how this shift is affected by the growing introduction of outsourcing as a response to current business pressures. Outsourcing could place the CIO on the dustpan of history as IT becomes more and more a standardized utility, or it could place the CIO, because of the unique position the CIO as a bridge between the IT world and the business world, in a new position of power.

This article explores this issue through a CIO roundtable held in 2009 as part of an annual series of CIO roundtables held in Detroit, MI. The objective of this roundtable was to discuss what bothers CIOs and what steps they take to address these issues. The topics of interest were agreed on in consultation with the CIOs prior to the roundtable to make sure of the issues' relevance. The roundtables were video recorded and subsequently transcribed. The CIOs attending represented a wide array of private and publically traded companies including the CIO of an alternative energy manufacturing company with revenue in excess of $300 million; the CIO of a publically traded real estate company in Michigan with market capitalization of $480 million; the CIO of a private insurance company in Michigan with $150 million in premiums; the CIO of an energy company with market capitalization of over $4 billion; the CIO of a privately owned sports company that owns NBA, AFL, NHL, and IHL teams and partly owns some of their arenas; the CIO of the USA subsidiary of a German automotive supplier with revenues of €12.5 billion; the CIO of a US-based manufacturer of fabricated steel and cast aluminum automotive wheels with $2.16 billion revenue; and the CIO of a Michigan based bank with $16.4 billion in assets. Also attending were the CIO of the State of Michigan with an annual IT budget of about $430 million, and the CIO of one of the state universities in Michigan.

One of the key issues that came up, and the topic of this article, is the change in IT in organizations because of outsourcing. The key findings are that outsourcing is an imperative because of budgetary constraints CIOs face and their need for quick access to trained personnel, combined with the changing perceptions that users have concerning what IT can deliver and users' own power in the process. In the CIOs' views, contrary to some vendor claims, outsourcing actually does not save money in the long run, and, even in the short term, it does not save close to what the vendors promise. Overall, outsourcing needs to be understood as part of a major shift in the role of CIOs toward being a business integrator rather than simply manager of an IT service. Interestingly, although the CIOs in our roundtable represented both large and small companies in a broad range of industries, there was no disagreement among them. On the contrary, they reinforced one another's comments with examples from their own companies, showing how these trends are of shared concern and have impact across industries.

II. OUTSOURCING'S IMPERATIVES

The Economic Imperative to Outsource

Perhaps the most important underlying issue CIOs need to tackle today is the recent economic downturn and how suddenly it occurred. As one of the CIOs of an alternative energy manufacturing company put it: "When I joined the company in December [2007], we were basically on a tear. We couldn't manufacture fast enough. … Gas was four bucks a gallon and everybody was diving into solar as fast as they could. … In the last six months, our forecast went from two-years-to-a-billion-dollars to in-two-years-just-kind-of-staying-where-we-are, because not only did the sales stop but the whole market changed in terms of how solar is manufactured/sold in the marketplace … How do we respond to the economic situation today? I don't think there's any surprise to what everybody's doing here, and it's cutting, cutting, cutting."

But it is not merely an issue of cutting costs: today CIOs need to do *more* with reduced budgets. In fact, the CIOs complained that, if anything, the workload has increased as their budgets have decreased. With such an imperative to cut costs wherever possible and supply even more services, outsourcing part of their IT services is one of the key ways CIOs address this crunch. Still, outsourcing is by no means a panacea. On the contrary, despite the short-term respite it may provide, the CIOs were wary of the risks of outsourcing and the overpromises they heard from vendors. Hence, when outsourcing is done, it is done selectively and on a small scale, and only when the vendor can “do it better, cheaper, and not *just* cheaper.”

Contrary to prevalent suggestions in the literature [Gefen, 2010], the CIOs explicitly said they would rather invest in developing the skill-sets their team lacks in-house rather than access them through outsourcing. The words of an energy company CIO capture this consensus: “We are working on in-sourcing rather than outsourcing; hiring, developing the skills. We’re working with three of the universities in the state to get new graduates that have the aptitude to learn our systems and to get in and help.”

Despite its problems, the economic downturn has actually created opportunities for the CIOs of companies that have outsourced part of their IT. It is precisely because times are so tough that the CIOs can now contact their IT vendors, who are also vulnerable because of the economic downturn, and demand lower prices and a long-term relationship. With everybody being under financial pressure, suddenly the short-term profit motive is less appealing. As the CIO of the alternative energy company said, it was a “… time things got really tough, and so it was a little easier for me to call every vendor in and say if you want to do business with us, you believe in us as a company, you want to be with us in the long term, this is what it’s going to cost you.” It is not about cost savings alone anymore.

The User Imperative to Outsource

Economic stress is not the only reason these CIOs outsource, however. User expectations of instant gratification and their perception that outsourcing can deliver where in-house development cannot have changed the game. Today, internal clients—the division managers and others within the same organization who control their own budgets—know what they want and know they can demand it and even often purchase it directly through outsourcing without involving the CIO. Until they realize that what the vendors promise is only part of the package they really need, these clients have the impression, often wrongly, that the internal IT department is slow and too expensive. A telling example of this was given by the CIO of a bank: “I think as we continue to see the workforce evolve and, especially in our organization, as we continue to see our users become more and more tech-minded, they continue to come up with fabulous ideas on their own. I think the only way that I would be able to reduce the number of requests is by blocking access to Google through our Web filters, which at times I contemplate doing. … We were having discussions before this about the user community going out and finding a freeware solution, which is fabulous, and we’ve already signed the contract for this, and we want you to know how to implement it because, as good security folks, we don’t let you touch our servers in production. But then we have to come back after the fact and say, you know, freeware doesn’t really work in the enterprise. They’re usually going to come back and nail us for some licensing fees.” Another illustration came from the CIO of a university who told this story: “they … come to central IT and say, ‘Can you do this?’ ‘Oh, sure, you’re in my two-year project, and what’s the business value, and show me the return on investment,’ and I demand all this stuff. And they [say], ‘I can buy this solution here for $3,000, and I don’t have to show an ROI and I don’t have to prove all this stuff out, and I don’t need you to do it.’ ‘And I’ve got the money in my budget.’”

III. OUTSOURCING IN PRACTICE

Decide, Then, What, It, to Outsource?

With these two drivers of outsourcing, the question about what is outsourced arises. Apparently, the information technologies that are outsourced are often the standardized ones. As the bank CIO put it, “Outsourcing, to us, can be a variety of things. We don’t do [much] complete business process outsourcing. But we always look at a hosted solution, ASP model, with any type of new technology we may bring in. Most development, though, is done in-house, and we may look to partner with a vendor to actually host the solution.” As another CIO, this time from an energy company, said, “We do some selective outsourcing. We do communication networks, for example, through AT&T, things that aren’t our core competency as a company.” All those are standardized technologies, and the reason they are outsourced is because of the intent “to be able to do that at the lowest cost that we can but with internal resources” and instead use the remaining resources to be “very focused on strategic initiatives.” Standardization is the driving force here: “We have just given up doing development. We look for packaged solutions, hosted solutions that will get us as close as we can get to solving a problem and then look for people who can integrate as developers, and that’s pretty much where we are.” And, even then, the focus is more on the secondary functions where the marketplace is cheaper, faster, and quicker, such as outsourcing e-mail to Gmail. Alternatively, outsourcing is often a matter of freeing the IT team from the need to maintain legacy systems so they can concentrate on providing strategic value through IT to help transform the business.

Nurture An Outsourcing Methodology

One might have expected that with the risk and expenses of outsourcing, companies would have established methods for managing and monitoring IT outsourcing. That was not the case. Many companies did not have such detailed methodologies but relied instead on common sense, and the few that did have supposedly established methodologies treated these methodologies more as “theoretical.” Worse still, there was a reliance on the vendor’s marketing, as the CIO of the large insurance company put it, and one may expect insurance companies to know how to calculate ROI and costs: “I don’t know that it would be statistically correct when we do our math. Sometimes it’s [like this:] we think we’re going to save this, but here the vendor is recommending this and telling us this kind of ROI; and we go in there and do a little fidgeting and say, okay, we don’t have a lot of confidence in that number; we’re going to take a conservative look at this.” A few CIOs did come from companies that had strong outsourcing methodologies, and these typically were manufacturing companies that already have lots of experience in outsourcing their supply chain. The CIO of an automotive parts supplier said, “We’ve got a very strong methodology. We publish very detailed requirements to service providers. There are obviously strong SLAs and penalties for violating them. We build a risk–reward cost model, and obviously my IT organization has a very strong negotiating competency with our vendors, so we do all that internal.” Most importantly, however, there was a consensus among the CIOs that if the IT or their requirements are not fully understood, then they are not outsourced, period.

Actually, Bring Things Back In-House

A trend that seems to be happening, based on the CIOs’ comments, is bringing IT back in-house and cutting back drastically on the number of contractors on staff. In fact, quite a few IT that were outsourced earlier have been brought back in-house, in the words of a real estate investment trust CIO, “just because it made sense from a total cost of ownership perspective.” The economics of bringing activities back in-house are quite interesting and somewhat contradictory to what one may have expected based on the literature, such as the CACM survey on offshoring [Aspray, Mayadas, and Vardi, 2006]: the transaction costs are actually lower in some cases when IT projects are brought back in-house. As the CIO of one of the larger insurance companies in Michigan put it, “We found that we hire contractors on a project basis, and four years later they’re still there, so it’s a very costly, long-term employee. So we had to shift where some of those roles that we felt were really internal organization positions and not project positions. We ended up hiring for those.” Outsourcing has become limited to “supplemental resources.” Moreover, when asked about the reported 40 percent costs savings venders promise according to Dominguez [2006], all the CIOs agreed that such savings do not materialize because of the additional communication and administration costs, as well as the managerial friction with the vendor when the service is not as expected. All these additional costs add up to making a 40 percent vendor-promised costs savings in reality amounting to a more reasonable 10 percent.

An alternative, somewhere between bringing IT back in-home and outsourcing it, is internal outsourcing. This term refers to letting out IT services to other branches of the same conglomerate, typically in lower labor-cost countries. As the CIO of a large supplier to the automotive industry put it, “So, for example, in the last year—we used to have our own SAP support locally. We now rely upon our sister organizations back in Germany as well as in South America. We had one SAP ABAP coder, which is typically a candidate for offshoring, but in our case we have an internal development center in Hungary, so we began to shuttle those requests over there.” The CIO of another automotive supplier supported this trend: “We are leveraging our global SAP team, some of which sits in Turkey, some in Germany, some in the Czech Republic, some in the US. So we’ve created our own internal follow-the-sun model around supporting that particular system. In terms of our folks, we’ve got a lot of high-potential people.”

And, Partner with the Business

Perhaps the most important aspect of outsourcing is that the readily available alternative to the internal IT department has forced, or perhaps only sped up, the transformation and promotion of the IT department from a standalone provider of IT and its services to the organizational integrator—and done so with the full support, when the CIO was successful, of the other managers in the organization.

This is how the CIO of one of the automotive supplier companies put it: “So one of the things that we tell the business is [that] every dollar you spend in IT … will flow right through, and we can tell you how it’s spent. So we have a lot of detail around cost of ownership, around assets, so that when a business comes back and they say, ‘We want this,’ we help them understand really what that means, and it’s not just ‘Hey, I need this plant floor system,’ but there are network and security requirements and things that go with it. So we partner with the business on those projects, and largely those projects are funded by the business if there’s significant ROI. If there’s not significant ROI, they normally don’t get funded. … So we partner with the business on those projects, helping them review those requests, develop stronger ROIs and prioritize those things and really trying to set expectations.”

The bank CIO put this need for partnership in unequivocally plain words: "There needs to be a partnership between IT and the business unit, stronger partnership, where they present the business case, the business ideas, and then we come back and fill in the rest of the gaps." And, in this process, IT departments are taking on more of their espoused coordinating role in the organization. Being the one unit that ties everything together, IT departments are becoming the departments that integrate in entire organizations. Again, the bank CIO commented: "And now we're making them cross business lines, come together and communicate more and actually weigh one business unit's idea against another business unit's idea and at the highest level, kind of making that community decision of what is the next large thing that we're going to do."

In this process of coordination with IT at the center, it has become a question of evaluating IT investment in view of the organization at large, which is a drastic departure from the past when IT used to be budgeted and evaluated as a totally separate entity. In the words of the energy company CIO, "We have laid out kind of a master plan for where we want to go with our technology. And the first measure we [use] is, 'Does it fit into the overall picture?' where we're going. The second question is, 'Does it give us significant improvement to the way we operate from a process perspective?' And then we kick it through for the financial analysis."

IV. THE CHANGING NATURE OF IT WORK

Making IT a Business Partner

This partnership has also resulted in a change to the skill set required by the CIOs. Again, one of the automotive supplier CIOs said, "I think we wear a consulting hat as much as we wear an IT hat …. I think by and large my customers get it. They understand it. They know what we've done in other [cases]—we do a lot with best practices. We'll do pilots in one plant. That news spreads like wildfire." It is an approach, in the words of one of the automotive supplier CIOs, of "Look, let's just get it done right the first time."

With this change there has also been a shift from talking about "IT projects" to "business transformation projects." Some CIOs said that in their organizations projects must have a business owner and a dedicated business leader and the IT is accordingly funded not as an IT budget, but by specific business owners. In these cases this actually means the CIO forces the business managers several times a year to check their current priorities and make sure they know how they are spending their dedicated IT budget. Perhaps tied to this, the energy company CIO commented, "We're trying to get away from the perception of IT as a cost center and move more toward the value service provider. It is now about the IT department as a 'strategic partner business transformation rather than IT cost center' and moving into a cross-organizational process view."

This transition is part of a change in the role of the CIO. As the CIO of a real-estate investment trust put it, "I think if you look at the future of IT, our jobs will be very different twenty years from now [from what] they are today, meaning a lot of things that we do today to keep the lights on are going to be taken care of by others, because they're not our core competency; they don't give us competitive advantage. We're just going to outsource that stuff. So our roles will be more or less to integrate and bring these best-of-breed providers together so that we can focus on our core competencies."

The way to achieve this transformation is through changing the role of the IT team, as described by a large sports and entertainment company CIO, "We have business liaisons, as we call them, that are within IT, but they go out and infiltrate into the different functional areas, like accounting or HR. So they sit in there. So the business unit manager that's within accounting, that one designated person, has somebody at their disposal almost 24/7 to bounce IT ideas off of. So that person that's in accounting is going to be the champion for it, but ultimately it's being bounced off of IT at an executive level, saying, is this really going to match what we're talking about—all this to 'keep IT as a strategic partner.' As we move into this more strict ROI and prioritization discussions, our role is actually increasing, helping them develop those plans and make sure that they're presented the complete picture so that these decisions can be made." Echoing this integration into the business, the university CIO said, "When you're working with two different vendors and your data are in two different locations, that deeper understanding of integration at that point—contract management—becomes a skill that we really need, [plus] vendor evaluation, vendor management, license management. All of those skills are extremely important to us. And what we've seen over the last five years is the skill set of our IT staff has migrated more toward that end."

Broadening the Responsibilities of the CIO

Importantly, to make all this happen, CIOs are incorporating the other business units into their own IT decision making process, setting priorities and being partners in the process. This change has provided the extra benefit of further cutting costs now that the business units understand what IT is all about and the complexity of the process. As a result, *rather than the role of IT being demoted by outsourcing, IT is emerging as the business integrator*. This has been quite a transition for CIOs, too. Rather than protect their turf and insist that all IT be standardized and managed by the CIO throughout the process, there is a beginning of a move, at least among some of the CIOs at the roundtable, toward adopting a mindset that it is good for the users to try out new IT ideas independently. In the words of an energy conservation company CIO, it is good to let the users "… play with stuff. Let them go out there." And then the IT staff steps in saying, in the words of the same CIO, "All right, let me help you do it right." This brings side benefits to the IT team too as, again in the words of the same CIO, "We're finding that that gets us more trust and respect than being the watchdog or the policemen." But, this is really because IT teams have little choice today, as bluntly put by the CIO, "I think more and more we're seeing that everyone's an expert."

The result of all this is that there has been no demotion of the CIO. On the contrary, the CIO position is reaching maturity and equality with other top executives. As the CIO of an insurance company said, "I was going to say [something] about the demotion of the CIO: I don't really view it as a demotion at all. I think maybe it's not 'Oh, here's this technology person that's going to walk in and wow us with fancy language' and 'Hey, look, I can give you some bell or whistle to hang our hat on.' I think our role is much more of a partner, and we continue to evolve to be a business partner and to have earned a right at that table to be as much of a strategic driver as the business unit person, like, again, in our case our sales and marketing guy that's identifying the next market that we need to move into in insurance." In the words of the insurance company CIO, "But overall it's partnership, partnership, partnership, and education across the board." The words were echoed by the investment trust CIO, "But really, if you want to be treated as an executive and sit at the executive table, you have to build a business. So, to do that, you need to learn what your business partners do. You've got to get into their business and understand what they do on a day-to-day operational perspective. And if you can do that, then you can help guide them and be strategic at how they do that work."

Evolving the CIO into A Business Integrator

The results of these roundtables seem to confirm the transition reported elsewhere in the job of the CIO from being technology-centered toward being a bridge between the strategy needs of the organization and the technology [Hunter, 2010]. This expanded role in the strategic decision making of the organization was noticed as early as 2001 [Sambamurthy et al., 2001]. This transition corresponds to an apparent increasing recognition in the industry of the combined technology and business leadership of the CIO [Gottschalk, 2007] and the growing influence CIOs have on other c-suite managers [Enns et al., 2003]. Reflecting this change, there is an increasing recognition of the need for CIOs to foster better two-way communication based on "competence, credibility, interpersonal interaction, and trust" between IT managers and other managers as a way to create value out of investment in IT [Smith and McKeen, 2010a, p. 432]. The apparent ability of the CIOs in the roundtable to create trust in themselves, as Smith and McKeen suggest they should, by managing politics wisely, showing good social skills, being professional, and having clear governance policies and managing expectation provides support for the conclusions drawn by Smith and McKeen.

The results also conform with observations in other IT outsourcing contexts that IT outsourcing is a joint IT and non-IT decision process [Gefen et al., 2008]. Treating IT outsourcing as a joint operation might signal a new trend in the industry where previously it has been suggested that non-IT managers tend to leave IT decisions to the IT department because they do not understand IT and because they think the IT department does not understand them [Ross and Weill, 2002]. If anything, the roundtable seems to confirm the type of transition Ross and Weill advocate, showing that it is already in process, with non-IT managers becoming involved in IT budgeting decisions on both organizational and project specific levels, as well as which IT capabilities to invest in, and, therefore, who is to blame when IT projects run into problems. It would seem that with their support for selective well-thought-out outsourcing, CIOs have managed not only to outsource the IT when it makes sense but also to partly outsource these IT decisions and the risk involved to non-IT managers.

But, while the results of the CIO roundtable confirm some previous observations of the changing role of the CIO into a business leader and not merely a technology leader, the roundtable reveals some interesting insights about how this is actually happening in the current business context where outsourcing has become an economic and user-driven imperative. Despite these drives being outside the control of the CIO, apparently, the way industry is responding to them is not to marginalize the CIO and reduce the importance of the IT department, as might have been expected based on Carr's "IT Doesn't Matter" article [2003]. Instead, the industry as reported by the CIO roundtable has decided to respond by enhancing the position of the CIO and the IT department. Even though outsourcing could have threatened the position of the CIO in the organization by shifting power to other units and removing the IT department from its monopoly over IT, CIOs have actually managed to use outsourcing to cement and increase their position and influence. In fact, the roundtable, apart from confirming the need to have effective communications between the CIO and other senior managers [Smith and McKeen, 2010b], and having IT management more business savvy [Basselier and Benbasat, 2004] as widely accepted today [Gottschalk, 2007], actually shows that CIOs can and often do have the upper hand in managing these situations. Rather than have outsourcing become a threat, it has become an opportunity for CIOs to reassert their position as business managers.

Putting the Brakes on Outsourcing

The roundtable also paints the picture of outsourcing in a new light. Outsourcing is a matter of cutting costs as widely accepted, but it is also driven by the users. This user, i.e., non-IT manager, support for IT outsourcing is driven by users' expectations of what IT can do for them and their increasing technology savviness. Outsourcing is not just a matter of responding to an economic drive, although this drive is very important.

Within this picture the CIOs are actually putting the brakes on the IT outsourcing process by emphasizing the traditional needs CIOs typically have espoused: coordination and standardization of various IT functions in the organization. This position of the CIOs emphasizing the need to capture the whole cost picture of IT when making IT decisions, and not only direct installation costs, resonates nicely with the need to recognize the total cost of IT suggested by McKeen and Smith [2010]. Adding to McKeen and Smith, and perhaps not surprisingly, it is the CIOs who are aware of these additional costs while other senior managers are not, which may be the reason behind the transition in the role of the CIO towards being an IT coordinator. Figure 1 summarizes this new way of managing outsourcing and the accompanying shift in the role of the CIO.

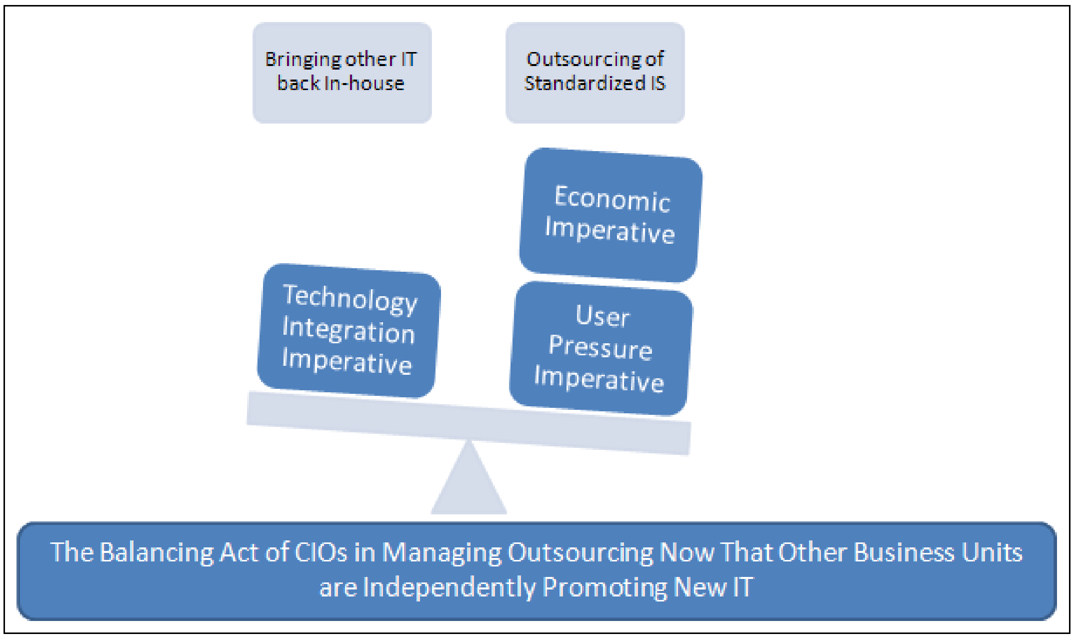

Figure 1. Outsourcing Imperatives and Shift in the Role of the CIO

Viewed on a broader perspective of IT related risks, the roundtable confirms the transition in IT risks noticed previously by Smith and McKeen [2009] in which IT risk no longer deals primarily with implementation risks at an IT level alone, but rather applies now to the whole company as it integrates its IT with external suppliers, making IT risks a matter of operational risk to the entire company. In discussing how to address these new risks, Smith and McKeen, summarizing a meeting of CIOs they organized to discuss this matter, proposed to expand on the suggestion of Slywotzky and Drzik [2005] in *Harvard Business Review* to treat IT risk "holistically" as it applies to the whole company. In contrast to their conclusion, based on Hunter and Westerman [2007] that non-IT managers are still rather unaware of the need to manage IT risk in this broader picture, our CIO roundtable indicates that CIOs are beginning to take such an approach and that non-IT managers are responding favorably to it. How senior managers other than the CIO treat IT and independently outsource it combined with the economic imperative have increased organizational exposure to IT risks, and with these increased risks have changed the role of the CIO.

These results also confirm the long claimed importance of alignment between the CIO and non-IT managers [Hunter, 2010], as it comes about through the need for CIOs to both understand the business needs of their organizations and to be involved as technology leaders in it, as well as managing and influencing non-IT managers' expectations [Dearstyne, 2006]. As revealed in the roundtable, however, CIOs may actually lead outsourcing from behind as sages by correcting the errors other non-IT managers make in adopting new IT. This leading from behind, rather than behaving as technology advocates who lead by blazing new paths themselves, is an interesting shift in how CIOs operate. This is a shift brought about, among other things, by outsourcing, from that of an early adopter of technology who pushes technology on the organization [Moore, 1991], who seeks competitive advantage through the IT [Porter 1979], and who is a calculated risk seeker in the Diffusion of Innovation terminology [Rogers, 1967], as seen in the 1990s. Instead, there is movement toward the CIO being part of an early majority in the Diffusion of Innovation terminology who is open to new ideas, but only when they are already proven and the risks known. Figure 2 summarizes the new emerging balance of responsibilities within the IT context in organization.

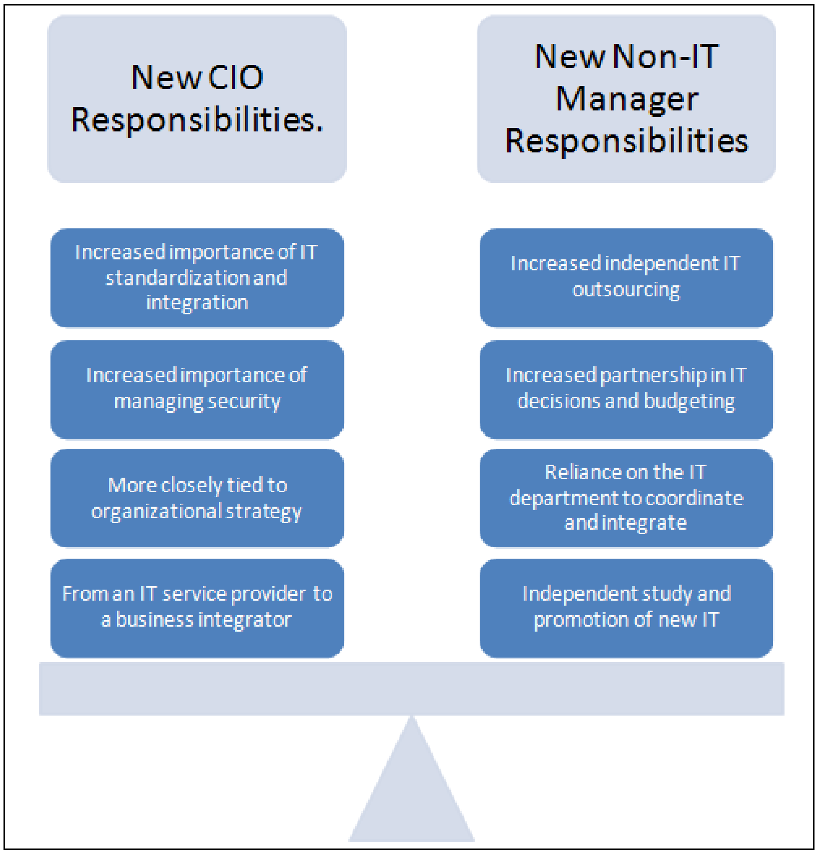

Figure 2. The Emerging New Balance of IT Responsibilities

V. CONCLUSION

Outsourcing is a game changer, but rather than demoting IT and the CIO, outsourcing actually allows CIOs at last to achieve the place they deserve at the executive table by providing real business value, and not just IT services. And, importantly, other managers accept this change in the importance of the CIO. The increasing trend to outsource IT, and especially the increasing involvement of non-IT managers in the process, poses new threats and new opportunities to CIOs. With the increased holistic risk this trend brings, it also brings the advantage that non-IT managers are becoming more exposed to IT issues and with this increased exposure comes greater recognition of the importance of the CIO in the organization. This increased importance arises not merely from capability as a technical solution provider, but, more importantly, as an IT-based solution integrator.

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REFERENCES

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Aspray, W., F. Mayadas, and M.Y. Vardi (2006) "Globalization and Offshoring of Software: A Report of the ACM Job Migration Task Force", http://www.acm.org/globalizationreport (current Oct. 3, 2010).

Basselier, G. and I. Benbasat (2004) "Business Competence of Information Technology Professionals: Conceptual Development and Influence on IT–Business Partnerships", *MIS Quarterly* (28)4, pp. 673–694.

Carr, N.G. (2003) "IT Doesn't Matter", *Harvard Business Review* (81)5, pp. 41–49.

Chillingworth, M. (2010) "What Is the Future State of the CIO?" *CIO*, http://www.cio.co.uk/opinion/chillingworth/2010/09/01/what-is-the-future-state-of-the-cio/ (current Oct. 3, 2010).

Dearstyne, B.W. (2006) "CIOs: Information Program Leaders in Transition", *The Information Management Journal* (40)1, pp. 44–50.

Dominguez, L.R. (2006) *The Manager's Step-by-Step Guide to Outsourcing*, New York, NY: McGraw-Hill.

Enns, H.G., S.L. Huff, and C.A. Higgings (2003) "CIO Lateral Influence Behaviors: Gaining Peers' Commitment to Strategic Information Systems", *MIS Quarterly* (27)1, pp. 155–176.

Gefen, D. (2010) *The Art of Successful Information Systems Outsourcing*, New York, NY: Business Expert Press.

Gefen, D., S. Wyss, and Y. Lichtenstein (2008) "Business Familiarity as Risk Mitigation in Software Development Outsourcing Contracts", *MIS Quarterly* (32)3, pp. 531–551.

Gottschalk, P. (2007) *CIO and Corporate Strategic Management: Changing Role of CIO to CEO*, Hershey, PA: IDEA Group Publishing.

Hunter, G. (2010) "The Chief Information Officer: A Review of the Role", *Journal of Information, Information Technology, and Organizations* (5), pp. 125–143, http://www.jiito.org/articles/JIITOv5p125-143Hunter460.pdf (current Oct. 3, 2010).

Hunter, R. and G. Westerman (2007) *IT Risk: Turning Business Threats into Competitive Advantage,* Boston, MA: Harvard Business School Press.

McKeen, J.D. and H.A. Smith (2010) "Developments in Practice XXXVII: Total Cost of Ownership", *Communications of the Association for Information Systems* (27)32, http://aisel.aisnet.org/cais/vol27/iss1/32 (current Oct. 3, 2010).

Moore, G.A. (1991) *Crossing the Chasm,* New York, NY: Harper Business Essentials.

Peppard, J. (2007) "The Conundrum of IT Management", *European Journal of Information Systems* (16), pp. 336–345.

Porter, M.E. (1979) "How Competitive Forces Shape Strategy", *Harvard Business Review* (57)2, pp. 137–145.

Rogers, E. (1967) *Diffusion of Innovations*, New York, NY: The Free Press.

Ross, J. and P. Weill (2002) "Six IT Decisions Your IT People Shouldn't Make", *Harvard Business Review* (80)11, pp. 85–91.

Sambamurthy, V., D.W. Straub, and R.T. Watson (2001) "Managing IT in the Digital Era" in Dickson, G.W. and G. DeSanctis (eds.) *Information Technology and the Future Enterprise: New Models for Managing,* Upper Saddle River, NJ: Prentice-Hall, pp. 282–305.

Slywotzky, A. and J. Drzik (2005) "Countering the Biggest Risk of All", *Harvard Business Review* (83)4, pp. 78–89.

Smith, H.A. and J.D. McKeen (2009) "Developments in Practice XXXIII: A Holistic Approach to Managing IT-Based Risk", *Communications of the Association for Information Systems* (25)41.

Smith, H.A. and J.D. McKeen (2010a) "Developments in Practice XXXV: Building a Strong Relationship with the Business", *Communications of the Association for Information Systems* (26)19, http://aisel.aisnet.org/cais/vol26/iss1/19 (current Oct. 3, 2010).

Smith, H.A. and J.D. McKeen 2010b) "Developments in Practice XXXVI: How to Talk So Business Will Listen … and Listen So Business Will Talk", *Communications of the Association for Information Systems* (27)13, http://aisel.aisnet.org/cais/vol27/iss1/13 (current Oct.3, 2010).

ABOUT THE AUTHORS

David Gefen (gefend@drexel.edu) is a Professor of MIS at Drexel University, Philadelphia, US, where he teaches IT Outsourcing, Strategic Management of IT, Database Analysis and Design, and VB.NET. He received his Ph.D. in CIS from Georgia State University and a Master of Sciences in MIS from Tel-Aviv University. His research focuses on trust and culture as they apply to the psychological and rational processes involved in ERP, CMC, and e-commerce implementation management, and to outsourcing. David's wide interests in IT adoption stem from his twelve years of experience in developing and managing large information systems. His research findings have been published in *MISQ, ISR, IEEE TEM, JMIS, JSIS, DATA BASE, Omega, Journal of the Association for Information Systems, Communications of the Association for Information Systems,* and elsewhere. David is an author of a textbook on VB.NET programming and a book on the art of IS outsourcing. David is on the Editorial Boards of *MISQ*, *JMIS,* and *DATABASE*.

Arik Ragowsky is an Associate Professor of Information Systems and the Director of the Manufacturing Information Systems Center at Wayne State University. He received his MS and Ph.D. in Information Systems from the School of Management, Tel-Aviv University. His experience includes working as a CIO of a manufacturing company and as a consultant for manufacturing organizations with information systems (ERP systems). His current research interests are in the value of information systems, manufacturing information systems, ERP, strategic information systems, alignment between the IT and the organization, and cloud computing. Arik published in such journals as *The Journal of Management Information Systems, Information Technology & Management, The Communication of the ACM, The International Journal of Industrial Engineering, Information & Management, Data Base for Advanced Information Systems, Information Systems Management,* and *Communications of the Association for Information Systems.* Arik is on the Editorial Boards of *International Journal of E-Commerce, Information Systems Management Journal.*

Paul Licker (licker@oakland.edu) is a Professor of MIS at Oakland University, Rochester, Michigan, US. He teaches Enterprise Information Systems, International Issues in Information Technology and Project Management. He received his Ph.D. in Communications and an MSEE. from the University of Pennsylvania. His research focuses on user relations in Information Systems, Information Systems for competitive advantage, the role of Information Systems in culture, and economic models of electronic commerce. Dr. Licker has been, variously, professor, filmmaker, computer programmer, consulting systems analyst, and IS business owner. He has taught in Canada, the US, the UK, Thailand, and South Africa. He has published in *Communications of the ACM, Information and Management, JGITM,* and *EJISDC.* Paul has authored textbooks in systems analysis, Information Systems fundamentals and management of programming.

Myles Sterm is an Associate Professor of Accounting and SAP University Alliance campus coordinator at Wayne State University, Detroit, Michigan, US. He teaches courses in Accounting and in ERP Systems. He received his MBA from The University of Michigan and his Ph.D. from Michigan State University. His research interests include control and security of computer-based information systems, the evaluation of benefits from ERP systems, and critical success factors for implementing ERP systems. He has published in *The Journal of Management Information Systems, International Journal of Computer Integrated Manufacturing, Journal of Accounting Education,* and others. As a consultant, he has helped over two hundred organizations successfully implement ERP, Accounting, and office automation systems.

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