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The Characteristics of a Successful CIO, the CIO

Hybridization, and the Need for a New Role

Abstract

The purpose of this paper is to discuss the characteristics needed for today's CIO role, how these characteristics meld together with the characteristics of the hybrid role of the CIO and the feasibility of a completely new role to take the place of the CIO, such as the Chief Strategy Officer. Competencies of the CIO are explored, how the relationship between the CIO and executive team adds value and the importance of the relationship between the CIO and CEO in order to add value to the organization. The abstract view of the CIO as an IT superman is explored, the combination of today's roles of the IT professional to fill the needs of the future IT driven organization, the direction that CIOs are taking as a result of the demand for hybridization, and the characteristics of a successful hybrid CIO. The role of a Chief Strategy Officer is explored as a replacement for the role of the CIO.

The CIO adds value to the business by acting as a business leader. This individual should possess some unique competencies. The CIO must also be a skilled team player with a strong executive team. The CIO must be aware of the organizations outsourcing options and be skilled in risk analysis. A CIO must be able to be staunch with vendors when considering implementing large projects that have a lot of extra pork included for the vendors benefit. All of these characteristics help the CIO add value to the organization.

There are some competencies that a CIO should have in order for the CIO to add value. Peppard identifies seven competencies of the CIO. They are,

” Leadership”: “driving the organization forward in the use of it, creating a set of value expectations shared across all areas of the business in relation to it, influencing key stakeholders,” and “growing and developing own leadership team”. “Visionary”: “envisioning options and opportunities (both operational and strategic)”, and “an advocate for new technology”. “Strategic thinker”: “holistic view of business” and “contributing to strategy discussions”. “Relationship builder”: “expressing empathy, listening, and being passionate”. “Diplomat”: “collaborating with colleagues to achieve win-win”, “building personal networks across the organization”, and “creating the right impression”. “Deliverer”: “achieving credibility with both business and technical people through successful delivery of projects and programs”, “maintain cost efficient IT operations and services”, “managing risk”, “meeting expectations”. “Reading the market”: “Using the marketplace appropriately for sourcing”, “commercial acumen”, “understanding risk”, and “networking externally with peers” (2010, pp. 79).

All of these are at the root of how the CIO adds value to the organization. An important factor Peppard points out about the CIO is that too much emphasis should not be placed on the CIO and its competencies itself. We must consider the entire executive team when evaluating the CIO's performance, Peppard states, "what the data indicates is *the environment in which the CIO operates* plays a crucial role in the success of the organization in optimizing IT value" (2010, pp. 75). According to Peppard. "the ability to read and use the external market for potentially sourcing IT services and to understand risk" (2010, pp. 80) is also an important competence of the CIO in adding value to the organization. Outsourcing IT can be an important value adding decision for the organization because it can result in substantial savings. However, there needs to be careful consideration when considering outsourcing. For example, the decision to move to the cloud must take into account the ability to move data out of the cloud once it is there as well as security concerns. This is why this skill is so important to the CIO. Understanding risk goes hand in hand with reading and using the market for potential sourcing of IT services. Security concerns of the possible move to the cloud most certainly need to be understood as they are a risk. A CIO must also be savvy when it comes to dealing with vendors. A CIO who isn't savvy can fall prey to vendors hawking large IT projects that may not be cost efficient, lacking value adding characteristics and hampering the organization's ability to develop a strategic advantage with IT against it's competitors.

The executive team must be IT Savvy. They must all have knowledge of this area in order to effectively communicate to share ideas with each other. This will allow the CIO to bring his o her ideas to the executive team and inform them of the IT needs in the company to a team that understands these needs and how they will impact the organization. Without this

there is limited understanding of the IT needs and IT begins to function like a utility and only becomes important when it is broken or over budget. There is no attention to IT strategy and the decisions making process and value adding activities are weak or nonexistent. So we can see that the CIO is not alone in his efforts within the organization. In Peppard's article, one CIO states, "If the other members of the senior management team have no understanding of IT or its power as a strategic lever, then the CIO has little hope of setting and managing expectations, or delivering against them" (2010, pp. 82). The role of the CIO is also going to be determined by the way that the executive team engages with the CIO. If the executive team is not IT savvy they will generally treat the CIO as a technical advisor, like an IT director. If the executive team is IT savvy, then they will more than likely treat the CIO as someone who can drive the business strategy around IT innovation, align IT with business processes, etc. This, of course is a totally different role compared to an IT director.

The relationship of the CIO with the executive team is also very important and determines the role of the CIO. A strong relationship with the executive team will increase the effectiveness of the CIOs contributions. Having said this it is important for the CIO to be on the senior leadership team. If this is not the case, than the CIOs will fall into a role of someone who takes orders versus the role of someone who drives organizational strategy and innovation. Combining a CIO with a strong relationship with an IT savvy executive team allows for a flourishing environment for IT instead of one that condones IT as the enemy, not understanding the implementation of the technology and not understanding the importance of a partnership in the development of IT. As mentioned earlier it is important for the CIO to be on the senior leadership team. While on this team it is important for the CIO to be involved in the decision

making process. It will be very difficult for the CIO to add value to the organization when he or she is always playing catch up as a result of being out of the loop. It is important to be in the loop during the decision making process so the CIOs ideas can cascade down through the organization, otherwise he or she will be playing catch up and it will be too late. Also, with the CIO not involved in the decision making process, IT projects are likely to fail completely, be late, or be over budget. And because the development of systems operate in a cycle this can cause the problem to occur again and bring a scarlet letter on the IT department, keeping them out of the decision making process and compounding the problem. Without the CIO involvement in decision making IT will go off in its own direction effectively preventing proper alignment of IT with the business and eliminating any hope of the CIO delivering any value to the organization.

The importance of the CIOs management team cannot be left out of the discussion on how the CIO delivers value to the organization. The CIOs team is essential in helping with all of the activities that can pile up on a CIOs desk and distract him or her from the big issues. Peppard quantifies this importance with some figures given by a CIO in her article, "Speaking personally, I probably spend about 60% of my time working on plans for my future, and 40% on day-day [business] operational issues" The CIO estimated 80% of his time was spent away from IT and that his management team was crucial (2010, pp. 89). The implications of this for the CIO adding value to an organization are that without an effective management team, the CIOs value decreases or is antiquated.

There are some challenges that a CIO must overcome in order to be able to add value to his or her organization. One of these challenges is actively engaged with business colleagues

with IT issues. This is very important in the area of information systems and the value realized

on the implementation of those systems. To accomplish this the CIO is going to need the

assistance of his or her colleagues as was discussed earlier in how important it was for the CIO

to be directly engaged with the senior leadership team as well as utilizing an effective

management team. The second challenge is identifying the value from IT expenditures. The

third problem the CIO must overcome is eliminating the stereotype that he or she is an asset

for technical use only. In other words, adding value or developing strategies for the

organization. The fourth problem is in creating a vision for IT. The CIO must work with the CEO

in this process. This highlights the importance of the CIO being involved in the decision making

process of the senior leadership team. The fifth problem is building a management team. The

importance of the   management team was discussed earlier. It should be noted that it is

easiest to build your management team from the inside versus trying to find individuals who

are qualified.

The relationship between the CEO and CIO is a critical relationship in the management

of IT. This relationship was discussed earlier in brief. Here the relationship will be discussed in

detail. In a study by Johnson and Lederer, they discussed eight business and IT strategy

dimensions. They are,

- Aggressiveness is the extent to which an organization attempts to improve its

  market position and outperform competitors. A firm which competes to increase

  market share is following an aggressiveness strategy.

- Analysis is the extent to which an organization requires factual, comprehensive information for decision-making. A firm which attempts to identify the cause of problems and generates alternative solutions is following an analytic strategy.

- Internal defensiveness is the extent to which an organization engages in activities to improve its efficiency of business operations in an effort to preserve its prospective domain. A firm that competes by reducing cost would be practicing internal defensiveness.

- External defensiveness is the market or environmental activities that help a firm preserve its domain. Competing by establishing and maintaining strong relationships with customers is externally defensive.

- Futurity is the extent to which an organization's decisions or activities reflect long-term considerations. Competing through extensive forecasting and tracking environmental trends exemplifies futurity.

- Proactiveness is the extent an organization searches for new market opportunities and business ventures. A firm that responds to a changing environment its competitors practices proactiveness.

- Riskiness is an organization's willingness to engage in business practices with an uncertain outcome, but potentially high return. A firm that competes by investing in a new subsidiary with a low probability of high returns may be practicing riskiness.

- Innovativeness is the extent a firm applies creative and imaginative solutions to business problems. A firm that adopts new products and services before competitors is practicing Innovativeness (2010, pp. 139).

For the CIO to add value to an organization it is imperative that there be a mutual understanding about the role of IT alignment. Johnson and Lederer discussed six dimensions of strategy that lead to IT strategic alignment that result from a mutual understanding between the CEO and the CIO. These dimensions are analysis, internal defensiveness, external defensiveness, futurity, proactiveness, and innovativeness (2010, pp. 145). Further as a result of this alignment, there is a contribution to the IS, which according to Johnson and Lederer , "has a major impact on the competitiveness of an organization by lowering costs, providing product differentiation, using electronic links, creating market entry barriers, leveraging unique capabilities, enabling existing business strategies, and creating new business strategies" (2010, pp. 140). We can see the importance of the CIO adding value as a result of having a mutual understanding with the CEO. Johnson and Lederer relate this to the dimensions discussed earlier. There is a positive relationship with analysis, external defensiveness, futurity, proactiveness, riskiness, and innovativeness (2010, pp. 145). We can see the impact that the CIO is having on the organization from this study as a result of having a mutual understanding with the CEO and how this results in a positive impact on the organization as a result of the existence of the CIO.

There are many roles for the CIO today. A combination of these roles can form a new role for the CIO. A superman if you will. A CIO that embodies the skills of all of the CIOs in every IT driven organization in the world. The role of managing IT and preparing it for use within the organization has changed to one of being strategically involved and a consumer oriented individual. Along with the role of implementing technology the CIO must now interact with senior management. Due to the fact that many executives do not understand

what technology can do for their company, many CIOs are left with the nuts and bolts of the

position such as costs vs. the CIO who gets involved with the company at the business level as a

result of a more technology literate senior executive staff.   As the reader you can see how this

dictates the duties of one's position. There are two areas of contemporary research that

support the superman role. One is supporting the idea that the CIO become more involved in

the decision making process of the organization. The other is identifying the traits of a

successful CIO. With this in mind we can begin to picture the characteristics of the superman

that will become a new hybrid role in the IT driven organization. To delve deeper into the

second area of research that discusses the successful CIO's traits that contribute to the

superman's DNA, we can see from Peppard, Edwards, and Lambert that communication skills,

business acumen, people skills, openness, and conscientiousness are the makeup we are

looking for (2011, pp. 33).

Qualities from the generic Utility IT Director are going to be useful in the makeup of our

superman role. As one can imagine, the Utility IT Director is responsible for the basic needs of

the IT organization. These needs are limited to IT infrastructure, telecommunications, etc.

Simply, he directs IT operational processes. This is important to the makeup of this new role

because this individual is tasked at providing essential IT utilities at it's lowest cost as his or her

role is operationally oriented. The task of providing excellent IT performance at a low cost for

operations is something that our new role is going to need. Another quality that will be a part

of our new role can be described as an evangelist. This role is important because it brings the

need to leverage information in the organization to produce value by stressing it's importance.

Peppard, Edwards, and Lambert describe this as the CIO seeking to educate his or her peers on

the potential for information to drive business potently, by providing visions of the future and pilots to demonstrate their visions (2011, pp. 35). These evangelists will motivate their peers and staff to embrace IT as an enabler of innovation instead of seeing IT as a utility of the organization that is a simple cost driver. It is difficult to completely define how IT is delivering value to the organization. Because of this, the role of the evangelist becomes even more important to champion the services of IT to skeptics in the organizations by delivering with visionary information and pilots. Another role that will combine with our superman is the role of an innovator. In this capacity the CIO must deliver services that are going to give his or her organization a competitive advantage. The innovator will also work like the evangelist and gain commitment for organizational change. It is also important for the innovator to be a part of the senior executive team's decision making process. The next role of CIO's that will contribute to the essence of our superman is the role of a facilitator. Peppard, Edwards, and Lambert state, "Facilitator CIOs ensure alignment horizontally, with the objective of ensuring that every department, function, and division within the organization can define, integrate, and exploit information. They ensure that the activities performed by Evangelist and Innovator CIOs are embedded into the organization" (2011, pp. 37). The facilitator should bring new skills into the organization, which includes training and support for IT activities. The last role that our superman will inherit is one of an Agility IT Director/CIO. This role fulfills the needs of the businesses in IT on a constant basis. He or she will be giving the technology literate senior executive team the expert advice that they need for the organizations goals.

Each of these CIO roles that are distinct in various organizations will make up the superpowers of the IT driven organizations IT superman. This new role that is a combination of

all of these unique roles will drive the IT organizations of the future, as they will all require

some aspect of one of these skill sets. Of course this individual will not grace the offices of the

worlds IT driven organizations of the future in a blue suit and red cape, but will make his

presence known by the all of the contributions he makes that are demanded by the makeup of

today's current businesses.

There is also a new role emerging for CIOs in today's business that is a hybrid CIO role.

It is a result of the CIO's role becoming more business oriented. This new role takes on names

like CIO and Vice President, Distribution and Strategic Services. This role requires the CIO to

step outside of the technical realm and take on responsibilities from various aspects of the

organization. These other responsibilities are general management responsibilities at the

senior level. Overby states that in a survey of 1,500 CIOs, more than half report having

responsibilities outside of IT (2011, pp. 26). This new hybrid role puts the CIO in a position to

make better business decisions than an individual that is completely anchored in IT. According

to Overby these business decisions that the Hybrid CIO is taking on include the following:

- Information security 69%

- Business process improvement or transformation 62%

- Corporate website/online identity 40%

- Innovation/change management 38%

- Business continuity 34%

- Respondents chose multiple answers (2011, pp. 29)

This is not limited to a small number of CIOs. Many are adopting these new positions as Many

CIOs are seeking a hybrid role that is fueling the trend.
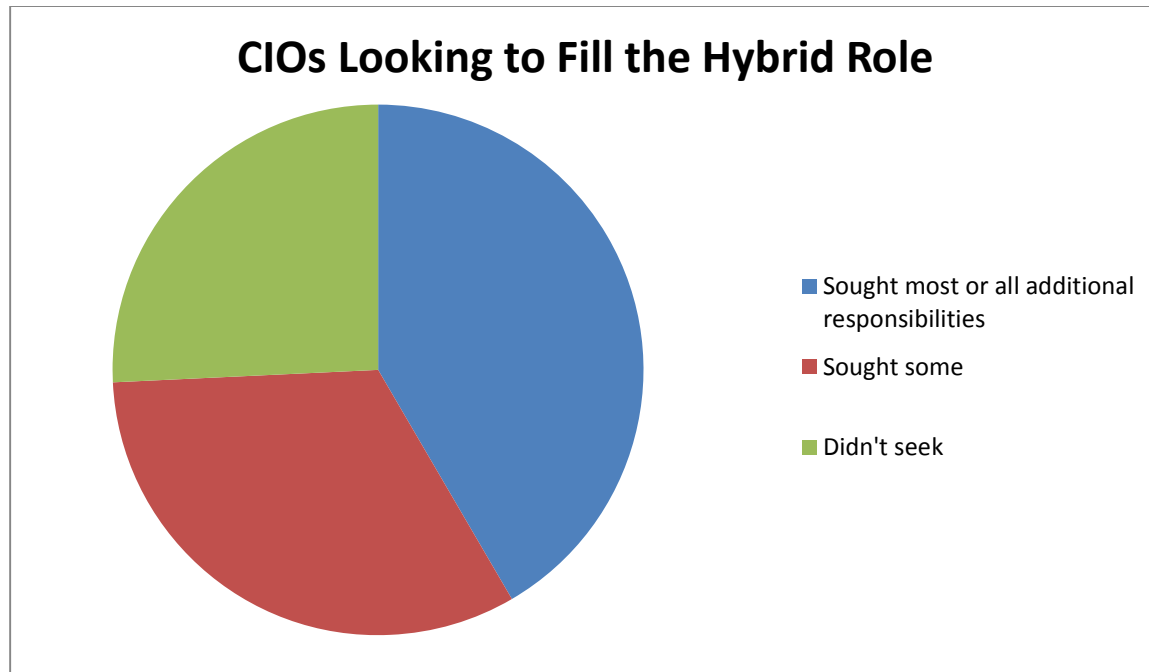
(Overby, 2011, pp. 29).

This is a result of CEOs realizing that CIOs are good at more than technology. They realize that

CIOs make a difference in business innovation and strategy as result of their knowledge of

business processes.

It is no accident that this happening, as technology is becoming more integrated with

business. Thus the need for a hybrid CIO who can do more from every angle of technology

management and general business management is in demand. The successes of the CIO in his

new hybrid role can lead to the opening of new challenges such as management of logistics as a

result of streamlining inventory, which I think we can all agree is outside the typical role of

driving technology. There can however, be a bad side to all of this hybridization of the CIO.

One of the negatives is that when CIOs begin to fill these other general management roles that they may also put too much emphasis on IT and neglect the other areas of importance for which they have been assigned. Another negative is that people outside of the IT department might put up resistance to the CIO taking on a position outside of the IT department. This is because people might feel that they have been passed over for a promotion by an individual that has no business credentials for a general management position. This can cause cultural resistance to the CIO. People may also feel that the CIO is only talking on additional responsibilities to further his or her own career. Also, people may not be willing to jump on board with the CIO in his or her new role right away. On the other hand, the additional responsibilities of the CIO in business will make them want to stay around longer in the business as they are much more rooted in the business aspect of the organization, making them a valuable asset to the organization. Another positive outcome of this hybridization can be seen in the CIOs management team. Along with the CIO taking on additional responsibilities so will his management team. This means that he can bring the best of both worlds into one team to solve problems. The world of business and the word of technology. This means that the old barriers between the IT department and the rest of management have been broken down. Another way that the hybrid CIO adds value is that many CIOs do actually move on to general management positions within the organization. This certainly helps the organization in its goals to grow individuals from within instead of recruiting them from the outside, which requires the spending of organizational resources.

The CIO role has evolved this way over the past five years. Glaser and Kirby have identified a 2008 CHIME survey that detailed several characteristics that make up a successful

CIO who is carrying out a hybrid role. These are the characteristics that define success and

should be reviewed as they are the factors of soft capital that drive the hard capital that the CIO

hybrid role deals with in the organization.

- *Expectation management.* Successful CIOs help their organizations understand
  what IT, and the IT department, can do—and what it can't. Organizational
  members must also appreciate the challenges that implementations represent.

- *Understanding the business.* The best CIOs develop a deep understanding of the
  financial, operational, and clinical issues and activities of the organization and
  the role that IT can play in supporting the organization. They should also have an
  appreciation for the broader healthcare industry.

- *Leadership.* To be effective, CIOs must be able to lead their peers and their
  subordinates. Leadership requires conviction, a willingness to listen, the ability to
  inspire, courage, and superior communication skills. The CIO should be seen as a
  peer by other members of the executive team.

- *Innate talent.* Successful CIOs are bright, have management aptitude, possess a
  solid work ethic, have excellent interpersonal skills, and be able to quickly assess
  complex situations.

- *Adaptability.* CIOs should be able to adjust plans, reset expectations, alter
  projects, and tackle budget challenges that can be required due to changes in
  business direction, technology innovations and shortcomings, and realignment
  of business partner relationships.

- *Credibility and trust.* ClOs who are most successful have a track record of accomplishments. They also have very high integrity. They are honest about mistakes and deliver on plans to correct those mistakes.

- *High-quality IT staff.* The most effective ClOs are able to recruit, energize, grow, and organize a superb IT staff (2009, pp. 40).

These are the qualities of soft capital that drive IT alignment, innovation, and strategy. Compared to a CIO who's only role is a generic IT utility director, we can see that the hybrid role is much more demanding of skill sets and much more of an asset to an organization compared to the IT utility director role or any of the other roles mentioned earlier.

I think that one of the roles that may emerge in the future for the CIO that transforms the role into a new position is something along the lines of a chief strategy officer. This is apparent as the role of the CIO has changed from being technology oriented to a role that is more business oriented. This has resulted from the change of business and IT being separate where business used to give IT orders by telling them what they wanted and expect IT to deliver on their demands. Now business and IT must work together to come up with the best solutions. This new role of chief strategy officer will require the individual to step out of the silos of departments and gain an understanding of all of the areas. Fitzgerald tells us that the ability to manage, build relationships, and understand business strategy were critical for professional advancement (2008 pp. 38). These are the qualities that make up an individual who would be engaged in a position that deals with working with business strategy at the senior executive level.

Today businesses are more technologically oriented more than ever. They will only continue to become even more technologically oriented into the future. This is going to require more integration of technology with business strategy. Thus, the need for an officer who is grounded in technology but most of all capable of delivering strategic solutions for the company based on the use of technology that can lead to a competitive edge. We can already see today how companies with a competitive edge in technology have enjoyed growth and profits. Companies like Amazon and Walmart all have leveraged technology to gain a competitive edge. Having said that we can imagine how important it will be for companies to have a position devoted to strategy and technology.

Some may also think that the advent of the cloud may reduce IT staffs and create a void at the top when it comes to leadership needs in IT. This, however, is not the case. Internal IT will continue to play a critical role in the organization and can still contribute to strategic value and the need for leadership for the internal technology needs will be just as great.   Fitzgerald enlightens us on this fact by telling us that Procter and Gamble outsourced half of it's staff in 2003, but five years later it had completely re-staffed at it's previous level as a result of the internal IT function making substantial value adding contributions.

With companies actively pursuing an information management strategy it only makes sense to have a role devoted to strategy at the senior executive level. Rogalski states that 76.5% of CIOs are targeting enterprise-wide integration and 75% wanted information management strategy in place in three years (2007 pp. 29). With these figures in mind we can see that it would be a good fit to have an individual in place that focuses on strategy as enterprise wide integration is going to drive an organization forward and is going to need to be

integrated into corporate strategy. Information management strategy will also need to be guided by a strategic thinker. These needs are completely different from resources that can provide needs that are completely grounded in technology or that are still devoting time to the deployment of IT infrastructure that can be handled by a Chief Technology Officer. With the use of business intelligence, linkages to customers and suppliers and data warehousing there is going to be a strong need for someone to guide the organization's strategy in terms of business and technology. In the future this demand will become so great that it may lead to the diminishing staple technology responsibilities that are a part of the CIO's role today. This is already evident in the promotion of CIOs into general management positions, as their skill sets have proved to be capable of filling these positions. In some instances, CIOs that have filled the hybrid role have been asked completely to abandon their IT roles. This speaks well for the development of a senior executive who is responsible for strategy that involves technology. As information systems become more driven to make a difference to the business instead of the IT department's latest technology fad, I think that the need for the strategist becomes more evident.

We can see that it is important for an individual to be involved in strategy to drive business and IT solutions. In the beginning of this paper I introduced the qualities that make up a CIO that can add value to the organization. These qualities go above and beyond the qualities that an individual who only holds responsibilities in IT. My point in introducing that information was to show that certain qualities are needed to enable a value added process to come from a CIO and that the staple technology only guru will not work in today's technology driven organization. Next I presented the facts surrounding the IT superman and what his makeup

was. By revealing his identity we are able to see what the future IT driven organization needs from an individual with hybrid roles. With further information pertaining to the hybrid role I think we can see that there is enough skill present to drive the organizations of today and tomorrow. Although many individuals in this hybrid role move on to general management positions and this could indicate that a position such as a Chief Strategy Officer may be a good idea, I think that loosing the aspects of IT in a senior leadership role could be a bad idea. The hybrid role allows the bridge between IT and business to exist, which I think is crucial to aligning IT with the business and creating the most value.

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