2017

Why Small Businesses and Nonprofits Need an IT Strategy

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WHY SMALL BUSINESSES AND NONPROFITS NEEED AN I.T STRATEGY

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Submitted to the Graduate Faculty of

GRAND VALLEY STATE UNIVERSITY

In

Fulfillment of the Requirements

For the Degree, of

MASTER OF SCIENCE

COMPUTER INFORMATION SYSTEMS

AUGUST, 2017

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Table of Contents

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Part 1. Introduction

Technology has a tremendous impact on the potential for growth and success of any business or organization. Whether an organization already acquires elements of success, such as having great products and or service offering, good customer focus, and employees who are passionate about its development, the organization must integrate to its norms, an understanding of the full value of IT, to maintain the same level of success today. This paper focuses on the use of technology in business. The businesses we own or work for, benefit greatly from the increasing speed at which automated technology can perform human tasks. It is technology that drives the business processes enabling companies to do more with less, and grow. Without the use of technology, a business cannot function, let alone grow, meaning that technology is the future of business.

Although businesses have been using technology for several decades, not all businesses appreciate or understand its's impact enough to see it as the future of business. Many will say it is more of a hindrance than an enabler, and thus, have put up all sorts of walls against the automation of tasks regardless of how mundane they are. Others may understand the benefits, yet fear the elimination of an everyday routine. While it is good to empathize with those businesses, it is also important to spell out that the world is more digital today than it has ever been. The key to advancing a business is to implement a technology strategy, and invest in the use of technology. The small businesses that lack a technology strategy, often stem from the business owner's disengagement in technology and its role in a business. This problem compounds to a failure to correctly align a company's resources – including its IT – with the strategic objectives of the organization. And the consequences of a missing technology strategy can be huge, often resulting in lost opportunities to use technology as a catalyst to achieve critical business performance improvements (Mulvey, D. S. 2014, May 15).

That said, this paper is targeted towards the leaders of non-tech small businesses and nonprofits who are yet to adopt a technology strategy, to rethink their corporate approach and ensure technology is one of the driving forces to achieving their missions' goals and objectives. Here are five main reasons for adopting technology and having a technology strategy in place:

- **To ensure IT will be able to support the organizations long term goals and strategy**
- **To plan and prepare for large investments**
- **To keep abreast of new technologies**
- **To raise money for technology investments**
- **To enable responsible IT governance**

Part 2. IT as Support to Organizational Goals and Strategy

The easiest way for an outsider to tell if a company is performing well, is to look at the companies' financial statements, especially the ROA (Return on Assets), which is defined as net income divided by total assets (Hagel III, J., Brown, J. S., & Davidson, L. 2010, March 4).

But to truly understand a company's day to day operations in today's B2B (Business to Business) or B2C (Business to Consumer) world, one must look at the use of information technology within the organization (Slubowlski, Jim. "The Value of IT Within Healthcare."). IT is the backbone of every business

function, and can tell the story of how a function operates to support the overall business. Below are few impacts IT has made in the business world.

2.1- Business Strategy

IT has created new opportunities for products and services. Services which used to be delivered in person, are now delivered over networks. Key examples for this include email or company website. Both provide the ability to instantly make information available to several systems and people (mass communication) at the push of a button. IT has also provided a way for data to be reused by housing pertinent information in databases. Data captured for one purpose (such as transactions), can be used for other purposes like customer targeting. With IT, companies have nearly collapsed the limiting factor of time and distance. Online collaboration tools such as Skype, GoToMeeting, Facetime, make it easier to connect with business partners and customers at low cost. A survey by American Airlines found that small businesses typically allocate between 10 and 24 percent of their annual budget to travel (Beesley, C. 2016, September 23). However, smart usage of technology has helped cut costs immensely. For example, telecommunications company Cisco, figured they are avoiding $100 million in yearly travel costs by utilizing the more than 200 telepresence (video conferencing) rooms across the organization. Similarly, information technology company HP (Hewlett-Packard) said air travels among its offices went down 25 percent with telepresence (Lohr, S. 2008, July 22). In a strategic use of IT, business partners, customers or vendors can be kept in the loop on any changes regarding a service or product.

2.2 - Organization Culture and Structure

The use of IT has also forced organizational culture change and increased productivity, by encouraging the free flow of information between employees (internal), contractors, vendors and other constituents (external). Productivity in today's business world means something new. It is not focused on just zero-defect proficiency (no room flaws), or on perfectly managed minutes of the day. Rather, productivity in today's business world focuses on adaptation, innovation and forward progress. Too much emphasis on efficiency suffocates creativity, innovation and progress. Employees depend on each other for success, and that is precisely why working in siloes is no longer the norm, as information is constantly pushed from one end of the organization to the other, increasing productivity and overall company growth. Per an article from the McKinsey Global Institute, productivity increases by 20-25% in organizations with improved communication and collaboration through social technologies (i.e. connected employees) McKinsey Global Institute. (2012, July).

In addition to organizational culture, IT has enabled a greater variety of structures by encouraging the centralization of information and the decentralization of teams. Gone are the days when corporate information is stored on disparate systems, or where teams are forced to work from a single location. A good IT strategy enables more flexible and fluid structures, dispersed teams and teams that come and go as needs change.

2.3 - Work

IT has dramatically changed the nature of professional work. There is no office or business out there where professionals do not make use of computers. The nature of skilled jobs today involves extensive

knowledge, and the use of computers is often a core activity. But note, that your business can't just throw IT at everything and expect a good result. This is because technology has the power to bring out what is good in an organization, but at the same time it has the power to expose the weaknesses and wrong doings. Becoming effective with technology requires applying the traditional skills of organizing, thinking and writing, with the best usage of IT in researching sources, accessing information, connecting to experts, and communicating ideas and results. To achieve this, businesses have a need for the development of hybrid employees – people who are competent at both their discipline as well as technology.

Part 3. Plan and Prepare for Large Investments

Choosing how to spend money can be problematic for small businesses and nonprofits, especially when the expenditure is hard to justify in comparison with to other more pressing matters. Having a good strategic IT plan in place enables the organization to take time and consider its existing systems, as well as future systems based on needs and strategic direction. The plan allows the organization to identify when equipment or systems will need to be replaced, upgraded or phased out entirely, and will prepare the organization to anticipate ahead of time for those (sometimes significant) expenditures.

Like any other business function, the use of IT must be well planned. A plan will not only help prevent nasty surprises in the form of unbudgeted expenses, it also paves the way for those expenses to be spread across multiple budget years (i.e. 1, 3, and 5 year plans), and keep the bottom line in the financial statements healthy.

Planning for IT is a core activity, which means making it a functional area and a driving force of growth and competence. A rule of thumb for doing so is to tie the technology plan closely to the organizations strategic plan, so that the business is thinking through the appropriate tools needed to accomplish the specific goals and strategies it is striving for in both the future and the present. Therefore, if the business has a three-year strategic plan, then the technology should also be a three-year plan. If the strategic plan is for five years, then so should be the technology (Podolsky, J. (2015). Like the strategic plan, the technology plan is a living/breathing document. It should be revisited yearly, or more frequently if needed. This practice enables the business not only adjust to organizational changes but to also keep up with the rapidity of technological changes.

To sum it up, a plan for IT is a communication tool. A document that aligns technology usage with the organization's strategic goals:
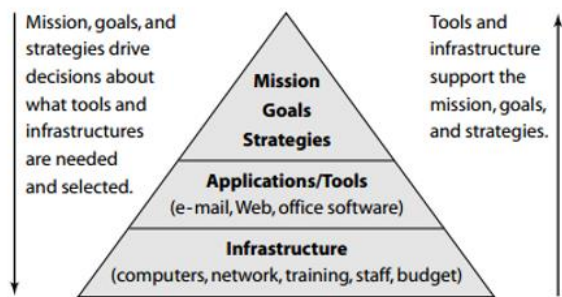
- Defines what technology will be implemented
- How it will be implemented
- How it will be supported

The three-tiered pyramid below gives a visual representation (plus examples) of the mission defining the technology, and the technology supporting the mission.

Figure 3.1 - Technology Plan Pyramid

Technology Plan Pyramid

Mission, goals, and strategies drive decisions about what tools and infrastructures are needed and selected.

Mission
Goals
Strategies

Tools and infrastructure support the mission, goals, and strategies.

Applications/Tools
(e-mail, Web, office software)

Infrastructure
(computers, network, training, staff, budget)

Source: Podolsky, J. (2015). *Wired for God: Strategic Technology Planning for Nonprofits*

3.2 - Other Benefits of Technology Planning

- "Without planning, it is easy to purchase equipment that is not needed, that is inappropriate, or that is not robust enough. "Podolsky, J. (2015)
- Continuously brings up the question…are we maximizing the use of the current systems?
- Budget for present, as well as future needs
  - Ability to effectively see the obvious and not-so-obvious cost of technology
  - The business may spend more in the present, but save in the long run
- Creates a historical record for better communication with current staff, new hires, board of directors, vendors, consultants etc.
- A basis for fundraising and proposals (nonprofits)
  - It is difficult to find funders for technology, who do not ask the question "Does your organization have a well-defined plan for technology?"

3.3 - Five Myths of Technology Planning

Over the years, businesses of all sizes have given multiple reasons for not engaging in a plan for technology. Common reasons heard, have been consolidated and labeled as five myths of technology planning. Podolsky, J. (2015). They include:

1. *It is only about the technology.* This is far from the truth. As mentioned earlier, a technology plan is really an adjunct to the organizations strategic plan, focusing on mission, goals, and strategies. It is only a guide for making appropriate decisions about the tools and related elements needed to fulfill the mission at hand.
2. *It only outlines technology goals and not business goals*. People often refer to technology goals when they really mean business goals. There is no such thing as technology goals, because technology is only an aid to achieving business goals. Therefore, a technology plan outlines technology strategies (not goals) that facilitate the achievement of business goals.
3. *A technology plan will enable the business to save money, or conversely a technology plan will result in more expenditures.* Both statements can be true or false depending on how it is conveyed. Having a plan in place will enable the business to target resources more effectively, and provide a framework to be used when evaluating true cost of ownership (TCO) and budget

appropriately. On the other hand, having a plan in place does not change the fact that technology is expensive. But it will help keep the business accountable, making sure that the technology supports their mission. The only major cost is the staff time involved in developing the plan. This is an intangible cost on its own.

4. *A technology plan can be developed in just a couple of weeks.* This really depends on the scope of the plan and the resources (time included) that can be thrown at it. However, most small businesses and nonprofits should expect anywhere from six months to a year for an effective plan.

5. *You need to be an expert in technology to write a technology plan.* Although it is highly advised to pull in someone with technological expertise, a technology plan solely written by an IT staff are usually flawed and ineffective. A plan should involve a team that is representative of the organization as whole (i.e. key personnel's).

Part 4. Keep Abreast of New Technologies and Developments in the IT Space

Very few business leaders understand fully the scale of change coming through the digital revolution. This has, and continues to be a problem for many organizations today. Even if your business plans to do work the same way it has always done, at the same size (hopefully this is not true for any company), the technology landscape is ever changing and should be monitored closely to stay ahead of unwanted surprises.

Today, new technologies arrive and mature at an increasing rate and allows humans to do things faster, cheaper, differently and more accurately. A carefully laid out strategic plan for IT helps look at emerging technologies and trends and anticipates when technologies may be beneficial or possibly necessary for the business to adopt or embrace.

Per an article on Forbes (Morrison, N. (2017, February 9), rapid technology change is the biggest threat to global business. A survey which questioned recent graduates from the Community of European Management Schools (CEMS) Masters in International Management program reported 68% of respondents chose rapid technology as the biggest challenge compared with 60% who cited shifts in economic and political power and 59% who elected climate change.

> *"It is clear that keeping up with the rate of digital advancement – for example automation, harnessing big data, emerging technologies and cyber security – will pose significant challenges for future leaders, including our own graduates, and will add a whole new layer of complexity as they try to stay ahead of competitors and innovate."* ~ Roland Siegers, CEMS Executive Director.

The article concluded by stating that the consumer and retail industry will change more over the next 20 years, than it did over the last 200 years.

While your business may not have a desire for the latest and greatest technologies, it goes without saying that there will come a point when new ways of doing things simply must be adopted if the business is to stay relevant. Some businesses have gained significantly from aggressively adopting new technologies, while others have preferred to wait until technologies are well established and stable

before adopting. Regardless of where your business finds itself, technology must be on the radar and examined regularly for the right time to make a move.

A second reason for keeping abreast of new technologies and developments in the IT space happens to be cyber security and attacks. Cyberattacks are an increasingly common and worrisome threat. Statistics indicate that 38% more cybersecurity incidents were detected in the last year (2016) than the year prior. Predictions show that the global cost of cybercrime will reach $2 trillion by 2019. This a threefold increase from the 2015 estimate of $500 billion (Esteves, J., Ramalho, E., & de Haro, G. (2017, March 6). To combat the risk of cyberattacks, companies need to understand both hackers' tactics and their mindsets. This can only be done with a strategic plan that includes a section on how to keep systems safe from attacks. Managers or employees (if there is no dedicated IT staff) in charge of the technology area within the business need to adjust their mindsets and become as open and adaptive as possible. An article published by MIT explains that hackers have two different mindsets, explorative or exploitative described as follows:

> *"An exploration mindset used in early stages of an attack combines deliberate and intuitive thinking and relies on intensive experimentation. Once access to a system is gained, hackers then adopt an exploitation mindset."* ~ Esteves, J., Ramalho, E., & de Haro, G. (2017, March 6).

Cyberattacks typically take on a four-step process (Esteves, J., Ramalho, E., & de Haro, G. (2017, March 6). Steps 1 and 2 fall under exploration, while steps 3 and 4 cover exploitation. In step 1, if hackers think your business is worth hacking, they will begin by identifying vulnerabilities. These include surveying the network information, organization information, and security policies. To mitigate this the business should have in their strategy to conduct a "birds eye view" or footprint of their systems on a regular basis. Most attacks on companies are not a result of poor system setup, rather poorly educated end user. Thus, in addition to the footprint exercise, the business is to ensure that employees are well informed on policies regarding the sharing of information. In step 2, after the first layer of security has been compromised, finding weaknesses in the applications running on the systems becomes their next target.

Preventing this from happening involves examining the network for weakness, an activity known as Penetration Test or Pen-Testing. Small businesses and nonprofits do not have the resources for this, therefore should outsource this activity to a trusted IT partner. Steps 3 and 4 builds on step 2. Hackers play on both technological knowledge and social skills when gaining access to systems, and businesses should know that company email and social media accounts are the primary sources of data breach as these are where most end users spend their time. Often, systems are infected for months (as the hacker studies the habits of the end users) without notice. A strategy for IT should have antivirus and monitoring agents on each workstation which scan and update daily.

Part 5. Raise Money for Technology Investments

Small businesses and nonprofits struggle to find money to finance activities, talk less of non-program activities like technology. In the case of nonprofits, the funding bodies such as government agencies,

individuals and foundations, rightly want to see that their dollars are being applied towards the services in the organizations mission (O'Neil, M. 20014, July 28). In for-profits companies, revenue generated from sales is often injected back into other functional areas such as more sales and marketing or external investments. However, in recent years there is a growing awareness in both sectors that investing in operational efficiency and effectiveness can greatly improve the long-term success of the business. This has presented opportunities for potentially untapped sources of revenue and or cost savings, by getting work done quicker, better, easier and cheaper using technology. An excellent example of this is the implementation of VOIP technology across international offices for companies that are global. The ability to easily get in contact and communicate with a colleague on the other side of the globe is a compelling business case to convince a funder to finance the project as a one-time investment. A thoughtful and articulate strategic IT plan can help paint a picture of a competent and operating organization. This will increase general confidence both internally and externally.

It is also worth mentioning that funding a technology project doesn't always mean looking for an outside party to contribute. Rather, making IT strategic involves creating and maintaining a yearly budget for technological activities. Again, putting in place a strategic direction is a stepping stone to anticipating what will happen within the functional area of IT in that fiscal year, and understanding how to budget the related expenses.

Part 6. IT Governance

IT Governance is oversight of the IT function. Its role in the business is to ensure that investments are made and managed based on the best interests of the organization. Having a documented strategic plan is critical to structuring good IT governance, since the plan is the backdrop to which all tactical investment decisions will be made.

The IT Governance team is a subset of the overall leadership team, and must carry its leadership strengths with it as it focuses on IT governance and aligning IT with business strategy. The responsibility of the team is ensuring that IT initiatives and projects move the company incrementally closer to its goal. This team has five core objectives:

- IT strategy is aligned with the business strategy. IT must deliver the functionality and services in-line with the current and planned needs, so that the organization can accomplish what it aims to do.
- Implementing new technologies that facilitate the business to do new things that were not previously possible.
- Based on the improved efficiencies, ensure IT provides increased customer satisfaction, partner satisfaction and loyalty.
- Ensure resources are used prudently. IT-related services and functionality are delivered at the maximum economical value, in the most efficient manner.
- Most IT-related risks are known and managed, and IT resources are secured.

Source: Young, M. (2008, September 9). Leadership - The Role of IT Governance.

Decisions made regarding changes in IT should be handled like other business functions, using KPI's. KPI (key performance indicators) is highly important to the success of business projects and initiatives, and IT is no different to this. Measurements assess whether the IT initiatives align with business strategies, ensure that the funding allocated is appropriate based on organizational priorities, and demonstrate the expected ROI results. There are several measurement areas out there, but it is important to have established metrics that identify the strengths and weaknesses of each project/initiative to facilitate proper decision making and improvements. Below are five major areas for defining IT projects:

- **Time to delivery:** This metric needs to include major and minor milestones along the defined project roadmap. Working on meeting milestones will help project managers and IT governance body determine if the initiative will meet its deadline. It will also assist in understanding what is working well in the project and what is not. Areas that are working well can be used again in future projects.
- **Project Budget:** Helps in identifying potential hidden cost (scope creep) and where they show up. Keeping a project within budget is necessary.
- **Application Performance:** Overall impact of the specific application on the IT infrastructure. This metric also identifies any dependencies the application may have that might have been overlooked.
- **User adoption:** Identifies the benefit of the initiative to the entire organization. The greater the user adoption, the greater the benefit. The metric will also show if adoption is low and where exactly, enabling IT take appropriate steps (training and education) in increasing the numbers.
- **Cost saving and revenue generation:** Measures the impact in which the initiative will have on financials.

Source: Young, M. (2008, September 16). Leadership -Defining IT Performance Measures.

Note that the above list is not conclusive, and will vary based on the type of business and industry. However, once a list is created (based on the strategic document plan) it is highly recommended to not divert for it.

Part 7. Organizational Alignment

Putting together an IT strategic plan is not just developing a document, and miraculously hope that everyone in the organization follows it. Instead, it is highly important that the company adopts some sort of organizational alignment around the purpose of the plan. Creating alignment involves two key aspects; leadership roles and responsibilities, and addressing resistance.

7.1 - Leadership Roles and Responsibilities

Leadership plays a critical role in the technology planning process. Although the roles of the executives as leaders are highly essential, all levels of staff should show leadership qualities during the planning process if it is go successfully (Podolsky, J. 2015). Staff roles (leaders, followers or neutral parties) will

change depending on the activity at hand. Take the administrative assistant for example. He/she is on the planning team, and will need to be an advocate for the work being done. It is their job to understand both the organization's vision and the vision of the IT plan, to be a spokesperson, coach, and change agent to those who are not directly involved with the process. Other specific roles are that of the Executives and the Board of Directors.

7.1.1 - Executives

Often, businesses that have some understanding of IT see technology planning as an operational issue, and thus the executives in those businesses choose to be rather hands-off and delegate the process to other staff members. However, and as we have noted; <u>Technology and technology planning, is as much as strategic issue as is an operational issue.</u>

> *"Technology is a tool that can change the services a business provides, not just how they provide them. It has systemic implications for the entire organization, affecting every aspect of it, at every level. Because of this, the role which the executives play in technology planning is crucial. Hands-on role in developing the technology plan, managing logistics, or getting the plan written is required. However, the executives need to make sure the plan supports the business mission and vision. More than, they must overtly support the vision of strategically integrating technology into the business and be advocate for it to both internal and external stakeholders."* ~ Joni Podolsky

Technology planning cannot become a priority for the business if the executives are not in full support of it. They have the ultimate say on whether it can be made a priority over a six to twelve-month period, and it is their job to make sure that the appropriate internal and external resources are allocated to the process. This shows they are personally invested and involved in the effort, and can get other staff members on the same boat and excited. If looked at from another angle, the role of the executives in relation to technology and technology planning is no different from their roles in other functional areas and initiatives – they are the visionaries, strategists, change agents, coaches, politicians and fundraisers.

7.1.2 - Board of Directors

If the business has a Board of Directors in place, its role in this case is to approve the financial commitment of the company to both the completion and implementation of the technology plan and, if necessary, to assist in securing funding. The members of the board, have a shared understanding of the vision and mission, and have committed to strategizing to make organizational plans a reality. This is no different with the technology plan, and by fulfilling this role, they support the staff in developing the technology plan. This can vary from one organization to another. Some boards are very hands-on, while others aren't, but the following are typical ways in which individual board members (depending on their background and area of expertise) can be helpful during the planning process:

- Participate as technology planning team members – external to the company, they can provide a more objective point of view than a staff in the day-to-day grunt work. There will be board

members who are likely to be using technology tools in their organizations that can speak of their experience and give examples of ways to which technology can be used to improve efficiency and effectiveness.

- Serve as staff mentors – This is a great role for a board member with technical expertise. He/she will be sounding board, and may offer to help the team research technological possibilities.
- Locate resources – each member brings with them a network of professionals. So, in addition to fundraising, they can be helpful in finding potential consultants and or volunteers.

Source: Podolsky, J. (2015). *Wired for God: Strategic Technology Planning for Nonprofits* (pp. 49-50)

Overall, having a board that is invested in the planning will make implementation much easier in the long run.

7.2 - Addressing Resistance

Initiating a technology plan and achieving the agreement to make that plan a priority for the business is a daunting task. The idea to develop a plan may come from a staff member (i.e. IT staff or Administrative Assistant), but the directive to move forward with the plan often must come from leadership – CEO or another member of the executive team, or from the board. That said, introducing a new technology denotes change, and change is interpreted differently by staff members. There will be those who absolutely love change and will find the idea exciting, while to others change can be terrifying, and therefore have resistance to the technology planning effort. Resistance is often taken as a bad thing, but it doesn't have to be; it can help the business develop a better plan, because resisters often identify issues that should be addressed, and they often need to be walked alongside of in doing so.

There are several approaches to addressing resistance, and one of, if not the most important way is to remove the word <u>technology</u> from the discussion. After all, what is really being talked about is identifying the tools needed to be successful. First focus should be on the mission and processes, without regard of how technology will be used. Only when that is done, should discussions on the tools needed to improve the processes can take place. The result of this, is that it brings forth clarity and helps everyone to understand <u>why</u> the technology is needed, and that it will improve something in the business.

Another way to help those resisting technology and technology planning is to get them involved as much as possible in the planning process itself. By asking them to help research technology possibilities in line with the issues the business is trying to solve, they will begin to envision how technology can be used as an effective tool and may generate excitement from doing so. Also, having them see successful demonstrations, particularly from businesses in the same industry or providing similar services, using technology and technology planning will increase clarity. The aim is to get practical examples and focus of successes and challenges; do whatever is necessary (within reason) to help generate vision and excitement.

Here are three come reasons often presented by people for not buying into technology or writing a plan for it. Each is followed by appropriate responses.

- **"It costs too much. Not only will developing the plan cost money, but technology in general is too expensive to implement, so why waist the time?"** – Get to the root of what is meant by "costs too much." Consider altering the scope of the plan, and implement in phases. Do what is most urgent first. Always go back to the ROI, and drive that home.

- **"It's too much work and time."** – Reviewing the business strategies of the organization to an extent is part of every employees' job. Trade-offs may need to be made (at least considered) so that staff can make technology planning a priority. Keep the team adequately staffed; add skilled volunteers and consultants if necessary.

- **"Technology is constantly changing and it's too hard to keep up."** – It is important to remember that the technology plan is a living/breathing document that is developed to help the business manage change more effectively. Come to a consensus on the appropriate technology that will meet the business needs at the time the plan is written, then account for the need to keep it maintained and updated over its lifetime in plans budget.

Source: Podolsky, J. (2015). *Wired for Good: Strategic Technology Planning for Nonprofits* (pp. 20-21)
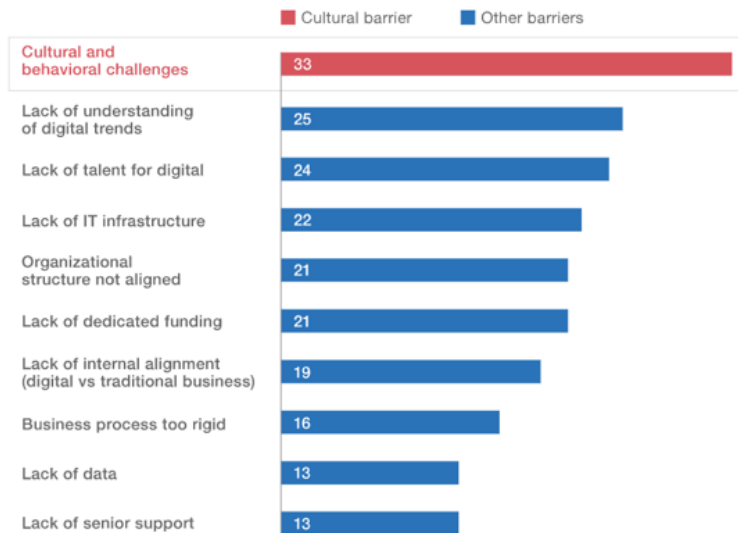
A third way is to have a culture for digital transformation. Earlier I touched on how IT changes organizational culture. At the same time, the organization needs to be open to transforming its culture while still preserving its core elements. The world is deep in the digital age, which is fast-paced, information following, and opportunistic (Goran, J., LaBerge, L., & Srinivasan, R. 2017, July).

The central finding from a recent McKinsey survey of global executives, highlighted three digital culture deficiencies: functional and departmental silos, a fear of risk taking, and difficulty organizing and acting on a single view of the customer. All three point back to culture.

Figure 7.2.1. Significant Challenges to Meeting Digital Priorities.
% of Respondents

WHY BUSINESSES AND NONPROFITS NEED AN I.T. STRATEGY

Cultural barrier ■ Other barriers

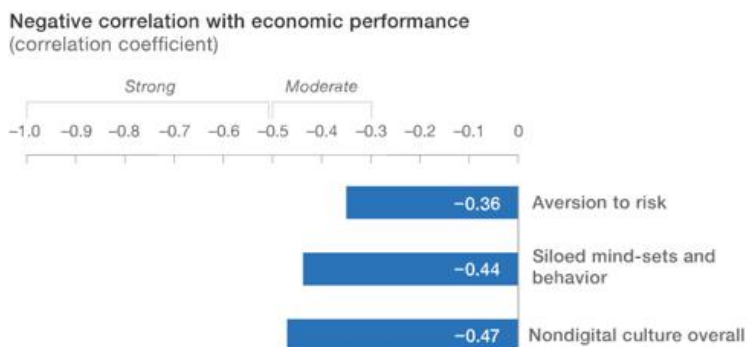|	
Cultural and behavioral challenges	33
Lack of understanding of digital trends	25
Lack of talent for digital	24
Lack of IT infrastructure	22
Organizational structure not aligned	21
Lack of dedicated funding	21
Lack of internal alignment (digital vs traditional business)	19
Business process too rigid	16
Lack of data	13
Lack of senior support	13

McKinsey&Company | Source: 2016 McKinsey Digital survey of 2,135 respondents

When risk aversion is present in a company's culture, lack of investment in strategic opportunities and sluggish responses to changing customer needs (or changing trends) becomes a norm. And when silos characterize an organization, reactive rather than proactive responses to evolving customer needs occur. Businesses like this fail to discern where to best place their bets while digital continues to sway customers elsewhere.

Solving organizational issues like these should no longer be an option to business leaders. However, it must start from them to cast the vision to begin breaking the barriers. Executives who wait for organizational culture to change organically will move too slow, as digital continues to overtake the world blurring lines between sectors, and intensifying competition (Goran, J., LaBerge, L., & Srinivasan, R. 2017, July).

Additionally, the research shows that cultural struggles clearly support poor economic performance as the figure below shows:

Figure 7.2.2. Cultural Obstacles Correlated to Negative Economic Performance

Negative correlation with economic performance (correlation coefficient)

Aversion to risk	−0.36
Siloed mind-sets and behavior	−0.44
Nondigital culture overall	−0.47

McKinsey&Company | Source: 2016 McKinsey Digital survey of 2,135 respondents

Experiences from industry leaders like GE and Nordstrom, have shown what it looks like when companies support digital strategies and investments, taking intentional steps to make their culture responsive to customers, be better connected, and willing to take calculated risks.

As an example, in 2016 GE launched Predix Cloud, a platform-as-a-service (PaaS) offering, designed specifically for connecting industrial equipment to the cloud and providing faster access to industrial data and analytics. It combines GE's deep domain expertise in IT and operational technology, making available features like asset connectivity, scalability for machine data, and security and compliance (Olavsrud, T. 2015, August 5).

Between 2004 and 2014, Nordstrom made an extraordinary series of investments in digital, each with the goal of providing an awesome customer experience. From a point-of-sale system to mobile checkout, their persistent digitization of their business has allowed the company to grow its revenue by more 50% over the last five years. They achieved such success by tightly integrating with all parts of the business that serve the customer, making the right data accessible and simplifying processes – a unified view of their needs (Ross, J. W., Beath, C. M., & Sebastian, I. 2015, January 14).

Business leaders must make it a high priority to shape and measure culture in their organizations by approaching and tackling it as methodically as they do other operational transformations. It is time to get serious about defining the purpose of your digital business model. Although important, don't get hung up about developing a strategy for social, mobile, cloud, or any other technology. Rather develop a strategy for succeeding in the digital economy in a way that leverages unique capabilities of your business, and responds to market opportunities. Then go ahead and grab every technology that will get you there.

Part 8. Conclusion

IT enables change, and change is the key to not going obsolete. Following the same routine of getting work done without changing things up every now and then, is one fact that kills creativity and innovation.

Per Jeff Boss, entrepreneurs (or in this case businesses) cannot afford the mindlessness associated with bureaucracy, or the obsession with efficiency (Boss, J. 2014, April 11). He goes on to state that "employees need to be able to think on their feet, contribute and create the right workplace that wields the right product." Staying relevant in today's marketplace requires something that most companies fear, and that is change. For change to have a lasting impact, there must be the willingness to change, and to keep changing because change is not a one-time event. There is no single organizational overhaul that allows a company to suddenly become competitive forever.

Change is an ongoing way of life. Through a culture that embraces technology, businesses can change, and allow themselves to create an attractive environment (beyond the organizational culture), that is fitting and irresistible to the next generation of employees; Millennials and Generation Z, also known as Post-Millennials who hardly understand a world without technology. In an article by Marcel Schwantes, flexibility is one workplace practice that encourages employee loyalty, boosting their contribution in the business (Schwantes, M. 2017, June 20). These flexible arrangements include time

and location, to name two. As referenced earlier, time and distance are two factors that are no longer a major issue for businesses pursuing work productivity, thanks to the use of technology.

> *"I believe the future of company culture in 10 to 15 years will be dramatically influenced by the Internet of Things. The 9-to-5 will be traded for a flexible work schedule that allows for three-hour lunch breaks, late mornings, or half-day Fridays. Due largely to IoT, defined hours and boundaries will dissolve as work will be able to be accomplished regardless of location.* ~ Bryan Koontz, CEO of Guidefitter.

When/if businesses can use technology as part of creating an environment for more positive change at work, they will undoubtedly witness much higher levels of discretionary effort (defined as the level of effort people could give if they wanted to, but above and beyond the minimum required) in their employees. This is something every company needs to activate within its workforce for competitive advantage. It is something you can see and measure at the same time.

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