



CTO PLAN FOR SUCCESS

7 STEPS TO A TECHNOLOGY STRATEGY

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If you're a CIO or CTO you are probably familiar with the question "What's our technology strategy?". Sometimes the point of the question is general and relates to developing a technology strategy overall, but more often it's specific to a particular hot-button technology area: "What's our cloud strategy? What's our Data strategy? What's our security strategy?".

Many businesses struggle with implementing technology. IT systems don't work how they want them to, IT projects cost more than they anticipate, or they spend their time constantly fighting issues and unreliable IT systems, impacting the profitability and margin of the business. One of the main reasons for this is that some businesses spend all their time reacting in fire drills rather than spend up front proactive time on a clearly defined and actionable technology strategy.

In his latest blog, VNCTech Group's President & CTO, Anthony Maiello, provides steps to help you get started developing a Technology Strategy.

All industries can benefit from advances in technology. From leveraging mobile computing technologies, cloud-based services, and even consumer electronics, there are a plethora of vendor offerings.

However, with all the available technology choices in the market today, how can your organization determine which technology is worthwhile to implement? How can you get a competitive advantage over your peers or improve operations to reduce cost?

The process for developing a technology strategy is no small undertaking, but is worth every ounce of effort. It requires a champion to spearhead the effort, buy-in or acceptance from executive management and department heads, Boards, teams and, let's not forget to mention, considerable planning.

But in the end, your organization will have undergone a comprehensive process to help lead its digital transformation with a robust technology

strategy. The plan will ease the transition of adopting technologies that ultimately benefit the organization, and the amount of upfront effort will be worth the time and energy.

Drawing from multiple experiences as CIO and CTO over 3 decades at different companies across multiple industries, here is my 7 step process to developing a technology strategy.

Seven Step Process

The objective of a technology strategy is NOT for an isolated team to create a pretty document that gets filed and never used. The objective is to identify those opportunities that align with your entire organization's business strategy and goals that your teams, peers and leaders can buy into so you can turn opportunities into actions; and this takes in depth and organized discussions with people across the company, understanding industry trends, and major league planning.

The plan's process can be divided into seven distinct stages:

1. Gather information
2. Categorize information
3. Identify Actionable Opportunities
4. Group Opportunities into Strategic One-Pager
5. Communicate Strategic One-Pager
6. Build technology Roadmap
7. Publish and Communicate Technology Strategy

1. Gather Information

Always start any technology strategy journey by gathering information about your current state and where the company thinks they want to be from a business strategy perspective. The more information you gather the better the outcome. The best way to do this is through collecting data through the following methods:

1. *Researching industry and technology sources* - These sources could be Gartner or Forrester, but the more specific to your industry the better.
2. *Internal documentation* - look at current state documents as well as anything created for future state needs; financial, technical, functional, product ...
3. *Stakeholder interviews* - with many people from different parts of the organization to understand *specific needs, challenges and timescales*. Make sure you're at least interviewing people from technology development, finance, product and leadership teams. The interviews should be 1:1 guaranteeing confidentiality to ensure people are comfortable being open and honest during what should be a minimum 1 hour discussion.

This could be a SWOT type analysis if you prefer but don't "over-process"; the key is to document your observations from the information obtained whether they are weaknesses, strengths or threats and align these to areas of the business area such as application dev, finance, product marketing, infrastructure and so on. In my experience, each stakeholder could produce over 100-200 observations so plan for a lot of data gathering. You may end up with thousands of observations across the 3 areas of gathering information. Remember, the more the better!

2. Categorize Information

This step requires going through all your observations and grouping them into themes or categories. For example, you may detect that a number of observations were focused on "efficiency", so you would group these observations under the theme "efficiency" while maintaining if the observation is a weakness, strength or threat. I recently worked with a SaaS company who wanted a robust technology data strategy that focused on enhancing their data architecture to meet their global needs for "google fast" data streaming as well as synchronization with a very large future data lake. After I conducted the interviews and data gathering, I went through the observations and detected the categories or themes to be Interoperability, security, stability and performance.

At the end of this step you will have all your observations categorized into a handful of buckets (themes) and each theme will have 3 “sub-buckets” to distinguish if it's a weakness, strength or threat. Typical threats would be something discovered in your industry or technology research that may be a disruption while a weakness may be things detected from stakeholder interviews.

3. Identify Actionable Opportunities

Now that you have the observations categorized, this is where you have to get very creative and start seeking out opportunities that will add value for the business. This step requires:

1. Looking at each category, identify “problem trends” that need to be solved based on where you see consistency across observations. These “problem trends” are the start of a rough list of “opportunities”.
2. Label each opportunity discovered based on SWOT type grouping used in step 1 (weakness, strength, threat).
3. Label each opportunity based on the area of the company most impacted (for example, finance, technology, HR etc).
4. Examine all opportunities and fine tune, group if similar, and remove duplicates if any. Now you have a pretty solid list of opportunities
5. Finally, and very important, map opportunities to technology and industry trends you researched in step 1 if you believe there is potential these trends or disruptions may help realize the opportunity(s). For example, advances in SDRAM technology and network speed can address a multitude of opportunities for data streaming and “real time storage” opportunities.

You should prioritize the opportunities by area of the company and focus on those actionable opportunities that will therefore further your overall organization’s business strategy from “low hanging fruit” (short-term) to more longer term and high benefit. You now have the basis and crust of your technology strategy; but you still need to get the company and stakeholders on board.

4. Group Opportunities into Strategic One-Pager

In this step you want to create a one-pager that is what I call “market-ecture”. It’s sort of high level technical architecture but can relate to everyone from marketing to finance to IT. Its purpose is for everyone to quickly see your basic strategy on one page. So it's really a selling item to some degree to use in the next step when you communicate your strategy across the company. What I find most useful is creating your “market-ecture” where the bottom part of the page shows familiar common and foundational elements that may be more technology related while the top layer shows the basic opportunities grouped by company area that everyone would recognize. One of the keys here is to ensure each department sees something they can recognize and relate to.

5. Communicate Strategic One-Pager

Unfortunately, many technology strategies that actually reached this step never get funded or executed. Sometimes because it's simply not a good strategy from a business perspective, but more often is because it is not articulated well or marketed properly to the stakeholders so it's never seriously considered to be funded. In a sense, marketing your strategy to stakeholders is the hardest step and requires the most work.

The good news is you have your one-page that shows your strategy and can use it to start internal marketing. As the technology leader, talk about it at every opportunity. Incorporate your one-page strategy into every presentation at every level, then explain it and dive deep into it for your audiences across the company. Believe in your strategy as being the vehicle for new revenue and markets for the organization. Sell it to everyone; your peers and your Board. The goal is to get the resources and funding needed to execute. Convince them that this is probably the type of strategic investment they were looking for but perhaps nobody until you articulated it this well!

Remember, this is a business and businesses spend money on a variety of things and need to make intelligent decisions on where to make those investments. This is why it's critical you come into these conversations prepared to give a little to take a little with the ability to articulate where there are cost savings after spending money.

6. Create a Detail Technology Roadmap

You enter this step after you have an idea on funding; at this point it may just be a range but that is good enough as there is now interest in your strategy. The roadmap needs to include actions that can be measured and delivered.

Build a roadmap based on the funding and resources that you have or will receive. The roadmap includes all of the actionable work described in the technology strategy laid out on a time-line schedule. It includes a rough estimate of the cost of each opportunity and the resources required from both IT and the business units affected. This creates a project plan that clearly defines cost and resources that can be adjusted over time based on company needs, budget changes and so on. Executing and delivering to plan, especially at the beginning, is extremely critical because this is where you're proving your strategy works to your stakeholders. Lets face it, a strategy that cant be executed and delivered is useless. So ensure you have the right teams, energy, passion and fortitude to deliver on plan.

7. Publish and Communicate Technology Strategy

Ok so I said this isn't just a pretty document that gets filed. That is true. Executing and delivering are the bottom line most important parts of a strategy. But, to be able to articulate and professionally communicate your strategy you should take the time to officially document, publish and print your technology strategy. You will use this official document to communicate its importance over and over to all stakeholders, and the central role it has and will continue to have in determining what gets invested in and worked on, this will become especially important for strategies that take multiple years to execute.

If you create and execute a technology strategy following these steps, I can assure you will address all the business challenges and goals. You will have a plan, stakeholder and peer acceptance, a detailed roadmap/project plan and you will be the technology strategy driver and expert in your business making a lasting positive impact on your organization and industry!

Written by Anthony Maiello



Anthony Maiello is President & CTO of VNCTech Group in Dallas, Texas. He spent five years at Sabre leading Software and R&D teams for Travel systems. Prior to Sabre, Maiello served as CIO of Sterling, General Electric, and Honeywell. He has a total of 38 years of experience in information technology and software engineering across multiple industries and companies.. He holds a BS in software engineering from Manhattan College.