Digital Value Institute

A DIGITAL JOURNEY ROADMAP

Maintenance Status OK

GEAR will be undergoing maintenance in 2 Days ⚠

Maintenance : Augmented Reality Mode

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THE DIGITAL VALUE INSTITUTE
- A CXO THINK-TANK TO FAST-TRACK THE DIGITAL LEARNING CURVE

INTRODUCTION

Every digital transformation [DX] has a unique story. The BIG PICTURE, true story of digital transformation has yet to be told. The technology industry and mainstream press have heretofore focused the narrative on the "Wow and the Why" i.e., "Wow, look at that cool experiment;" or "You have to DO Transformation, or you will go extinct!" It is time to move beyond superficial exhortations to "Get Busy" and "Do Something!" to more nuanced, consequence-embracing and mature conversations regarding the HOW, at what cost and according to what time-table multi-year resource commitments.

The dominant emerging narrative about digital transformation today is how difficult it is:

> **"A recent [WSJ] survey of directors, CEOs, and senior executives found thatdigital transformation (DX) risk is their #1 concern in 2019.Yet 70% of all DT initiatives do not reach their goals [Forbes]. Of the $1.3 trillion that was spent on DX last year,it was estimated that $900 billion went to waste."**

Every digital initiative generates lessons regarding value creation and service experience. The Digital Value Institute has precipitated hundreds of C-level conversations aimed at unlocking the accumulated wisdom of the global leadership community summarizing lessons learned leading in an era where uncertainty has become a central feature of modern capitalism.

Some characterize the contemporary environment using the acronym VUCA—volatile, uncertain, complex, and ambiguous. The Oxford University Executive Education program prefers TUNA - Turbulent-Uncertain-Novel-Ambiguous. Whatever acronym you use, however you describe the world you operate in, your digital transformation initiative must embrace the reality that the external environment changes rapidly and unpredictably.

Cheryl Smith, the former CIO at KeySpan, McKesson & West Jet argues that this uncertainty mandates creating:
- (New) Digital Methodology
- (New) Investment Case
- (New) Role for IT

This in turn will require:
- Substantial IT training/retraining
- New financial models
- New roles for the business

The Digital Value Institute is a new think-tank for identifying how technology is transforming industries and how leaders and organizations can respond. The institute has, together with the following executives, developed this digital journey roadmap based on presentations and discussions at the Digital Value Studio in St Augustine, November 13-14, 2019.

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CMO
White Castle

Paul Gaffney
CTO
Dick's Sporting Goods

Brian Shield
VP IT
Boston Red Sox

John Crooks
IT Division Chair
Mayo Clinic

Tom Murphy
CIO
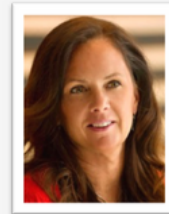**University of Pennsylvania**

Greg Keeling
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Bank of Montreal

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The Institute would also like to thank ABBYY, AvePoint, Cognizant, Infotechtion, and OpenText for their input and recommendations. These companies are in the forefront of digital transformation and have helped the institute develop this digital journey roadmap.

Yours truly,

Atle Skjekkeland
President, The Digital Value Institute
.

Thornton A. May
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DIGITAL BUSINESS VS DIGITAL ENHANCED BUSINESS

Every business, product, customer, and executive are on a digital journey. Soon everything will be connected – not only people, but also cars, houses, pets, and the products we buy and use. This means every business has to become a digital business, and every product has to become a digital product.

Early movers often get a competitive advantage. And when the industry changes, the leaders change. Standing still is not an option, and Digital Value Institute co-founder and futurist Thornton A. May claims that organizations risk being;

- "Kodak-ed" [i.e., failing to jump to the next technological wave];
- "Netflix-ed" [i.e., failing to adapt to changing customer buying patterns];
- "Amazon-ed" [i.e., having digital competitors render product/services irrelevant]
- "TESLA-ed" [i.e., having charismatic outsiders co-opt critical destination points on digital horizon]
- "UBER-ed" [i.e., offering sub-par customer experiences]; and most recently
- "AI-ed" [i.e., having algorithmic competitors outsmart incumbent offerings]

Tom Murphy, CIO at the University of Pennsylvania, recommends organizations to ask themselves the following questions:

- What business are we in? Who are our customers?
- Do we need to "Go Digital"? Who are we competing with?
- Are we already doing transformation? What value does IT bring to the table?
- Do we have the skills? How do we get or develop the skills?

Greg Keeling, Director, Ethics & Conduct at the BMO Financial Group recommends the following questions:

- What aspects of our business, our ecosystem are going digital whether we want them to or not?
- What aspects of the business do our customers expect to be digital, whether we want them to or not?
- What aspects of the business HAVE to go digital whether we want them to or not?

Many executives look at new digital businesses as possible disrupters, but these companies are different than your established business according to Bruce Rogow, a Gartner Fellow and Principal at IT Odyssey and Advisory Service. He claims digital businesses are different since:

- They were conceived, designed, organized & funded from scratch to be digital
- They have ZERO legacy customers, channels, products, policies, processes, cultures, employees, politics, incentives
- They are mostly driven by a dominating personality, ruthlessly focused
- They only hire digital natives & only keep the driven & obsessed
- They live off other people's money & lots of it. Profitability is down the road beyond the next round

You risk disruption from this, but this is often a financial disruption enabled by new technology, not a technology disruption. When you've got a new competitor that doesn't care about profitability, then your industry may be going down.

Most businesses can´t become digital business, but they can become digital enhanced businesses. "Understand your organization - some parts are easier to digitize than others" recommends Greg Keeling. "Other portions will remain high-touch. Think of healthcare - digital records + hands on care (e.g. IV bags) and technology enhanced blood testing".

Bruce Rogow summarizes this as follows:

Digital enhancement is often around transforming customer experience, by-passing slow and expensive middle-men/retailers, new business model or platform, smart products with IoT, and smart firms that easier transform and change. Best-selling author, speaker, and advisor Geoffrey A. Moore claims that a transformation in most cases happens around new technology, changing customer preferences, or management that can move into new industries.

ROLE OF BUSINESS VS IT FOR DIGITAL TRANSFORMATION

IT has rarely been involved in developing direct customer products, and if so, then this isn't the time to start. There isn't enough time in the day to effectively provide the infrastructure AND digitally enhance every product or service. Many organizations have tried to address this by hiring a Chief Innovation Officer, Chief Digital Officer, or VP Digital, but this is often doomed to fail if there are no clear goals, no defined business portfolio, no defined or single business sponsor, or no controlled absolute budget.

Cheryl Smith, the former CIO at McKesson, KeySpan, WestJet, and Cendant, recommends that new digital products and services must be an integral part of the business. Management must be inside the business while CIOs and their IT teams must focus on Infrastructure.

- IT must **focus on the infrastructure**, establishing and maintaining an infrastructure that is solid, easy-to-use, available to all when it is needed, secure in its operation, flexible in its deployment, and easily extensible in its growth
  - "Infrastructure" = hardware, system software, certain applications, middleware, operations, telecommunications, security

- IT must **ensure that the infrastructure is continually changed and modified** to support the digital/IoT businesses
  - "Infrastructure" must be quickly responsive to change business needs both for traditional IT systems and also now for connected OT systems

- IT must **support business colleagues in hiring and retaining the right qualified IT talent to be embedded in the business**, and (possibly) coordinate/optimize experts and skills across the BUs.

This means that IT experts must be embedded inside every business unit to ensure that technology becomes embedded in, wrapped around, attached to or even replace current products and services. Business units are responsible for the R&D, design, development, production, and delivery of customer solutions, whether B2B or B2C.

"Biztech is the new way forward" says Greg Keeling at the BMO Financial Group. The two disciplines must be combined, and until then, we need more technology translators to cross the void between the teams AND we need to fully integrate the legal & regulatory compliance teams into the discussion from the outset.

Research by Bruce Rogow found that there are two key roles to achieving the digital transformation.

- **The Digital Strategist**
  - Ensures opportunities & exposures are being identified
  - Develops and updates the game plan
  - Ensures the priorities, resources & capabilities are engaged
  - Monitors the overall progress

- **The Digital Enhanced Business Orchestrator**
  - Sometimes called "The Control Tower" or Conductor
  - Identifies the moving parts
  - Ensures the moving and necessary parts are coordinated
  - Provides the cadence and acts to speed up or slow down efforts

Greg Keeling recommends organizations to also hire cultural dynamist to make sure the teams are working effectively together, and a Chief Ethics Officer to ensure that the direction of the tech develop is in line with corporate values and broader societal expectations.

"Hire captains, not kings or queens" recommends Yuri Aguiar, Chief Innovation and Transformation Officer at the Ogilvy Group. The transformation leaders have to be able to:
- LeadEngage
- Communicate
- Keep it Simple
- Stay with the facts
- Acknowledge missteps
- Part of the Journey
- ADAPT

Make sure you also have talented first mates however to challenge the captain's directions lest they direct you onto the shoals.

Below are our recommended steps for a digital journey.

STEP 1: ESTABLISH A DIGITAL FORECAST FOR THE INDUSTRY IN 3, 5, AND 10 YEARS

Digital changes customer preferences and behavior. As an example, the proliferation of smartphones changes how people use restaurants. North American restaurants currently get around 20% of their business from take-outs according to Lou Grande, CIO at Red Lobster, but this is expected to significantly change over the next few years. This means restaurants won't need the same amount of space moving forward, and digital is key to growing their business.

Change is constant, but the pace of change is different for different industries. Research and brainstorm how the following areas will impact your industry in 3, 5, and 10 years.

- **Technology adoption**: What is the impact of the proliferation of smartphones? How will the explosive growth of Internet-of-Things (IoT) impact your industry? What will be the impact of AI and robots? How can data predict and change customer behavior?
- **New innovation**: What are the new business models from leading innovators in the marketplace?
- **Market changes**: What are the microeconomic trends shaping the industry? What is the impact of regulations, policy, social trends…?
- **New competitors**: What would be the impact if Facebook, Google, Amazon or other digital competitors moved into your industry?
- **Customer changes**: How will your industry be changing with the changing demographics? Will future customer buy and consume products and services in a different way?

Analysis by the American author, computer scientist, inventor, and futurist Raymond "Ray" Kurzweil shows that technological change is exponential, contrary to the common-sense "intuitive linear" view. We won't experience 10 years of progress in this decade — it will be more like a few hundred years of progress (at today's rate). Expect therefore a new S-curve for your industry.

STEP 2: DETERMINE THE FUTURE DIGITAL PLAY FOR YOUR COMPANY (TO-BE SITUATION)

Every organization in the digital age needs a strategy for being strategic. Rather than wasting time on group-gropes where senior executives use Post-IT notes to choose digital initiatives, Cheryl Smith, the former CIO at McKesson, KeySpan, WestJet, and Cendan, advocates deconstructing the firm's existing value chain. At each link in the chain, do a disruption/competitor analysis, detailing start-ups seeking to cherry-pick value creating opportunities. Analyze where start-ups are focusing their attention and what they are doing with your customer base. Your digital strategy needs to include a response this.

The C-level executives gathered at Digital Value Studio November 13-14, 2019 suggested that this value chain de-construction be required by the Board of Directors to assess disruption and business model risk.

Example of a de-constructed value chain for the hospitality industry:
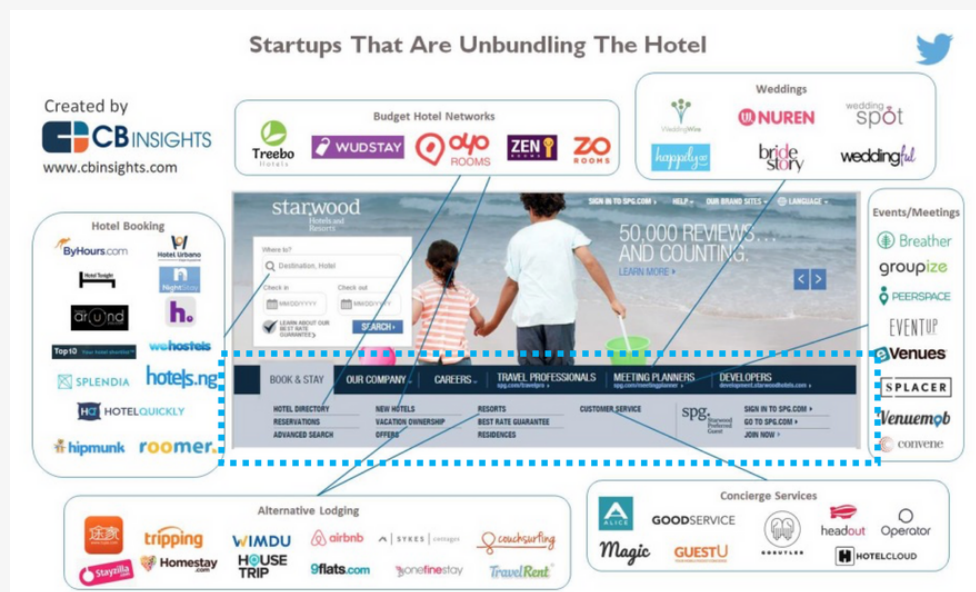
Cheryl Smith recommends organizations to do research and then hold a Reimagination session to get agreement on a digital vision for a company.

- **Voice if the technology**: What are the enabling technologies that can deliver on the new ideas? And vice versa—what new technologies can drive new disruptive products and services?
- **Voice of the innovation**: What are the new business models from leading innovators in the marketplace? Which will disrupt us? Which can we borrow, adapt, combine?
- **Voice of the market:** What is going on? Who is doing what? What are the microeconomic trends shaping the industry? What is the impact of regulations, policy, social trends…?
- **Voice of the product**: What are the product gaps? Are there any latent technologies within the product that can attract new customers or grow market share?
- **Voice of the customer**: Ethnographic Research, social listening and modeling, and use of thick data (qualitative, small samples, human emotional data) to uncover customer and non-customer wants and needs.

A rich source of transformational insights is analyzing the impacts of digitizing critical products and services. For example, what are the possibilities associated with digitizing a keg of beer? A diaper? A pharmaceutical product (i.e., a pill). A tractor? Companies like John Deere have used IoT data to shift their business model according to Scott Snyder, a Wharton senior Fellow, and Alex Castrounis, vice president of product and advanced analytics for Rocket Wagon, an Internet of Things, digital and AI company. The average farm went from generating 190,000 data points per day in 2014 to a projected 4.1 million data points in 2020 fueled by the significant growth in sensorization of fields and equipment. By turning these data streams into insights and prescriptive analytics, or automated decisions based on data, Deere moved from selling farm equipment to delivering 'Precision Farming' services, guided by their data advantage.

According to OpenText, many companies today are taking the 'sensorization' of products to the next level by building entire 'digital twins' or digital clones of physical products. A digital twin leverages sensor information between different parts in a physical ecosystem to represent how they move and interact with each other. Whether building a digital twin of a tractor, wind turbine or jet engine, it allows technicians to remotely monitor the operation and performance of the physical equipment. As well as model the interaction of physical components with each other, digital twins can leverage a content management platform to archive every digital asset relating to a physical product which could include test reports, videos, 3D CAD models and specification sheets.

"Building a digital twin provides a company with an information advantage over other competitive products and allows manufacturers of these products to explore the monetization of data", says Mark Morley, Director Product Marketing at OpenText Business Network.

Organizations also generate an enormous amount of data. Most of this data is unanalyzed. Cheryl Smith recounts the story of being the CIO at West Jet and receiving proposals from several vendors to invest in grand Big Data schemes. She explained that the West Jet web site was "hit" by customers 17 million times a day. Perhaps that would be a good place to start. Basic analysis created an amazingly successful program which sends promotions to people "checking out" various travel destinations. West Jet then turned to operating data launching a pilot which created a dashboard for the CEO which identified which teams, which airports, which pilots and which planes had the best on-time departure performance. A critical metric regarding data exhaust is the time between when data is available and when it is actually acted upon.

The digital strategy provides a shared script for the future. Try to create a vision statement as simple as John F. Kennedy's 1961 commitment "I believe that this Nation should commit itself to achieving the goal, before this decade is out, of landing a man on the moon and returning him safely to earth". Another more practical example is Li & Fung, a Hong Kong supply chain management company. They identified three critical business outcomes: reduce production lead times; increase speed-to-market; and improve the use of data in its global supply chain. Armed with those goals, IT embraced virtual design technology that reduced time from design to sample by 50%.

STEP 3: IDENTIFY CURRENT DIGITAL ACTIVITIES (AS-IS SITUATION)

We recommended in our Digital Strategy roadmap to use the Open ROADS community´s digital maturity model for analyzing the as-is situation. The model has the following elements that should be evaluated:

Strategic Dynamism	Customer Centricity	Digital Culture, Talent & Skills	Innovation & Lean Delivery	Big Data & AI	Technology Leadership
Digital Vision	Brand Vigilance	Digital Culture	On-demand Supply Chain	Data Exploration	Technical Operations
Business Agility	Customer Experience	Organizing Digital Talent	Lean Delivery	Data Engineering	Foundational Technology
Financial and Investment Model	Experience Governance	Continuous Learning	Innovation at Scale	Data Governance	Technology Governance

This helps you identify where you are, but also if you can leverage expertise and skills from other departments.

STEP 4: CREATE A PLAN FOR PROGRESS WITHOUT KNOWING THE ENDGAME (CLOSING THE GAP)

Start thinking about, and documenting, how your product and company are going to get from "here to there". Bill Seibel, Executive Chairman of Rocket Wagon, an Internet of Things, digital and AI company, recommends enterprises to consider the following journey:

- **Traditional Business**: We sell physical products and manage physical labor
- **Connected Devices**: We generate data from connected devices and/or connected employees
- **Connected Platform**: We blend the internet and things on a scalable technology platform that enables data fluidity
- **Connected Services**: We drive significant revenue and/or cost savings from smart services that leverage unique and proprietary data

This is how this could look for a tractor manufacturer according to Rocket Wagon:
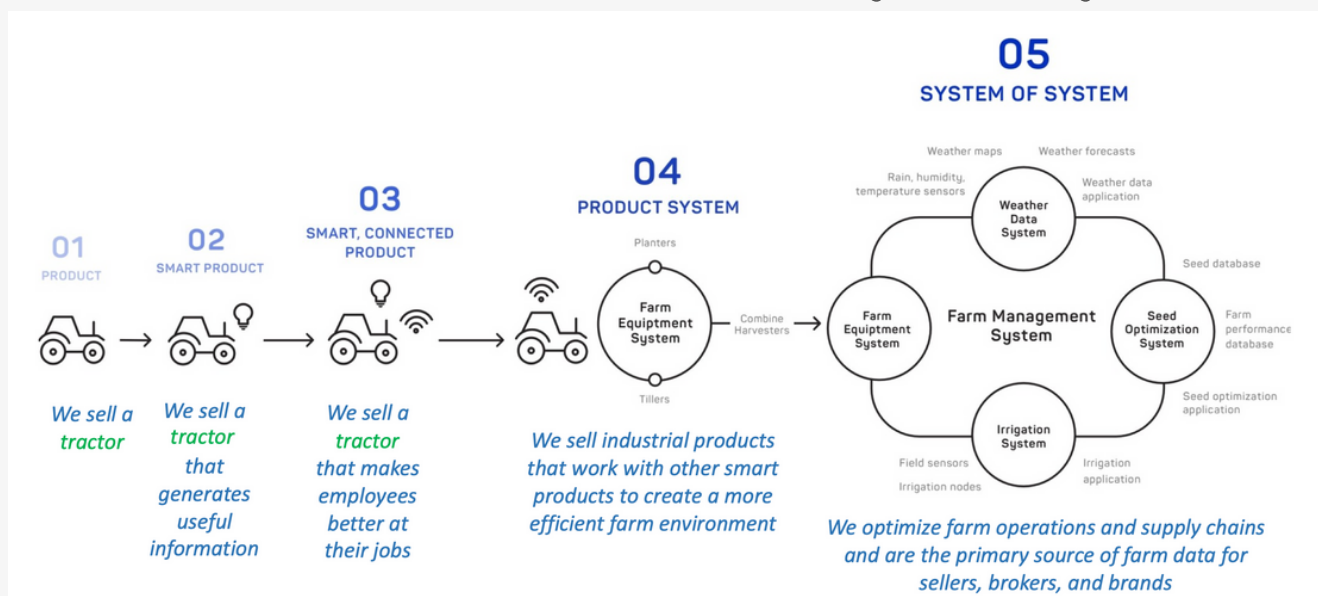
Cheryl Smith recommends the following steps for becoming more data-driven:
- Find and organize the data that you already have (data exhaust)
- Invest preemptively to collect more data, faster than any competitor
- Invest (heavily if necessary) to capture the maximum volume of data from the broadest set of sources, even if sustaining losses in the near-term
- Use machines and algorithms, not people, to produce high-value insights that transform the industry
- Systemize the pattern recognition that converts data sets into industry-altering insights· Use the results to define, refine, develop new products and services
- Leverage commercial terms to make customers (B2B or B2C) pay for insights with data access
- Include terms transparently that reserve the right to use details about customers' actions to improve the offering (the product or service) over time

Good execution eats strategy for lunch" states Yuri Aguiar, Chief Innovation and Transformation Officer at the Ogilvy Group. Aguiar recommends organizations to:
- Early identification of tangible and/or soft benefits
- Steering committee must be made up of front line people
- Grant responsibility "with" authority
- Give credit where credit is due
- Innovate and course correct

Try to be agile when moving forward with the plan for each step in the journey. Greg Keeling recommends organizations to consider one team working on the new now and one team on the next now (e.g. 1 implementing / 1 innovating).

Below are Cheryl Smith´s recommended steps:
- **Draw the Solution Design** - First the user experience—keep it simple (google), then the hardware and software solutions—the edge layer and the platform layer--Technical components must remain as invisible as possible – as does the burden of transporting, processing, storing, and analyzing data. The product must do all of this without noticeable lag or requiring too much user participation
- **Develop the Proof of Concept** - Prove an idea is feasible. Identify technical and delivery risks; test hypothesis solution on a risk-by-risk basis. Devote time to testing and experimentation to ensure the best possible solutions
- **Build/Test a Prototype** - Prototyping phase allows multidisciplinary teams to work out the kinks of a product's key features while putting together the physical and digital components. Two separate, iterative development tracks are necessary at this phase: One that encompasses industrial design and hardware engineering, and another for UX design and software engineering. Work with small vendors, keep costs down.
- **Produce and Test Market a Minimum Viable Product (MVP)** - Develop a working model for delivering the experience to the consumer with just enough functionality to provide real value to the consumer. Iteration continues, but hardware and materials considerations must be finalized, begin prep for large-scale distributors and manufacturers. Cost-benefit analysis.
- **Document the Product / Service Strategy for commercialization, production, and updating** - Develop a marketing plan, business plan, manufacturing plan, customer process and continual testing and improvement plan. Modify as necessary and move to commercialization, knowing that there will be continual improvements

Vince Kellen, CIO at the University of California San Diego, creates "Anchor Visuals" to explain plans and architectures – whether they be business or technical – to help explain what is going on in a particular area of digitization. They use this to communicate their plans using the right metaphors and words. Part of that is a visual language, and all of their architectures have Anchor Visuals.
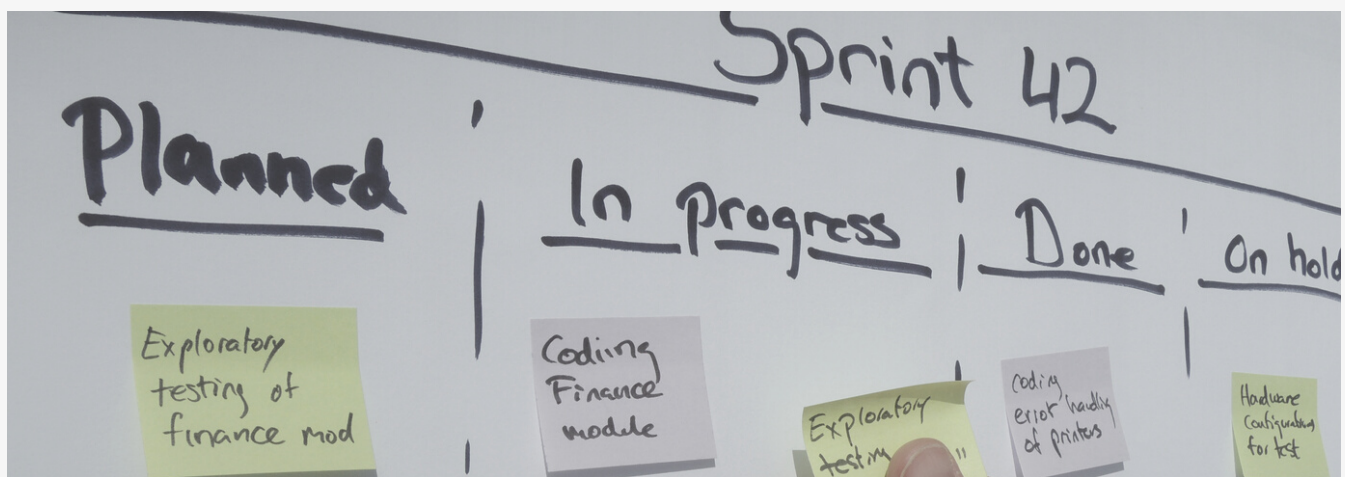
STEP 5: STRUCTURE FOR SUCCESS

If your vision and plan for the future will potentially disrupt your existing business, consider then setting up a separate division or company focused on the future opportunity. Best-selling author, speaker, and advisor Geoffrey A. Moore introduced in his book "Zone to Win" a model to manage existing business while at the same time trying to disrupt it. Moore recommends that a business should have four zones.

- **Performance Zone** for improving value propositions and sales on the current S-curve.
- **Productivity Zone** for optimizing the margins from the current S-curve. Stay a leader as long as the market is there.
- **Incubation Zone** for identifying new value offerings on a new S-curve. Run this as a VC-firm with a diversified portfolio and several stages of funding.
- **Transformation Zone** for introducing new offerings in a new S-curve with separate C-level leadership and KPIs.

As an example of this, the American retailer Kroger has established Sunrise Technology to drive a digital transformation within the company with the mind of a startup. Sunrise thinks about the problem differently, takes Kroger technologies and add others to solve Kroger problems. It can move at a different pace than the established enterprise.

STEP 6: ESTABLISH A DIGITAL INVESTMENT CASE

A traditional business case won't work if your digital products and services are new and transformational, and defining the ROI may not be possible given the total addressable market opportunities. Cheryl Smith, the former CIO at McKesson, KeySpan, WestJet, and Cendant, recommends therefore that you develop a Digital Investment case with incrementally scale bets based on market capture traction and provide for incremental P&L but with high potential equity value. Here are some of her Investment Case modeling areas for consideration:

- **Subscription Revenue** - what uplift might this create?Consumption model - charge for actual usage (hardware vendors going to this model)
- **Asset sharing model** - share expensive assets (Zipcar, AirBnB, rental of equipment when not in use…)
- **mCommerce** - any uplift expected by offering on mobile without cannibalizing current revenue?
- **Promotions and Couponing** - what uplift might this create?
- **In-app Marketing** - partners on a pay-per-click or pay-per-impression model
- **Selling first-party data collected** - today's primary model, but privacy issues
- **Collecting first-party data** - saves on purchase of data and may be necessary

In moving forward with digital transformation, expect "more than a measured level of resistance." according to Lisa Stanely, CEO at OSCRE. The hard part is often selling the vision, plan, and investment case to the corporation as a whole. Remove fear, and the first step in removing fear is to render it explicit (i.e., articulate what people are afraid of). Bill Seibel, Executive Chairman of Rocket Wagon, have found that you will need to be ready to have answers to the following questions:

- **"This will cannibalize sales."**
- **"Our customers never asked for this."**
- **"We need more research."**
- **"Let's start small and see."**
- **"What's the ROI? I have bigger fish to fry"**
- **"Fast follower is best strategy."**
- **"Great idea, but should delay it until timing is better."**
- **"Huge security risk. Our CISO will never approve."**
- **"Technology will never work."**
- **"Not the business that we are in."**
- **"We tried this before…"**
- **"Our competition isn't doing this."**
- **"Don't have team, experience, time…"**
- **"This will never get by Regulatory Compliance."**
- **"This will affect Dept. X, and we need their input."**

Do your homework for all possible questions to prepare possible answers, e.g. risk vs value assessment with CISO if risk is expected to be a possible issue.

STEP 7: ESTABLISH THE DIGITAL FOUNDATION

Infrastructure management needs to be re-inserted into the role of IT. It had been de-prioritized and misperceived as being "too technical" and "not strategic enough." Here is the eye opener – organizations cannot CANNOT be successful at digital transformation operating on an industrial age infrastructure or with 19th century HR practices or with a 20th century contempt for the customer. Organizations need a 21st century triple bottom line outlook.

Best-selling author, speaker, and advisor Geoffrey A. Moore claims that organizations have to work their way up the following steps to improve their business:
• Improve the infrastructure model
• Improve the operating model
• Improve the business model

CIOs and their IT staff need to focus on establishing a digital core or foundation with digital services and APIs. This should be a platform-based services architecture to simplify infrastructure, reduce costs, increase agility, improve scalability, increase utilization, provide self-service for business areas, and ensure security and compliance. It requires immediate and focused attention from IT organizations to be able to support the business in the manner it will need in the digital age. The better the foundation, the higher the building. This requires time and resources, and if not, then the organization gets the IT it deserves.

As an example, AvePoint invested a lot of resources early on in scaling, securing and maturing their cloud platform. That SaaS investment turned out to be critical in allowing AvePoint's channel and Elements offerings to develop to the point where major distributors like Ingram Micro could easily offer it in their digital marketplaces for MSPs. Following the Ingram Micro partnership, According to Dux Raymond Sy, CMO at Avepoint, they are expected to gain 40,000 new customers for their Elements channel brand in the next three years.

OpenText has a view that CIOs need to think about implementing a cloud based digital foundation or backbone that connects the entire digital ecosystem. This includes connecting digitally to every external trading or business partner and internally between an ever-increasing number of enterprise applications that are needed to support today's business environment. Establishing the digital foundation will help to simplify integration to business applications such as ERP, CRM and WMS (warehouse management systems), streamline information flows and provide greater visibility and insights into how the company is operating. Knowing the pulse of the business operation should be a key goal for every CXO.

Just adding new technologies without removing old technologies will increase operational costs and/or risks. Digital Value Institute co-founder and futurist Thornton A. May recommends organizations to timestamp the various piece-parts of the technology with a sunset date (e.g., the sell-by date on a carton of milk), and include the cost of replacement/termination as part of the investment case. If not, your technical debt will continue to increase and may end up as a digital cesspool.

There are many disruptive technologies entering the market at the moment and companies need to explore how these technologies such as Blockchain, AI and IoT can add value to a business. But don't explore these technologies independently, try to think about how to leverage these technologies collectively. For example, once a digital foundation has been laid you can connect IoT devices to the foundation and extract sensor data. This sensor data could be transported to an AI platform where insights are derived and then shared with management teams. Finally, these insights could be archived in a blockchain to provide immutable evidence of the IoT data which will build trust into the overall digital platform. This combination of technologies, on top of a digital foundation, according to OpenText, is known as an Autonomous Ecosystem, a system that offers pervasive connectivity, intelligence, insights and trust, all in one environment.

STEP 8: DETERMINE SUCCESS FACTORS

Capgemini published last year the study "Understanding Digital Mastery Today" recommending the factors for achieving success (source: Capgemini 2018 study findings.)

- Know your customer more intimately - Customer preferences change fast today. Digital 'masters' use analytics to better segment their customers, and regularly conduct market research.
- Align customer experience with internal operations - Digital masters align their operations to meet customer demands, organizing around the needs of the customer. Also link customers directly into operational processes in new ways (Ex: Lego allows users to design new products)
- Stay abreast of innovations in your market - Digital masters constantly explore emerging technologies and business models; work with a wide ecosystem of partners; test ideas quickly
- Set a vision and tie it to strategy and governance - Digital masters directly align strategies and KPIs to vision; make new company acquisition a strategy if appropriate; a strategy that clearly tells you where you are going; middle management responsible for execution (Ex: Under Armour from apparel manufacturer to digital health and fitness company)·
- Empower employees and put customers first - Digital transformation isn't a technical issue, it's a cultural change; being customer-centric is critical; employees empowered to put customers first (Ex: Every WestJet employee given 2-part cards to make commitments to customers on the spot)
- Proactively narrow the digital talent gap - Digital masters take talent development seriously —know the new skills needed upskill current employees first; create learning platforms; begin searches and hiring for talent holes
- Break silos between business and technology - Ensure that business and technology functions, orgs, and teams work together with few if any barriers; align objectives and incentives

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SUMMARY

Digital is game of pace, priority, and balance according to Bruce Rogow. Tom Murphy, CIO at University of Pennsylvania recommends CIOs to do the following:

- Don't get in front of business It always takes longer than you think
- Build collaborations by building relationships (Coalition of Willing)
- Put the governance/decision-making structures in place early
- Do only what you need to do; outsource the rest
- Engage the business owners in the right part of the organizationEngage broad group of stakeholders
- Look for practical efforts to take on to help develop skills & show value

Every company, executive, customer, and product is now on a digital journey, and CXOs needs to provide the business with a path to digital competence. This could be bringing in outside experts or hiring digital transformation experts. As an example, George Mason University has launched a program that addresses the three foundational elements of successful digital transformation:

- Technology Management
- Operational, Financial & Strategic Management
- Change / Culture Management

Remember that If you get too far in front of your troops, you start looking like the enemies. But if you are not moving fast enough, then your competitors will find a way of getting there ahead of you.

The Digital Value Institute

A CXO think-tank to fast-track the digital learning curve

NEXT STEPS

TASK

Click here for video library

Check out video interviews with experts like Geoffrey A. Moore, Dion Hinchcliffe, Ted Schadler, and Thornton A. May.

Click here to sign up for the in-person event

Join the Digital Value Studio event in St. Augustine November 2020 (not for IT solution and service providers)

Click here to get help developing a digital strategy

Get help developing a digital strategy for your business.

ABOUT THE AUTHORS:

THORNTON A. MAY
FUTURIST, AUTHOR, EDUCATOR

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Thornton May is a futurist, author and educator. At Dartmouth College, Keio University [Tokyo] and the Center for Japanese Studies at the University of Michigan, Thornton studied Japanese technology policies and practices during the Meiji Restoration [1868 through 1912], post-World War II and 1970s. Living in Tokyo Thornton worked at a series of global Japanese companies assisting managing "emerging technology" investments.

Thornton was hired by noted futurist Alvin Toffler [Future Shock, Third Wave, Power Shift and Revolutionary Wealth] to assist the "technology futures" program for Toffler Associates. Toffler Associates designed and delivered the strategic plans for South Korea [President Kim Dae-Jung] and Singapore [Minister of Finance Lew Kuan Yew]. These plans specified the technology investments necessary to sustain economic dominance in the twenty-first century.

Thornton returned to America to lead technology research at the Nolan Norton Institute. His research team is credited for coining the phrase "Chief Information Officer" in 1981. Thornton pioneered the multi-client research program designed to discover strategic and operating insights associated with emerging technologies.

His work as a futurist and anthropologist position him as part Paul Revere [the one to sound the alarm] and part Arnold Toynbee/Edward Gibbon [the one who explains what has happened/what is happening].

Thornton has taught at four major universities, written columns on technology for multiple leading publications [25 plus years at Computerworld], advises major organizations and government agencies on how to think differently about technology, all the while conducting seminal anthropological field research into technology-use behaviors of the various tribes comprising modern society.

Thornton began his career as an anthropologist studying tribal behavior in the modern Japanese corporation. He received a bachelor's degree from Dartmouth College, a master's degree from Carnegie Mellon University, and did post-graduate work in Japanese Studies at the University of Michigan. At five feet, seven inches, he played professional basketball in Japan.

Thornton brings a scholar's patience for empirical research, a second-to-none gift for storytelling and a stand-up comedian's sense of humor to his audiences. His book, The New Know: Innovation Powered by Analytics examines the intersection of the analytic and executive tribes.

The editors at eWeek honored Thornton, including him on their list of 'Top 100 Most Influential People in IT.' The editors at Fast Company labeled him 'one of the top 50 brains in technology today.' Thornton is a founding member of the Internet of Things World Forum.

ABOUT THE AUTHORS:

ATLE SKJEKKELAND
DIGITAL BUSINESS EXPLORER AND EVANGELIST

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Atle is a digital business explorer and evangelist. His interest in the business impact of cloud, social, mobile, IoT, and artificial intelligence has made him a frequent keynoter and workshop facilitator at events across the world.

Atle has a MSc in Economics and Business Administration from the Norwegian School of Economics with a specialization in business strategy and marketing. He has since 1996 spent his career in IT and Information Management, with a focus on how information can be used to add value, reduce costs, manage risks, and/or create new opportunities. This has made him into a leading information management innovator and educator.

From 2004 to 2018, he worked as VP, COO, and SVP at AIIM – a global association for intelligent information management. While at AIIM, he founded the AIIM annual conference, online community, certification, and training programs with over 30,000 students. He also served several years as the General Secretary of the DLM Forum for the European Commission, responsible for creating standards for electronic records management and digital archiving.

Atle led for almost a decade AIIM´s information management think-tank in EMEA and NA with a focus on identifying the future and impact of cloud, mobile, social, AI, etc. He also participated in several task-forces about the future of Enterprise IT with industry experts like Geoffrey Moore [best-selling author of Crossing the Chasm] and Andrew McAfee [best-selling author of Race Against the Machine]. The task-force with Geoffrey Moore introduced the concept Systems of Record vs Systems of Engagement, and a Forbes blogger named this the best social media idea of 2011. While at AIIM, he also developed and delivered custom information management programs for several large organizations like Chevron, European Central Bank, HP, Konica Minolta, and Oracle.

ABOUT THE TECHNOLOGY PARTNERS:

ABBYY is a global leader in Digital IQ for the enterprise. We create a new class of AI technologies that provide the digital workforce with the skills to understand enterprise content and processes. Our technologies are used by thousands of enterprises in finance, insurance, transportation, healthcare and other industries, helping organizations make intelligent business decisions. For more information about ABBYY, visit www.abbyy.com/company

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AvePoint accelerates your digital transformation success. Over 16,000 companies and 6 million Office 365 users worldwide trust AvePoint software and services for their data migration, management, and protection needs in the cloud, on-premises and hybrid environments. AvePoint is a Microsoft Global ISV Partner and four-time Microsoft Partner of the Year Award winner. Founded in 2001, AvePoint is privately held and headquartered in Jersey City, NJ.

ABOUT THE TECHNOLOGY PARTNERS:

Cognizant (NASDAQ-100: CTSH) is one of the world's leading professional services companies, transforming clients' business, operating and technology models for the digital era. Our unique industry-based, consultative approach helps many of the best-known organizations in every industry and geography envision, build and run more innovative and efficient businesses.

ABOUT THE TECHNOLOGY PARTNERS:

Infotechtion

Infotechtion is a vendor independent and global consulting firm specializing in holistic governance practices: mapping, understanding, remedying, improving and automating information protection and governance across the enterprise, and critically in Office 365. Most customers have already invested in Office 365 products; we provide strategic consulting and business enablement services on integrating business information with information governance requirements. We do not sell any software or licenses, which allows us to focus exclusively on the maximization of the value for our clients.

We are based in Europe, UK, and the US with global clients in highly regulated industries with up to 300,000 employees. Many of them are now using new Office 365 features and functions to better protect information with in-place records management. This ensure compliance while reducing operational, legal, and reputational risks, but also allow for sunsetting of legacy content management systems to reduce costs.

ABOUT THE TECHNOLOGY PARTNERS:

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OpenText delivers information advantage with world-class Enterprise Information Management (EIM) technologies, transforming how insight is created and decisions are made. OpenText EIM solutions enable enterprises to leverage information assets to their full potential – on and off the cloud – to drive productivity, growth, and lasting competitive advantage. With a focus on world-class EIM technologies and services, OpenText continues to innovate and provide customers with the capabilities they need to become tomorrow's disruptors.

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·   Build automation and agility into business processes
·   Integrate operations and improve supply-chain efficiency
·   Create more engaging customer experiences
·   Turn mountains of data into new insights
·   Improve content management, information discovery and security
·   Detect and respond to digital threats or extract forensics from all your endpoints

OpenText helps customers realize an information advantage with an industry-tailored approach to process, governance, culture, and technology to deliver solutions that address industry-specific trends, business challenges, and regulations.
Learn more about OpenText (NASDAQ/TSX: OTEX) at www.opentext.com

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