

## The Technology Fallacy

- Wizard of Oz – isn't really about the cyclone, it's more about her making her way in this strange new world. Parallel is that digital disruption isn't about technology it's about you navigate through this new digital environment. It's about learning to business in different ways, restructuring organizations to respond to changes, continuous learning and new leadership styles. Note, in the book Dorothy doesn't go back to Kansas!
- Knowing digital disruption is happening and doing something about it are two different matters – 87% acknowledged that disruption was happening but only 44% doing something about it. Staggering! Ask yourself if you are part of the 43% gap! Start with an inventory of opportunities/threats that technology poses for your organization. Sequence the inventory based on impact and immediacy. For each, describe and rate how you are responding. Identify what is getting in the way. Create an action plan for the most urgent interventions.
- Can't predict when disruption will happen or, how much disruption will happen. You have to be ahead of it. Ask front line workers (employees) as they know how well the organization is responding as they are the ones with firsthand experiences with customers, suppliers and colleagues. C-Suite and board are often too optimistic. They don't understand the key challenges facing their organization.
- If your employees don't believe you're reacting to digital disruption they may act in accordance to those beliefs. They may also leave their jobs to join companies that are responding. What employees think may matter most.
- Setting up a secret innovation lab without communicating those initiatives to employees or involving them may be problematic. Must have clear communication on what is being done and how the organization is changing.
- Why aren't companies acting – CXO/board doesn't understand enough about technology and are focused on short term priorities. Companies are trying to balance too many priorities. The board wants to focus on "how before why" but you need to agree on the philosophy of "why before how".
- What got you here, won't get you there – too focused on past successes, leading you to believe they're a factor in future success. Leverage the technology opportunities to do add value to customers and do business differently.
- It tends to be exceedingly difficult, if not impossible, to maintain Six Sigma standards while also experimenting with new ways of doing business.
- You need an early warning system for how your business is declining as it takes time to respond. You can't go out and invest in technology when it's too late....because it's too late.
- Biggest threats facing your company due to digital trends – Internal Issues (lack of agility, complacency, inflexible culture), Market Disruption (product obsolescence, lower barriers to entry), Competitive Pressures. Note, the biggest threat to a company is itself – communication and decision-making structures are too slow.
- We all have access to the same technology!
- Biggest difference between working in a digital environment vs traditional – Pace of Business (speed, rate of change), Culture and Mindset (creativity, learning, risk taking, collaboration), Flexibility (collaboration, decision making, transparency).
- Core periphery – core group of employees that you invest in and nurture. Blend with open market talent.
- If you are truly going to accelerate performance improvements, you have to stop focusing on efficiency...it's a diminishing returns game. Focus on effectiveness, on impact, on value delivered. Change your mindset.
- Digital Maturity = transformed processes, talent engagement, and business models while improving work with partners and employees.
- Companies tend to focus on what they already know. They focus on productivity and efficiency, rather than learning, growth and innovation.
- So much is about talent – skillset and attitude.

- Technology – (Adoption) - Individuals – (Adaption) - Business – (Assimilation) - Public Policy
- 15 years ago business adapted quicker to technology than individuals did – simple economics.
- Costs of information technology have come down – powerful mobile devices are ubiquitous.
- Companies don't need to drive adoption; they need to focus on adaption – eg the BYOD lag.
- Adaption – gap between want/expect to use the technology vs how companies support the technology. The gap is frustrating for employees based on what they can accomplish in their personal lives. As companies learn to engage with customers using technology, they often ignore their own employees. Highlighted by being able to apply for jobs outside your company than within.
- Companies exist to assimilate knowledge of it's employees. Problems arise when transactions and knowledge flow externally easier than internally. Key problems companies face is the need to adapt quickly enough to customer demands while also changing the organization to meet those demands.
- Adaptions means changing the way organizations work – flattened hierarchies, speeding up decision making, skill development, understanding both opportunities and threats.
- The more an organization knows, the more it can learn – not the sum of it's learning but rather how an organization learns and how it transfers information from one part of the company to another. Absorption can be cultivated.
  1. Expand talent diversity.
  2. Provide opportunities for developing skills for working in a digital environment.
  3. Enhance "sensing systems" for building up knowledge base.
  4. Velocity of information flow through org design and tools like Slack.
  5. Help employees understand "why" they need to close the knowing-doing gap.
- Baseline knowledge is why companies maintain R&D labs – learn how to learn.
- Adobe – to bold step of putting employee and customer experience under the same umbrella. Invest in the employee experience.
- Embark on "field trips" to look at how digital leaders actually deploy technology internal for processes and customer interactions. From your observations, identify 3 digital pilots. Execute, evaluate, learn.
- Transformation – dramatic change, not incremental. Think Michael Hammer with Process Reengineering.
- Use "digital maturity" – how an organization can engage with a fast-moving and continuously changing environment. *Aligning an organization's people, culture, structure, and tasks to compete effectively by taking advantage of opportunities enabled by technical infrastructure, both inside and outside the organization.*
- Webster definition of digital – characterized by electronic and especially computerized technology. It defines the word as an adjective (digital marketing) vs a noun (I'm in charge of "digital" or we're going "digital").
- Psychological definition of maturity – the ability to respond to the environment in appropriate manner. This response is generally learned rather than instinctive. You will have a better idea of digital maturity once you start moving towards it. Maturity is not a destination.
- How do you accurately score maturity since it's often perceptual data? Not all parts of an organization will mature at the same rate. So, applying an overall maturity score is misleading.
- Recognize that your organization will always fall short of ideal. Refer your company as maturing.
- Digital disruption represents both an opportunity and a threat for you, and the inverse for your competition.
- Digital strategy drives digital maturity. Not necessarily a long-term plan rather a recursive process of identifying the overall goals of the digital business, developing short term initiatives to get the organization closer to the goal, and then rethinking the nature of those goals base on what the organization learned from the short-term initiatives.
- Digital Strategy books - Leading Digital, Machine/Platform/Crowd, The Digital Transformation Playbook, Platform Revolution.
- When organizations have too many priorities, it's a sign there is no strategic focus. Tradeoff between established and new business initiatives is really exploration vs exploitation. Exploration processes are about innovation, often resulting in lower-performing shorter-term outcomes that result from the new processes.

Exploitation, in contrast, yields better short-term outcomes from organizations doing things in familiar ways but lower long-term outcomes by not searching for new ways to do things. You need balance “ambidextrous”.

- Effective digital strategy is an on-going process of strategizing that keeps the organization moving toward evolving goals. However, unless you have a good sense of where you are headed, your short-term objectives could lead you in the wrong direction. Hagel from Deloitte advocates a 10-20 year timeframe in addition to short term goals.
- Reverse engineer the future! Imagine what the future technological infrastructure looks like and plot the steps to take you there. Create the future. Pressure test your strategy with your customers.
- Digital strategy is about adapting the organization to a changing environment in a way that leads to a sustainable competitive advantage.
- Digital strategy shifts the focus from features of the product to how the technology enables new strategic actions for people and organizations to engage. Technology is secondary to the strategy it enables.
- Adoption of an expertise tool to tap into experts. Makes people within the organization aware of what skills are out there it also makes them aware of their own skills.
- Don't jump straight into transformation if you haven't first learned the basics of improved customer service and efficiency.
- The lead over digitally mature companies will continue to compound. The most mature are still trying to do things differently to leverage their advantages.
- A black belt is a symbol of maturity, not expertise. With a black belt you have mastered the basics of the art and now you are ready to start your real training.
- Digital strategy isn't just thinking of new initiatives that enable organizations to do business in the same way but slightly more efficiently. Instead, it involves fundamentally rethinking how you do business in light of all the digital trends occurring both inside and outside the organization. It involves identifying new services, sources of revenue, and ways of interacting with employees.
- Genotype = blueprint for an organism. Phenotype = characteristics of the organism, which result from interactions between its genetic blueprint and the environment. The same genotype can produce very different phenotypic characteristics, depending on the organism's environment i.e., genetics for being tall but height is affected by diet, sleep, climate, illness, stress etc.. The genotype, or blueprint, for an effective leader includes having purpose, inspiring employees to facilitating collaboration. Those fundamental capabilities will be expressed differently in a digital environment.
  1. Direction – providing vision and purpose
  2. Execution – empowering people to think differently
  3. Inspirational leadership – getting people to follow you
  4. Innovation – creating the conditions for people to experiment
  5. Nurturing talent – supporting continuous self-development
  6. Influence – persuading and influencing stakeholders, losing hierarchies and adopting peer-to-peer networks
  7. Collaboration – getting people to collaborate across boundaries
- Digital transformation is a people issue not a technology issue.
- Create your list of most critical capabilities for effective leadership in a digitally maturing environment. Conduct a 360-degree assessment of what skills you have in house. Create a plan to address the short falls. Triage with existing leaders to see if they have/can develop these skills or whether new leadership is required.
- More distributed leadership. Hands on the tools and masters at their craft. And inherently curious, leading through influence vs command and control. At NZ Bank people had to reapply for leadership roles based on culture and leadership potential.
- More integrated, interactive leadership. Creating a shared vision, managing programs cross-functionally, resolving issues with objective prioritization. Must have i. a Transformative Vision (knowledge of market trends, business acumen, problem solving skills), ii. Forward Looking (clear vision, sound strategy,

foresight...how to respond to those trends), iii. Understanding of Technology (pre-existing experience, digital literacy).

- Digitally mature companies seek out digital leaders vs digital leaders creating a digitally mature organization.
- Leaders must be change oriented – open minded, adaptable and innovative. If leaders do not have a place to regularly update their knowledge they will become obsolete – continuing education, cross-gen reverse mentoring program, on-line programs etc..
- The biggest challenge facing digital leaders is simply having the will to make changes happen to adapt the organization to the emerging environment. Can do this by i. Providing vision and purpose (engage people in creating and owning that vision and apply strong governance to develop capabilities to move forward over and over again), ii. Creating conditions to experiment (hire people that are more risk tolerant and not-succeeding is ok and possibly a behavior reward, putting in place sandboxes to go play and test new business models with universities/entrepreneurs etc.), and iii. Empowering people to think differently (asking what's possible and what do our customers want), iv. Getting teams to communicate across silos.
- Decisions should not be happening at the upper levels only, needs to be pushed down. Disconnect with what leaders think they're pushing down. Leadership is trapped at the upper levels in digitally immature companies. Leads to the perception that digital is just talk amongst management.
- Not being able to retain digital talent is the biggest threat within digital disruption.
- Employees need to update their skills yearly. Learn agility, be intellectually curious and become digitally literate. STEM should be STEAM as the Arts should be added. You need a balance of technical and soft skills.
- In the digital era, the half-life of expertise is about 18 months i.e., half is relevant. None by the time you graduate. "With technology we can teach people, or we can rent. I'm looking for people that can think." Past performance can no longer be an indicator or future success. Need education to be continuous, experiential and exploratory. It is about finding and seeking learning in nearly everything - being in a constant state of growth.
- Easier to teach older workers digital than to teach younger workers organizational knowledge. However, they are superior at the strategic application of technology.
- If digitally immature organizations with fixed mindsets talk about "digital" they almost need to trick their organization by calling it something else otherwise the fixed mindset takes over. Organizations don't believe they can do it because they're not digital people. Instead they talk about efforts in terms of improved customer service etc. without explicitly referencing digital.
- The most important skills for succeeding in a digital environment are strategic thinking, change orientation and a growth mindset. Growth mindset organizations = innovation, collaboration and risk taking.
- Growth mindset organizations hire from within their ranks, fixed hire from outside.
- Learning platform – teach and learn from each other i.e., Salesforce Trailhead. Employees can create learning modules. Modules taken are recorded in performance evaluations. Platform also records which modules are used the most, a point of pride for the creators. What have you learned that makes you more competent in a digital company and how have you helped others become more competent? Embed learning plans into your talent management process but ensure that learning extends beyond formal training programs (i.e., job rotation).
- Talent magnet – high standards, prodigious appetite for coaching, recognition that they benefit from coaching others, a willingness to take smart risks, and the ability to deconstruct complicated activities into components parts that can be learned and mastered. Digitally mature organizations don't even register access to talent as being an issue. Keeping the talent is another story. Key theme here is to utilize your existing talent! Digitally mature organizations possess an advantage in recruiting and they are coming after your most valuable people.
- "What if we train our employees and they leave vs what if don't and they stay". Communicate your strategic talent plan to employees and make sure they know what skills will be needed so that they can help identify talent or develop those skills.

- Employees want to work for digital leaders and will leave if they don't. Number one way to reverse the talent drain is to provide the opportunity to grow and develop.
- University towns often provide talent development companies are looking for at great value. Expand your talent search beyond your industry. One way to bring in the digital mindset. For example with healthcare you can tap the financial services sector
- Cigna – identified areas where the company needed to grow and reimbursed employees for tuition in these areas of study and certification.
- Cardinal Health – created a digital innovation centre where customers and business partners are routinely invited to collaborate and help drive innovation.
- One in three Americans are freelancers – choosing it as their career path. The gig economy. Crowdsourced work. Side hustles!
- Tour of duty model imposes on employees the need to continually develop diverse skills and to get those skills from within your organization vs going outside to gain that experience. Teaches people to be more adaptable to change as they are repeatedly thrust into new environments. Become comfortable, confident and competent in doing different things and doing things differently.
- Human jobs – first augmenting and enhancing the human worker, then replacing the human all together. The question shifts to whether human employees can take on other value-added roles and work i.e., cardiologist will deliver cancer diagnosis from a human being and not a computer.
- AI – will replace jobs where you can make a prediction from past data.
- Blockchain – will replace jobs that depend on mediating trust between parties i.e., self-executing contracts.
- 3D/VR/AR – same
- ATM – twice as many bank tellers today but their jobs are different i.e., less about counting money vs relationships with customers.
- Managers – less time on oversight and more time on coaching, mentoring and development.
- Work of the future vs the future of work. We worked with our hands, then we worked with our heads, we are starting to work with our hearts. Pablo Picasso said of computers “But they are useless. They can only give you answers” ....suggesting people are good at asking questions....so what questions should we be asking?
- Humans will open themselves up to computers rather than humans because their fear of judgement is significantly diminished. AI used to make human judgements like with Google and AlphaGo and the insights/strategies the computer developed on its own playing Go vs people and centuries of playing the game.
- People need to be lifelong learners. Jobs that people have at the beginning of their careers will be long obsolete by the end of their careers. People will pivot to new careers as their skills become undervalued in one job or sector. Repurpose their skills with ongoing training and with a growth mindset.
- Surfers – individuals will need to chart their own career path like surfers figuring out which waves to catch and ride to natural completion and then which wave to catch next and which ones to let go. Some surfers prefer to ride the wave all the way into the beach vs exiting at the peak in search of the next big wave.
- Lower salary for taking an engagement where you are learning or lower hourly when starting a family. Or, go higher pay for an 80-hour week job that maximizes their current skillset and their career aspirations are so aligned.
- Japanese concept of ikigai – the junction of what you love, what you are good at, what you can be paid for and what the world needs all come together.
- Paradoxically, work that is about to be disrupted may become particularly value before disappearing.
- Pay attention to the work that is about to be disrupted. Create an action plan for each job category. Link these to learning opportunities to make sure employees can reposition themselves.
- Culture is not what is written on the mission statement or company values it is the **accepted patterns of behavior**. Digital culture – not about how the organization decorates its space, it's about how an organization behaves, what it values, its unspoken but deeply embedded beliefs. An inflexible culture, complacency and

lack of agility are cited as the biggest threats because of digital trends. Start by reading Ron Friedman's *The Best Place to Work*.

- Digital culture is i. Critical to driving digital business adoption, ii. Distinct and consistent, iii. Intentional
- Maturing companies tend to “pull” digital transformation by cultivating conditions that are ripe for transformation to occur i.e., bottoms up. Top-down directives impact adoption from dragging feet to sabotage. Must move away from command-and-control.
- Employees need to be trained how to use technology and time to figure out how to integrate these tools into their work. Adoption of a new digital platform will hinder employee performance for the first few (6) months.
- BASF – encouraged collaboration platform and drop email.
- Google dropped “20% time” as risk-taking and innovation already embedded in their culture.
- Prisoners Dilemma Game – 30% always cooperate, 30% never cooperate, 40% of people will be more collaborative and cooperative depending on environment. Experiment by Harvard professor (Yochai Benkler) found different results based on what game he told people they were playing i.e., Wall Street Game (acted in self-interest) vs Community Game.
- Get the culture right first then the changes in technology and business processes will easily follow. Make digital culture “intentional”. Rate company culture (today and future state) on 6 criteria with a 5-point rating system:
  1. Agility – slow/deliberate vs nimble/quick to act
  2. Risk appetite – cautious/risk adverse vs bold/exploratory
  3. Decision making – instinctive vs data driven
  4. Leader structure – hierarchical vs distributed
  5. Passion for work – work to live vs live to work
  6. Work style – independent/siloed vs collaboration
- Examine your current digital initiatives from an adoption standpoint to identify challenges that may be linked to culture. Determine if you are using a push or a pull approach for enabling those initiatives.
- Salesforce culture is based on “ohana” or the Hawaiian cultural value of extended family. Employees raise their hands when they want a new challenge.
- Companies that are ahead in digital transformation are doubling down and are striving to be more digital.
- Slack Technologies – Designers, developers and product managers work alongside customer support agents to answer support tickets. Helps build empathy as they hear about problems with the product.
- Start with “one weird trick” for developing culture that everyone can rally around. Example around weight loss and one weird trick to get skinny!
- Strategic agility = ability to act rapidly. Cross-functional teams help here as they by nature can act quickly, can tackle separate initiatives and pursue various options simultaneously, bring various perspectives to problem solve. If it takes more than 2 pizzas to feed the team, the team is too big “Jeff Bezos”.
- CarMax – never tells the team how to solve the problem. But tells the team what the problem is and the KPIs to work against.
- Marriott – there are digital professionals in almost every function, not just the digital units. We all work with the same scorecard and address issues together.
- ING's agile journey i. Decide how much you're willing to give up, ii. Prepare stakeholders for the leap, iii. Build the structure around customers and keep it fluid, iv. Give employees the right balance of oversight and autonomy, v. Provide employees with development and growth opportunities.
- Important to educate employees on strategic objectives as well as developing “rules of engagement”.
- Cultivate talent markets so specialized talent is available as needed and on demand. These are strategic resources and you need to invest in the long-term health of the talent pool. Some may remain full time or part time or even contract. Many people who are not in the market for full time work have valuable skills – students, parents of young children, near or at retirement age.
- Innocentive – retired workers with specialized skills as part of most valuable.

- Many organizations treat contractors as second-class citizens and you can't afford to do that. On demand talent is extremely important.
- Employees need to feel that the company is willing to invest in them and continue to offer opportunities for growth.
- Collaboration platforms – Slack, Jive, Salesforce. Manage networks and share content...who knows whom and who knows what. Interestingly, when polled employees responded that they hadn't learned anything from their system. Easier for employees to get up to speed.
  1. Be cautious of the "superpromoters" who are posting 35 times the amount of content in the name of personal branding.
  2. Be cautious of homophily where people only communicate with people who are most like them or "groupthink".
  3. Creates a sense of community.
- Sociometrics – measurement of relationships and social structures, as well as the measurement of groups and the behavior and status of individuals within such groups. Employees are open to sociometrics and see it as a Fitbit for their career. I'm a salesperson and I want to be the best salesperson. Do I know what the best salespeople in the organization do and where are the significant differences?
- HP – "if HP knew what HP knows, we would be 3 times more productive.
- Test fast, learn fast, scale fast – how can this concept be applied by would-be digital innovators in legacy organizations, particularly in organizations designed to reduce or eliminate failure?! Running experiments is essential if your company wants to understand what is possible. Traditional companies think of experiments as success or failure vs what you have learned. There are no failures.
- Innovation – is not about doing innovative things. It's about cultivating an organizational environment that is conducive to innovation. It's also about being willing to act on those ideas. Organizations not born in the digital age struggle with innovation - the cultures try to remove or limit variation and second leaders find it challenging to innovate while also keeping the company's core business running.
- Legacy companies are built to eliminate experimentation – impacting ability to compete more effectively in a digital environment. Fear of failure baked right into the culture?!
- In more turbulent environments, where the conditions under which business takes place are rapidly changing, efforts at variance reduction may not be ideal. They may have the benefit of identifying new business processes that are far more effective or efficient, but a possible unintended consequence is that the organization may not be able to realize these benefits because it is optimized around the old conditions.
- When traditional companies innovate, they compare themselves against the competition...who are also risk adverse. Innovate where you think you will be 5 years from now.
- No wonder traditional companies can't experiment under Six Sigma since they've been trained to fail 3.4 times out of every million. How companies deal with setbacks may determine their ability to survive. With traditional companies you want to adopt a "test and learn" mindset rather than a "fail fast" one. Also, failing fast focuses on speed and cost vs what you have learned. Companies also think failing fast is embracing risk, but it's not risk if it never touches your core business model. Innovation has little effect unless it's transforming your business models. Scale your learnings and experiments across the business.
- Goldilocks Zone – if you're not failing enough you're not being bold enough.
- Thomas Edison – I haven't failed, I've found 10,000 ways that didn't work.
- Knowing why you succeeded may be more valuable than the success itself. Success is not the short-term goal, learning is. Learning from one round of experiments should inform the next round of innovation. Learning toward a specific goal should help define and align the experiments.
- It's hard to be a digital leader when you're being asked to change the wings on a 747 while it's flying.
- Throwing money at it is not the answer, in fact the opposite is true. Underfunded efforts encourage teams to be "scrappy". Focus where you make your bets.
- An innovation has to be simple and focused. It should only do one thing otherwise it confuses people.

- Assess your organization's risk policy and see which policies have flexibility. Make your customers aware of the selected risk and security policies. Put a timeline on the experiment. Release MVP to small group of customers. Identify learning loop by making it intentional.
- Increasing digital maturity:
  1. Assess – remember digital maturity is unevenly distributed throughout your organization.
  2. Enable – understand how digitally mature your organization needs to become. Remember it's not how mature your organization needs to become but what are the steps to be less digitally immature ie., remove the bottlenecks that are keeping you from being mature.
  3. Mature – retain lessons learned as you develop short sprints
- Levels of maturity
  1. Exploring – using traditional technologies to automate existing organizational capabilities.
  2. Doing – focused on supporting digital technologies rather than becoming digital as an organization.
  3. Becoming – your organization is deliberate in creating more advanced changes to current business, operation and customer models.
  4. Being – business, operating and customer models are optimized for constantly changing digital environments and ecosystems. Digital DNA. This is utopia!
- Organizational DNA will do everything it can to avoid change and keep it from being digitally mature. DNA traits can be grouped into Organize, Operate and Behave. How can I build pockets of success and leverage these across the organization?
- Assess your organization's digital maturity
  1. Conduct a survey of employees
  2. Conduct interviews with executive leaders
- DNA carries the underlying instructions, development, functioning and replication for “being” digital. Think of **MVC or Minimum Viable Changes**. Use these to “splice” into existing DNA. Changes are not simply a case of doing things differently; they are responsive to a need to be different. Focus on where success is likely to occur, and one characteristic to change. Which of the top 3 to 5 digital DNA traits would most move the needle for your organization over the next 12-18 months:
  1. Continuously innovating – products, services, processes, technologies, business models.
  2. Real time and on demand.
  3. Shifting decision rights and power.
  4. Modulating risk and security boundaries.
  5. Fluidity.
  6. Geography agnostic.
  7. Morphing team structures.
  8. Intentionally collaborative.
  9. Dynamic skill building – learning to learn, digital literacy
  10. Changing nature and types of work – job descriptions, tasks, skills etc are all highly fluid with DT.
  11. Constant disruption.
  12. Customer centricity.
  13. Democratizing information.
  14. Managing multimodal operations.
  15. Synchronizing ways of working.
  16. Productive mobility.
  17. Changing mix of traditional and nontraditional stakeholders.
  18. Flattening and changing hierarchy.
  19. Nimbleness.
  20. Continuous ecosystem disruption.
  21. Constantly changing decision criteria.



- 22. Failing forward, learning faster.
- 23. Iterative.
- Execute MVC with a sprint. Decide how to measure and whether change has been effective or not. Debrief lessons learned and weave those lessons into ongoing transformation efforts. Successful MVC doesn't mean digital maturity. Iterate on the change because you'll rarely get it right the first time. Scale the change to other areas of the organization.