



The Top 5 Barriers to Digital Transformation

WHITEPAPER



“When digital transformation is done right, it’s like a caterpillar turning into a butterfly, but when done wrong all you have is a really fast caterpillar.”

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INTRODUCTION

It should no longer come as a surprise to anyone that digital technology has revolutionized the business landscape. With the recent announcement that Apple has become the first trillion-dollar company in history, digital technology is set to be the dominant market driver well into the future.

The internet has fundamentally changed how we communicate, and smartphones have only served to accelerate the pace of change. It was only 11 years ago that the iPhone - the first smartphone with a virtual keyboard - was first introduced to the market. Now, as of 2018, it's estimated that 5.1 billion people (2/3 of the world's population) own mobile phones¹.

We've all seen the change for ourselves. The truth is that consumer preferences for customer service channels are shifting more rapidly than ever, with the rate of consumers who identify digital channels as their preferred mode of communication ever on the rise. Additionally, the digital communication landscape has continued to grow increasingly complex, with the advent of increasing number of digital customer service platforms; 2018 alone has seen the entry of Apple Business Chat and WhatsApp for Business, in a market already crowded with Twitter, Facebook Messenger, Live Chat, and SMS.

It's also clear that the stakes are high; powerful legacy brands like Nortel and Sears that have failed to keep up have fallen apart in ways that no one could have anticipated 20 years ago. Other companies, like Blackberry, have allowed complacency to take them from market leaders to laggards and are struggling to catch up and stay off the rocks. Brand loyalty is dead. Today's consumer has higher expectations than ever, and they are quick to switch companies if those expectations are not met.

With such a stark outlook, it seems clear that businesses need to seriously invest in digital transformation to keep from being left behind.

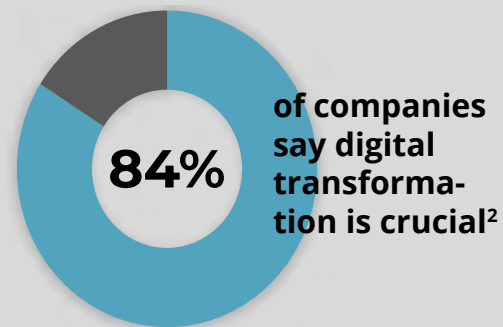
Unfortunately, many businesses have yet to fully invest in a comprehensive digital transformation strategy - creating a digital expectation gap that leaves large companies vulnerable to competition from start-ups who arise to fill the unmet needs of consumers who want to do business digitally.



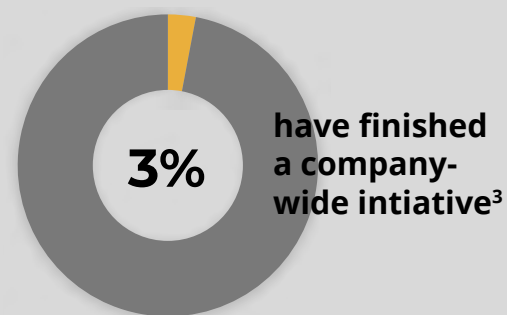
¹ We Are Social

The statistics about the slow pace of digital transformation are shocking:

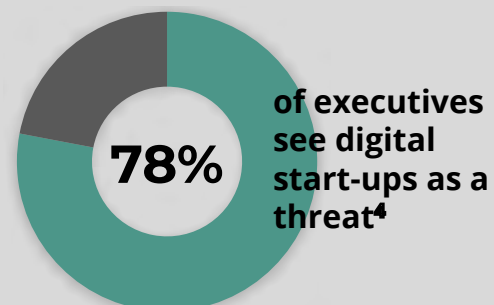
Some Facts to Consider:



but only



and yet



^{2, 3} SAP

⁴ Dell

Companies know that digital transformation is important. They're just not acting on that knowledge. And this inaction occurs despite the proven rewards of implementing digital transformation initiatives:

- Companies that invest in digital technology see higher rates of revenue growth - double that of companies who did not invest in digital technology⁵.
- "53% of organizations with strong alignment between customer expectations and their organization's middle- and back-office functions/systems are achieving significant positive business impact from digital, compared with 3% of those with little alignment"⁶.

All of this begs the question - if businesses know why they need to execute on digital transformation and they know the consequences of failing to do so, why is almost everyone continuing to drag their feet?

What are the barriers that keep organizations from investing and executing on organization-wide digital transformation, when the stakes have never been higher or more clear? What are the factors that have created such a wide gap between knowledge and action?



We've reviewed the research and identified 5 top barriers to organization-wide digital transformation:

1. Legacy Systems
2. Organizational Silos
3. Lack of Change Management
4. Poor Leadership Engagement
5. Risk Aversion.

1. LEGACY SYSTEMS



It's perhaps somewhat ironic that one of the largest barriers to effective organization-wide digital transformation is, in fact, previous technology investment that has resulted in a "vast accumulated legacy landscape of applications and systems that must be ever maintained, nursed, and supported before innovation can even be considered"⁷.

The increasing pace of change means that organizations are being pressed to do and achieve more in every budget cycle. However, the problem that many CIOs are facing is an era of relatively flat IT budgets, in an era of ever-increasing demands on already-strained IT budgets. Many CIOs must juggle the expenses of existing legacy systems operating along with increased costs in cyber security and regulatory compliance. Additionally, the cost of keeping existing systems operating takes up the lions' share of most enterprise IT budgets:

Fully 82% of the IT budget⁸ in an average organization gets spent on keeping existing systems operating!

"Most of the executives I talk to are still very much focused on digital largely as a way to do "more of the same," just more efficiently, quickly, cost effectively. But I don't see a lot of evidence of fundamentally stepping back and rethinking, at a basic level, "What business are we really in?"

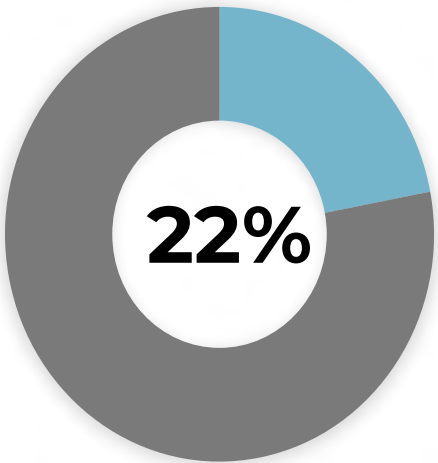
John Hagel III, Co-Chairman at Deloitte LLP Center for the Edge Leaders

"In today's era of volatility, there is no other way but to re-invent. The only sustainable advantage you can have over others is agility, that's it. Because nothing else is sustainable, everything else you create, somebody else will replicate."

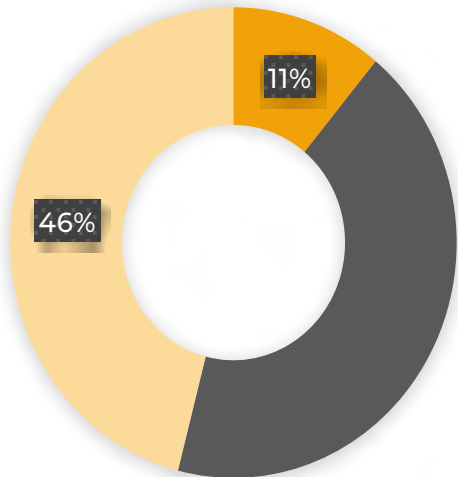
Jeff Bezos

When it comes to the hard budget decisions, many companies are choosing to kick the can down the road.

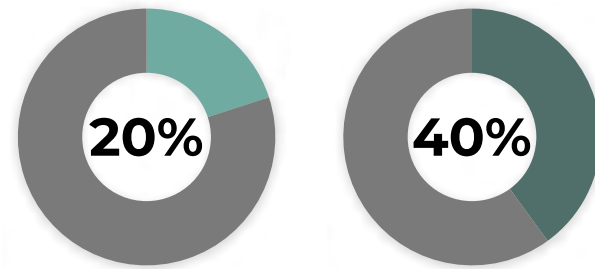
Rather than leading with innovation, most companies are hoping to do just enough to stay ahead of customer dissatisfaction driving customers to other companies. How widespread is this problem?



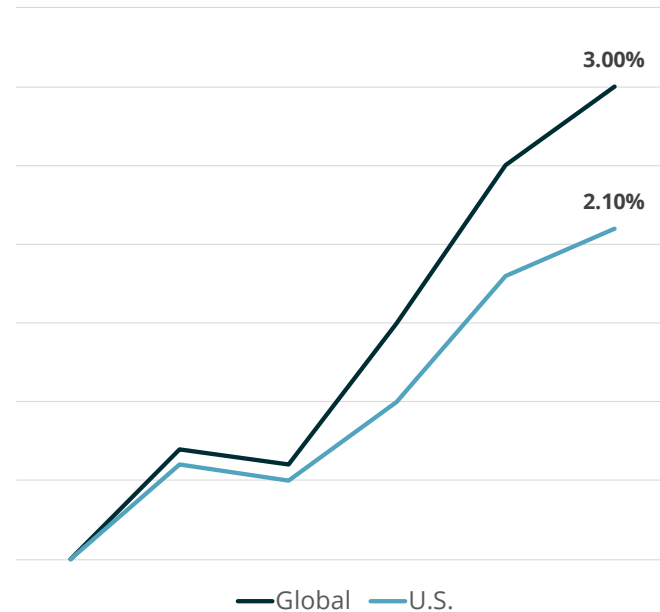
of companies⁹ have seen their IT budgets increase by 10% or more in the past two years.



11% of surveyed executives¹⁰ expected their tech budgets to decline, and 43% expected budgets to remain flat



In that same time period, only 20% of companies¹¹ have earmarked 10% of revenue for digital transformation efforts. And looking ahead to the next two years, fewer than half (40%) plan to do so.



Enterprise IT budgets are expected to grow 3% globally¹², and 2.1% in North America.

Given current rates of inflation in the United States, a 2.1% increase may not even be enough to keep IT budgets flat. There is a good chance that this will end up in a net reduction of IT budgets.



The stakes are high, but companies are standing still. By and large, companies are choosing short-term IT budget savings over the long-term revenue growth and increased efficiency that comes from investing in organization-wide digital transformation. By the time keep-the-lights-on and security expenses have been dealt with, very little money is left for investments that would make real, organization-wide progress towards true digital transformation.

This is a problem, because legacy problems cause more problems than just massive ongoing expense. Existing legacy infrastructure is one of the primary factors in the incompatibility of departmental data and infrastructure.

This inability to effectively manage data and systems across departments is one of the leading causes of the next barrier to organization-wide digital transformation: **organizational silos.**

2. ORGANIZATIONAL SILOS

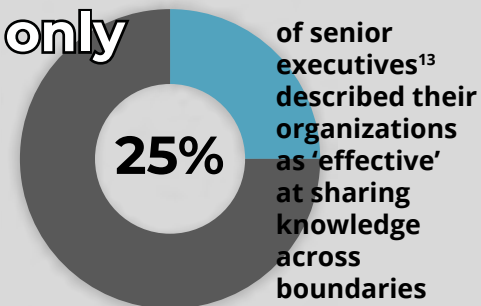


The term “functional silo syndrome” was first coined in 1988 by Philip Ensor, who worked for Goodyear in organizational development, and has since come to be referred to as “organizational silos”. This highly-descriptive agricultural metaphor refers to the phenomenon of departmental information systems that are incompatible with other organizational subsystems that should be related. Thus, information that should be shared freely across departments remains trapped in their respective systems. Even when a lot of information is accumulated and stored, it is effectively walled off from other parts of the organization like grain in neighboring silos. Organizational silos are one of the primary obstacles to effective data-driven decision making.

Despite the fact that organizational silos have consistently been identified as a top organizational challenge for 30 years, the research shows that little to no progress has been made in eliminating organizational silos from standard business models.

The data is clear: organizational silos have been a challenge for decades, but many organizations have failed to address them in a substantial way

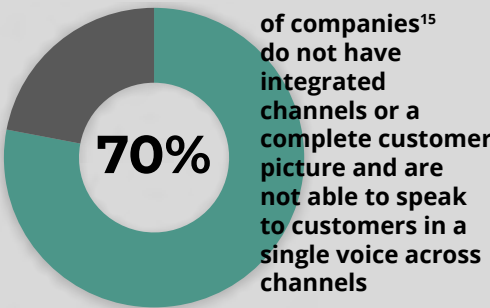
Important Facts:



and



and yet



¹³ McKinsey ¹⁴ Salesforce ¹⁵ New Voice Media

More Facts to Consider:

- Another survey found that 39% of employees¹⁶ don't believe there is enough collaboration in their organization
- Fewer than 50% of employees¹⁷ feel their employers were honest and effective in discussing problems
- 41% of CX professionals¹⁸ identify organizational silos as a significant barrier to seamless customer experience
- Another 34% of CX professionals¹⁹ name difficulty in unifying different sources of customer data as a primary barrier to good customer experience

So what is happening? Why are organizations kicking the same can down the road without ever addressing the problem at hand?





Perhaps one of the reasons for this is a fundamental disconnect between decision-makers and front-line service providers. Most high-level decision makers are simply not aware of the impact that organizational silos have on their customer experience. A provocative study called *The Iceberg of Ignorance* found that senior executives were aware of only 4% of day-to-day problems, department heads were aware of 9%, employee supervisors 74%, with only front-line employees being aware of 100% of the problems that affected product and service quality²⁰.

In other words, the leadership of most organizations is out of touch with the daily reality of customer service and with the barriers to frictionless customer experience; Fundamental decisions about the future of the organization are being made by people who are almost totally unaware of the problems experienced by employees and customers.

But why does this happen? Why are the problems of organizational silos and disconnected leadership so common? Perhaps it's because most companies still are not making plans for how to manage organization-wide change. There are very few companies who aren't at least investigating, if not enacting, digital transformation initiatives.

*But while most companies have at least embarked on their digital transformation journey, most companies have failed to implement **comprehensive change management strategies** to help them manage that transformation.*



3. LACK OF (EFFECTIVE) CHANGE MANAGEMENT



Change management as a management strategy has been around since 80s, yet lack of adoption of change management is still consistently identified as a primary obstacle to digital transformation - despite the fact that there are proven benefits of implementing change management programs:

- Initiatives that with “excellent” change management are six times more likely²¹ to meet objectives than those with poor change management.
- Simply moving from “poor” to “fair” change management²² increases the likelihood of achieving objectives by a factor of 3.

A proper approach to change management has never been more important; it used to be that large organizations could expect one major change every 36 months. But in the digital era, organizations are facing “faster, more complex, more interdependent, and more cross-functional change than ever before”²³.

So if the benefits of change management are clear, and the need for change management is evident, what is keeping organizations from adopting change management strategies?

The 3 primary reasons organizations resist implementing change management strategies:

1. Change is unsettling

In organizations that struggle with outdated legacy systems and organizational silos, getting all of the parts of the organization to work together in order to enact comprehensive, organization-wide change can feel like herding cats. Getting all of the various departments within an organization to agree on a common course of action can be a challenge, and that challenge is frequently exacerbated by the difficulty of data and systems that are incompatible across departments.

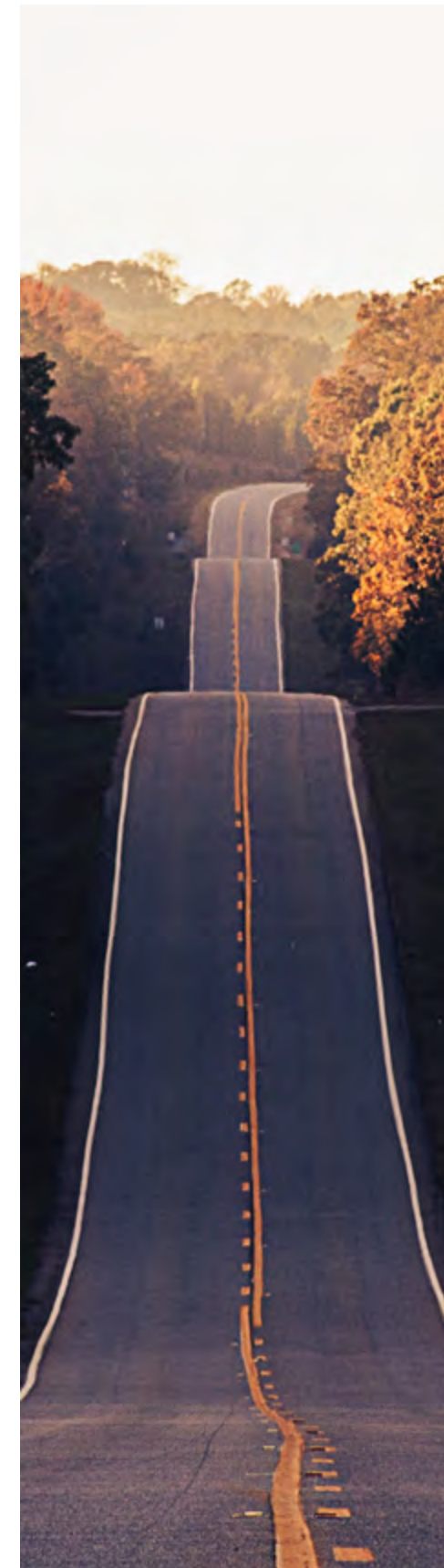
In other words, it becomes a chicken/egg dilemma; the lack of change management is itself a barrier to enacting change management.

2. Most change models are rooted in traditional, pre-digital thinking

Change management is not a new management strategy. With change management strategies, it is typical to speak of change initiatives as a fixed period of time or defined set of tasks leading to a fixed outcome. But the state of digital means that it is impossible to predict what an organization’s digital strategy will need to look like even a year or two years from now. The only certainty when looking to the future is more change, because in the digital era change never ends.

That kind of thinking is unfamiliar for many of those versed in old-school change management; change management programs are supposed to have clear end states! But digital is reorganizing the business landscape as we know it. Change management is no longer a road that navigates a set of obstacles between two clear points, because digital transformation is no longer a destination that can be arrived at. It is impossible for an organization to plant their flag in the sand, proclaim that they have transformed, and be “done” with digital transformation.

Digital transformation is a road leading ever toward the horizon. **Truly embracing digital transformation means embracing the idea of always being in a state of change.**





3. Change needs to come from the top (with employee involvement)

In order for change to be meaningful and lasting, change initiatives need to start with organization leadership, and need to have the involvement and commitment of executives to seeing change initiatives through. But leadership from the top is nothing without employee engagement and involvement. Executives need to re-engage with front-line members of the organization, listen to their concerns, and empower them to set out key concerns and areas of accountability that need to be recognized in the digital transformation process.

Ineffective change programs that come from leadership will be met with employee resistance and will be either only partially implemented, implemented only for a trial period, or not implemented at all. Even change programs that are strategically sound but are that are made without consideration for how the change process will impact front-line staff are destined to fail, because front-line employees will always need to prioritize their immediate concerns of assisting customers. If your change program is seen as a barrier to providing effective customer service, the overwhelming likelihood is that it will not succeed.

The difficulty with this, of course, is the fact that most change programs do not have the involvement of C-level executives.



4. POOR LEADERSHIP ENGAGEMENT WITH TRANSFORMATION INITIATIVES

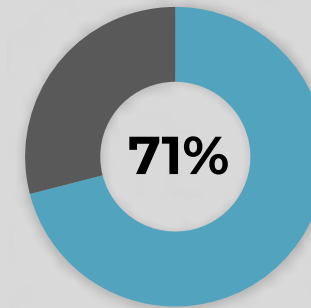


The reality of digital is clear; even market laggards are seeing the necessity of investing in digital transformation. But in order for any type of organization-wide change to succeed and be effective, companies need the engagement and support of top-level executives.

Unfortunately, for most organizations executive engagement with and support for transformation initiatives remains poor or non-existent.



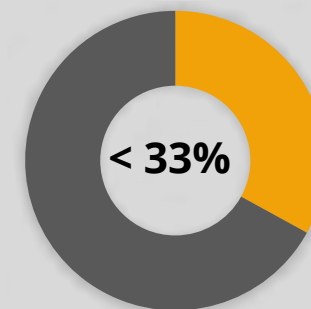
Important Facts:



of executives²⁵ identified "understanding the impact [that] digital technology will have on their customer's behavior" as their top digital transformation challenge

additionally:

most companies²⁶ lack CEO engagement or an organization-wide digital strategy and implementation plan



of companies²⁷ have significant executive-level engagement; when there is executive engagement, in most cases it is the Chief Technology Officer.

^{25, 26, 27} Altimeter

Without the support of top leadership, it shouldn't come as any surprise that most of the digital transformation projects that have been implemented have failed to achieve the desired results.

A McKinsey survey²⁸ found that 70% of change programs fail to meet objectives, largely due to employee resistance and lack of support from management. In other words, digital transformation initiatives most commonly start in the middle, and organizations do not succeed in getting employee involvement because they do not have executive involvement.

Even when companies do have some executive involvement, that involvement is almost always constrained to the CTO - with little to no engagement from the rest of executive leadership²⁹. IT is expected to do most or all of the work of transformation, with poor support from the rest of the organization. This lack of involvement becomes even more pronounced when companies try to move from the development of digital initiatives to implementation; dedicated cross-functional teams are active at the development stage of transformation initiatives 51% of the time, but are only active 29% of the time during implementation³⁰.

So why does this happen? Why do the executives who are responsible for setting the direction of the organization fail to recognize that digital transformation isn't just "IT's problem"?

5. RISK AVERSION AND UNWILLINGNESS TO EXPERIMENT



Business leaders and highly placed executives will often speak at length about the necessity of innovation in a highly competitive marketplace, but often their actions will speak to a deeply-rooted resistance to organizational learning and innovation. There is a fundamental disconnect between what business leaders say they value and the values they exhibit through their actions. **The truth is that most organizational leaders will tell you that learning comes from failure, while their organization is structured to punish failure for any reason.**

*There are any number of biases that influence daily decision making, but the most relevant biases for our purposes are: **Loss Aversion Bias, Status Quo Bias, Fundamental Attribution Error, Confirmation Bias, Existence Bias, Familiarity Principle, and Sunk Cost Fallacy.***

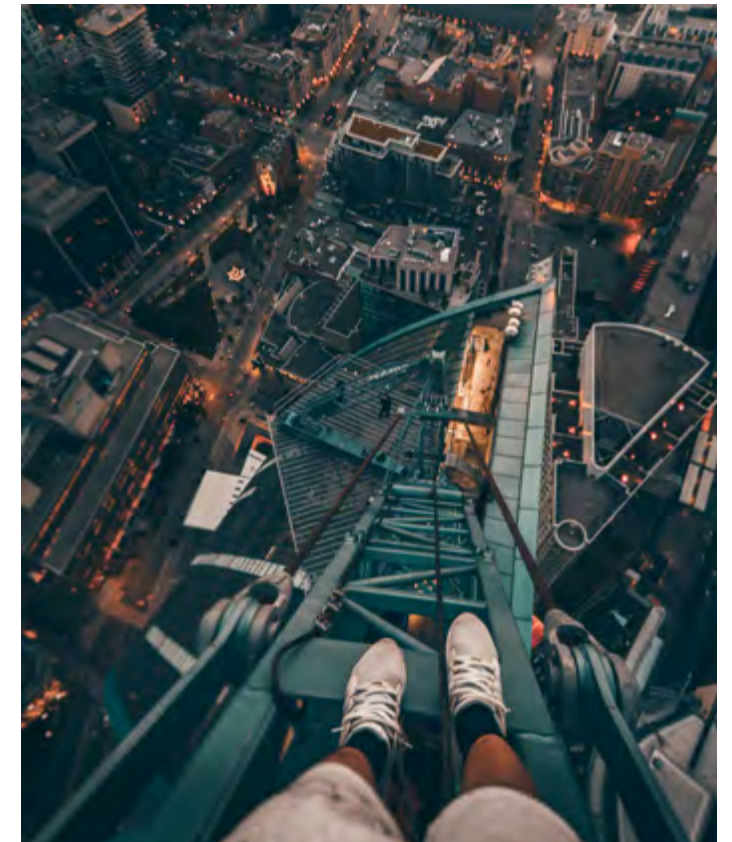
1. LOSS AVERSION BIAS

Loss Aversion is one of the biases that most significantly impacts organizational unwillingness to experiment. The Loss Aversion Bias shows that loss aversion is disproportionate to gain satisfaction; in other words - the loss we feel from losing \$5 is disproportionately larger than the satisfaction we feel from gaining \$5. Loss Aversion Bias causes us to avoid courses of action that will necessarily incur failure or loss, even when we know rationally that those courses of action will lead to more long-term benefit.

It is impossible to innovate without failure, but Loss Aversion Bias causes us to want to avoid failure at all costs.

2. STATUS QUO BIAS

Another important bias to consider is the tendency to perceive the status quo as positive. This is an emotional bias rooted in human dislike for change. Cognitively, we tend to set the current state of affairs as a baseline and view any deviation from that baseline as negative. There is a large volume of research to support that Status Quo Bias is a bias that commonly affects many types of decision making.



3. FUNDAMENTAL ATTRIBUTION ERROR

Fundamental Attribution Error is a bias that causes us to attribute the behavior of others to purely internal causes while ignoring the context of their situation, while applying the opposite to ourselves. In other words, if someone else acts badly, we assume it is because of negative character traits or personal failings - whereas when we ourselves act badly, we attribute that to situational causes and minimize our own accountability. This also applies to success: when we succeed, we overestimate how much our successes are caused by our own inherent characteristics and underestimate the role of personal characteristics of others when assessing their successes.

The overall effect and its importance is that people tend not to recognize when failure was directly caused by their actions, and thus are not able to learn from their mistakes and move forward in a productive way.



4. CONFIRMATION BIAS

Confirmation Bias refers to the human tendency to gather or recall only that information that supports their pre-existing beliefs. The more emotionally-charged a belief is, the stronger the effect that confirmation bias will have. Additionally, confirmation bias will cause us to interpret even ambiguous data points as supporting our position.

Confirmation Bias creates problems when companies are in the research and investigation phase of their digital transformation efforts, because it causes executives to ignore research that challenges their assumptions and preferences and cherry-pick information that supports the direction that they want to go in - even if that direction is not strategically sound. Unchecked confirmation bias leads to decisions based on emotions rather than logic and information.

5. EXISTENCE BIAS

Existence Bias describes the human tendency to treat the existence of a thing as inherent proof of its goodness, and to predispose us toward preferring things and ideas that are common over innovations that we are not used to. The importance of this effect is that, similar to the Status Quo Bias, it causes a preference for doing things the way they are commonly done and increases aversion to new products and ideas.

The most serious implication of unchecked Existence Bias is that it can cause clichéd thinking and bad ideas to sound more legitimate the more we are exposed to them. Being exposed to an argument once or twice isn't enough to induce an effect, but being exposed to an idea many times causes us to be more positively predisposed toward that idea.

6. FAMILIARITY PRINCIPLE

The aptly named Familiarity Principle is a concept developed by social psychology to describe the tendency for people to develop a preference for something mainly because they are familiar with it. The Familiarity effect has been demonstrated across many types of objects.

The Familiarity Principle is similar to but distinct from the Status Quo Bias, in that something can be considered status quo and yet remain unfamiliar to a particular person. It is also similar to the Existence Bias.

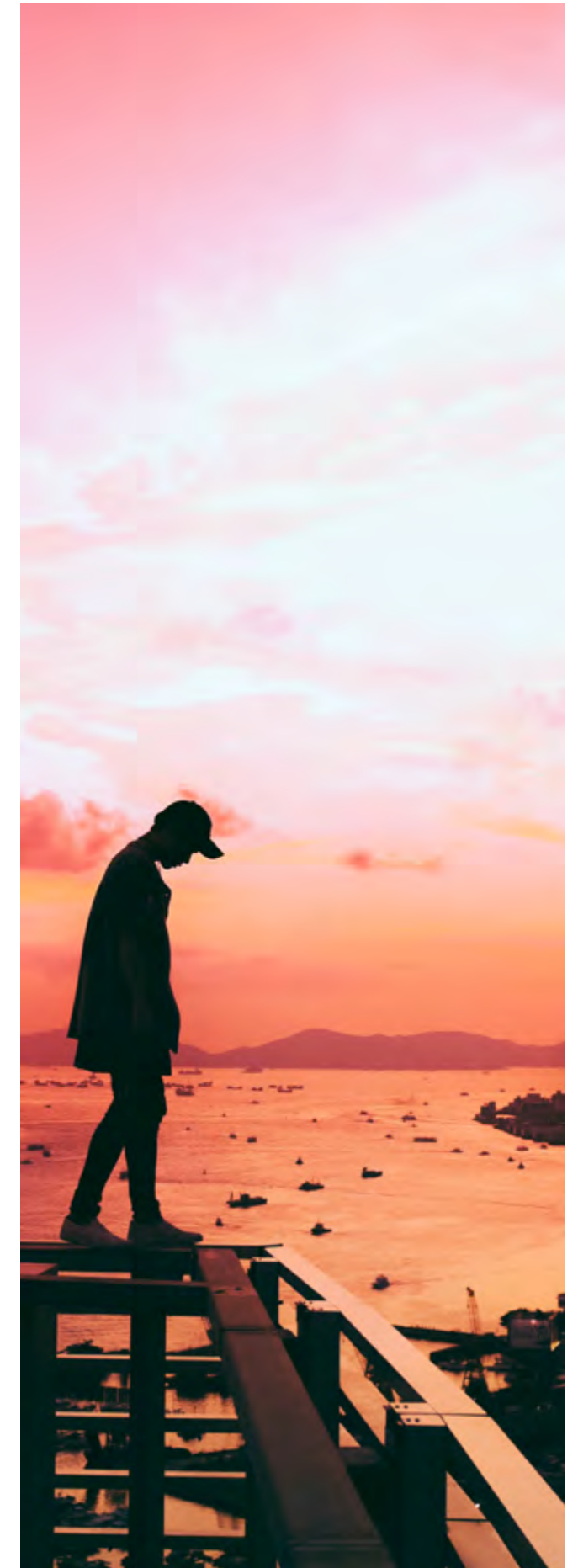
7. REGRET AVOIDANCE BIAS / SUNK COST FALLACY

Regret Avoidance Bias is more often known as Sunk Cost Fallacy. Both terms describe how humans like to believe that we make rational decisions about the future value of investments, but our decision-making is more often governed by emotion; the more heavily we invest in an object or course of action, the more reluctant we become to abandon it - even when there is ample evidence to show that we are making the wrong choice.

Regret Avoidance Bias is a well-understood phenomenon in finance, particularly in investments, as a phenomenon that drives people to ignore logic and make unsound emotional financial and business decisions.

WHAT TO DO?

So with all these biases in play, how can companies eliminate bias from decision-making in order to avoid making unsound business decisions?



Steps for overcoming cognitive bias in decision-making



1. Be aware of your biases

The most important step in overcoming bias in your decision-making process is simply being aware of your biases. Without falling prey to self-delusion. We all know that we shouldn't be influenced by bias, but biases are something that we all have, and simply being aware of what our biases are is a huge first step toward minimizing the impact of bias on our decision-making process. After all, it's impossible to overcome an obstacle if we are busy pretending that the obstacle does not exist.

2. Challenge your own views and values

Simply being aware of bias is a good start, but awareness alone isn't enough. In order to overcome bias and the negative effects it has on decision-making, we need to commit to challenging our own views and values. Examining closely held beliefs can be uncomfortable, but effective decision-making is impossible if we are not willing to think critically about what we believe and value.

3. Use a decision-making process

In order to minimize the effect that biases have on information-gathering and evaluation, it can be tremendously helpful to use a decision-making process. When looking at a problem, identify possible alternatives, define criteria for success, gather research about your alternatives (without discarding research that doesn't fit your assumptions), then evaluate your alternatives according to your criteria for success - using research to support your evaluation.

It can seem cumbersome, but breaking down the decision-making process into a number of smaller sub-tasks forces us to be more aware of our thinking, which allows us to be critical of internal bias. And having a process that is followed consistently for each major decision will create a culture of critical decision-making.



4. Make it safe to challenge the status quo

In order to overcome biases that predispose us toward lack of change, the status quo has to be challenged. It's important to examine current environments, processes, and systems and ask if they are working as intended? Are they serving a purpose, or are they getting in the way of productivity? Is there a clear reason why things are done this way, or is this simply "the way things have always been done"?

However, challenging the status quo is something that is often perceived as risky, because of the degree to which many organizations resist change. Leaders need to create a culture that encourages workers to feel safe in questioning the way things are done. Your front-line workers have valuable insights into the daily-to-day struggles of delivering your products and services. Empower them to speak honestly about their challenges instead of telling them not to rock the boat.

5. Seek diverse perspectives

An important part of overcoming bias in decision-making is having a diversity of viewpoints and opinions reflected in the decision-making process. When the people making major decisions all reflect the same background, it's easy for default biases and assumptions to go unchallenged. Taking action to ensure your decision process involves diverse employees from all levels of the organization will not only help you reduce decision-making bias, but will also deliver additional benefits; research has shown that inclusive teams make business decisions that are better and faster than non-inclusive teams:

- Inclusive teams make better business decisions up to 87% of the time³¹.
- Inclusive teams make decisions twice as fast with half the number of meetings, as compared to non-inclusive teams³².
- Decisions made by inclusive teams delivered results that were 60% better than non-inclusive teams³³.

CONCLUSION



The wave of digital is coming, and it is up to company leadership to decide how they will meet that wave. The majority of companies have not invested in strategies to meet the wave and are simply treading water, hoping to keep their head above water when the wave comes. The companies that have chosen to tread water face an uncertain fate - some will survive, but others will be pulled under. A very few companies are choosing to invest in digital and are preparing to ride the wave into revenue growth and new markets; those companies will be the market leaders as digital evolution continues ever onward.

Of course, that's not to say that it's too late to get back in the game.

The challenges posed by legacy systems and organizational silos are real, but they are not impossible to overcome - so long as executives are willing to recognize the role they need to play in enacting real change. When company leadership fully engages with digital transformation through support for change initiatives and challenging stale thinking, they can realistically assess the challenges they face and make effective decisions to overcome them.

However, companies also need to be prepared to face short-term budgetary pain if they want to reap the benefits of digital transformation. With the majority of IT budgets being consumed by the day-to-day costs of keeping legacy systems operational, additional money needs to be invested in getting through the transition period. Further, company leadership needs to fully commit to change as a process, and not a project of fixed duration and set objectives.

The ever-shifting digital landscape can be confusing, but one thing is clear: our digital destinies are not written in stone or determined by fate. How we respond to the challenge of digital is up to us.



HAVE QUESTIONS ABOUT ACHIEVING YOUR DIGITAL STRATEGY?

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