# CIOs and the Digital Transformation: A New Leadership Role

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**Abstract** Over the past few years, digital transformation and digital disruption have been widely addressed in both academic literature and business press. Still, these contributions notwithstanding, many IT executives are still struggling to find a go-to reference that would help them to orientate and fully exploit new digital opportunities through their transformational journey. This is partly due to the still limited collaboration between the two communities—academics and managers. Scholars are supposed to be focused on developing abstract models and theoretical representations of the new digital reality. Conversely, business and IT professionals seem to be primarily concerned with obtaining workable solutions to a concrete problem. In this book, we attempt to blend the two perspectives and explore new, fresh areas that are highly relevant for researchers and practitioners alike. To that end, each chapter of this book is written by scholars and co-authored with an IT executive, to bring together the rigorousness of academic research and the richness of practical experience in a single volume. This book is a collection of stories and experiences written jointly by academics and CIOs from the IT community, and is aimed particularly at managers and executives looking for inspiration to advance their digital journeys. The book opens with this introduction as an interview with Paolo Cinelli, Digital Business Manager at IKEA and one of the most influential figures in the international digital community. Paolo Cinelli talks about his experience with the digital transformation at IKEA, openly discusses the challenges he had to overcome along the way and shares his thoughts on what makes a CIO successful in today's digital world. This original contribution covers a wide range of experiences interlacing multicultural environments and gives an interesting

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perspective on the definition of Digital Transformation, the needed customer journey and the various challenges that this process is facing. Confronted with the various factors related to this unavoidable and ongoing change, a resilient manager should be able to recognize and seize all opportunities that every epochal disruption ultimately presents to existing organizations.

# 1 Introduction

Throughout history, new technologies have been disrupting well-established industry practices and replacing old, existing ways of doing business. The ongoing digital revolution is no exception—and while it may be perceived as a threat to some businesses, it presents unprecedented opportunities to others. The CIO could be at the center of this transformation and emerge as one of the leading actors and agents of this historical change.

New digital technologies affect both customer-side and internal processes of an organization, allowing a company to:

– Radically influence and shape management decisions
– Transform, often aggressively, the development of new products and services
– Find new ways to target customers by better understanding their needs
– Disrupt the existing business processes and models and create new sources of revenue
– Alter the existing industry structure and competitive landscape
– Enhance the quality of managerial decision-making
– Disrupt existing business processes and business models and
– Sensibly impact industry structures, customer experience and market strategic positioning.

What was initially perceived as a series of simple incremental product and process improvements is now fundamentally changing consumer behaviors, communication patterns, manufacturing and IT processes, as well as the types of products and services that can be introduced to the market.

Some skeptics may still think of "digital revolution" as another "buzzword" popularized by the media. In reality, the sheer magnitude of change related to digital technologies puts it on equal footing with the preceding industrial revolutions driven by stream-powered mechanization and electrically-powered assembly line production. What is different about digital technology today is the extent and speed with which it is pervading the lives of consumers, employees and organizations.

Back in 2000, the authors of the business bestseller "*The Cluetrain Manifesto*" (Levine et al. 2000)[1] predicted the effect that internet would have on well-established business practices that we take for granted today:

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[1]Rick Levine, Christopher Locke, Doc Searls, David Weinberger (2000), The Cluetrain Manifesto: The End of Business as Usual, Basic Books, New York.

> In just a few more years, the current homogenized "voice" of business, the sound of mission statements and brochures will seem as contrived and artificial as the language of the 18th century French court.

CIOs are center-stage to the digital transformation phenomenon. The very nature of a CIO's responsibilities undergoes substantial changes because in their new role, CIOs are expected to navigate through the multitude of opportunities, identify the right path for their business and drive adequate and timely change. To that end, digital transformation brings also a lot of uncertainty for CIOs: old-school approaches to managing IT no longer apply and new ones are emerging but not yet well-defined. At the same time, any transformational effort taken by a CIO will not simply affect IT function alone—it will have implications for an entire organization and for its customers and partners, too. Understandably, more often CIOs are cautious to make radical changes because the price of "getting it wrong" is sometimes too high.

The good news is that they are not alone in these challenges. Many companies that have managed to successfully "complete" (as if it can be ever be completed!) their digital transformation are very likely to have faced similar issues when they started. No transformation ever goes smoothly. The most successful digital transformations were carried out by companies that learned from their mistakes and pursued their goals relentlessly. Learning about their experiences can inspire new ideas as today's CIOs apply them to their own work.

One of the companies that has successfully integrated traditional and digital methods in its business is IKEA. IKEA was founded in Sweden in 1943 and is now the world's largest furniture retailer with a turnover of $36.3 billion. In 2015, IKEA reported 884 million store visits (7.7% increase compared to 2014), and 1.9 billion web visits (19% increase compared to 2014).

Paolo Cinelli, the former IKEA Group's CIO who currently holds the position of Digital Business Manager at the IKEA Franchisor Company (Inter IKEA), started the digital transformation at IKEA, and continues this work today. We had the opportunity to meet Paolo Cinelli and to get an exclusive interview with him. In the interview that follows, we asked Paolo Cinelli to share his experience on the topic of "digital transformation" and help us better understand how CIOs and IT professionals contribute to the process of value creation through digital. Furthermore, we wanted to explore his view on what could be a promising approach for organizations to manage digital transformation and to prepare for the challenges that might present themselves along the way. Below is our conversation with Paolo Cinelli.[2]

**In a recent speech during the Finaki CIO Community Gathering you revealed some important principles for building an end to end "customer journey." Your statements portray you as candidate to steer the ongoing digital transformation process in your company.**

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[2]Paolo Cinelli gave permission to publish this interview.

## How could you summarize the value of your international professional exposure?

An important part of my experience that inspires my work and attitude has to do with international exposure. I have had the privilege of working with different cultures, and in multicultural environments, developing a strong appreciation for their added value: ideas flow and flourish better, fostered by curiosity; interactions are more dynamic; discussions are richer thanks to multiple perspectives, etc. Unlocking such value requires an open mind and a positive interest in the differences around us, rather than an expectation that all must be the same. In my case, international exposure materialized in a number of assignments abroad, which have literally shaped myself and my family; but there are many ways to get the same exposure, so once again it is our self-awareness and willingness to change that make the difference.

My career goal was once to become a CIO, which I perceived as the "end station," but the reality is that once I got there and enjoyed the situation, my goal evolved. In fact, my energy decreased after a few CIO years, even touching a low point that triggered me to disclose my wish for a change. I was fortunate to be surrounded by a very humanistic company culture, and supported by great leaders who encouraged me to explore a next step outside my comfort zone. Still, had I kept this feeling of low energy, it probably would have resulted in low motivation, frustration and ultimately poor performance. Instead, expressing my desire for a change, combined with accelerating digitization trends and the trust of my colleagues, projected me into the exciting position of guiding the digital transformation of a very successful brand like IKEA. Although I could consider it a "dream job", I look at it with both passion and humbleness. What is a digital transformation? What do we mean with digital? How is digital different from ICT? Does it make sense to speak about a digital enterprise, or organization? This book tries to elaborate on those and many other questions through a multitude of views and reflections. One can agree with them or not, or partially agree, but the most important thing is to put the questions on the table and build possibilities to discuss them openly. I believe that is the spirit of this book, which therefore I read with high interest. And perhaps an ever important reflection is that the destination (e.g. becoming or remaining a CIO) is less enjoyable than the journey (as you go through it, you reach some milestones while the destination evolves into something even more attractive).

## We believe that, conceptually, "digital transformation" boils down to a complex business transformation, of which technology innovations and people are the most important ingredients. What is a viable strategy you would suggest to successfully navigate the ongoing turmoil?

Although the word "strategy" is subject to many interpretations, a common assumption regarding strategic documents is that they have a well-defined target objective. But what if this assumption is unfounded? Is it possible to set a strategy (a "how") to achieve something that is not well defined? More than a year ago, in my company, we noticed the need for a new strategy or direction, and drafted a document called "IKEA digital business direction." Not surprisingly, it is a paper that has undergone multiple iterations, and is currently on version 11. What strikes me, however, is that one word on it was never questioned: "draft". It can be seen as a sign of hesitance, or insufficient buy-in, or the result of editorial difficulties, and so on. Actually, after almost a year I started to feel nervous about continuing to engage with stakeholders bearing a "draft" watermark on our key paper. Reflecting on it, though, I became more comfortable, especially when I observed that people are much more willing to engage on a draft strategy than on a sharply defined, signed off and static one. There is some logic in such behaviour: if an executive's role is to

contribute at the strategic level to shape the future of the business, why should they spend time on strategies that are already fixed? Those are for the operational teams to execute! In other words, a term that might seem weak—draft—is actually the key to stimulate stakeholders' contributions, because they feel they can add their ideas, shape the strategy, and have their opinions considered; it leaves room for discussion, debate, involvement, etc. I can even argue that in some cases it might be smart to carry the draft status of a strategic document indefinitely, but I know that could raise skepticism, in particular due to the risk that without a signed off strategy, action is never taken. Let me then share what I noticed in that regard, at least in my organization. To my surprise, since I started sharing our draft with an increasing number of colleagues, I saw an acceleration of initiatives in the spirit of the (draft) digital direction. Initially, I even felt uncomfortable with that, and I realized that was due to the way we are raised in business. We grew up under the assumption that things evolve in a linear way: the business leaders outline expected scenarios, select the most likely one, create a strategy to address it, sign it off, deploy the strategy to convert it into business and action plans, which are in turn executed and monitored, so that we know when a strategy is effective. The reality, at least the current one, is different. We encourage initiative, and even entrepreneurship. Our companies are large and spread out, with plenty of clever leaders who want to make an impact. They enjoy being creative and see a mounting pressure for innovation around them. In such a context, sharing a draft strategy unleashes energy; people feel stimulated to try things out, and legitimated to possibly ask for forgiveness in case of failure, rather than for permission. At least that's what happened in our case, to the extent that a lot of suggested developments in our draft digital direction appear to be neither so farfetched nor innovative anymore, thus even questioning whether they should be mentioned in the strategy. Paradoxically, that calls for further revisions of the document, putting it in a status of "constant draft." Can this be a virtuous loop, advocating that in the contemporary, fast moving business world, linear planning is replaced by tentative strategies that, while constantly evolving, will never go beyond their "draft status"? Perhaps that goes too far or cannot be generalized, but, concerning the digital direction, I'm seriously tempted to believe in the power of "draft" and stay suspicious of "firm digital strategies". "Draft version" invites input, "final version" feels like "it's over, everything is already decided".

## Provided that there is value in what you have defined as an everlasting "draft", what is your position on VUCA, applicable business strategies and scenario planning?

Today, many companies are struggling to look for additional resources, and they need to be extremely careful in choosing new technologies to deploy in ways that are most aligned to their businesses and strategic objectives. A quick search indicates that a strategy can be seen as a high level plan to achieve a goal. The search found the term to have entered the business language from military origins, and some sources add an element of mobilizing and optimizing resources, or a long term view. What is certainly common amongst all sources is the aim to a defined goal, and a plan or method to get there. I suppose that an implicit assumption is to know the starting point or current status from which you will arrive at the wanted one.

ICT strategies so far have followed suit. For example, the traditional approach to ICT architecture has been to define a target landscape and develop a roadmap to reach it from the current (legacy) baseline. As asked in chapter "Human Being in the Digital World: Lessons from the Past for Future CIOs", is that still a valid approach in the current environment? You have mentioned the VUCA situation we live and run business in: Volatility, Uncertainty, Complexity, Ambiguity. It can be argued that the entire universe, and therefore our planet and all life on it, have always been in such a situation, and always

will be. But it's hard to deny that VUCA trends have recently accelerated for humanity and business. This situation makes it almost impossible to determine a target landscape, especially due to the disruptive speed of technology development. Can traditional architecture management methods still work in the current circumstances where a long term goal picture is undefined? My serious doubt about it leads me to further questions. What would be a better approach? Is adaptability superseding predictability? Consider an analogy based on a chess game, starting with unlimited time to make moves. The rules of a chess game have no ambiguity, and the goal of a checkmate is quite clear, but the complexity is so high that it's almost impossible to set a goal chessboard configuration (scenario). Still, players work very hard to explore the effect of possible moves and their ramifications, diving into predictable scenarios as deep as their thinking capacity allows. They visualize the chessboard landscape as a result of possible sequences of moves. Players with exceptional patience, concentration and logical reasoning capabilities (nowadays actually outplayed by super-computers) can imagine "target landscapes" that would be favorable to them, and steer the game in their direction. In case that doesn't sound challenging enough, let's introduce a timer, let's say 30 min per move (still quite a long time for professionals). Its effect can be twofold: on one hand, players can continue to use their same approach— identify a target chessboard landscape, and sequences of moves to get there—but speed up their reasoning; on the other hand, they can introduce a stricter selection of promising moves, likely based on probabilistic estimates or heuristics. Now, let's shorten the available time to, say, 10 min, and further down to 1 min. Does it still make sense, and is it at all feasible, to look for target landscapes? The complexity of the game hasn't really changed, but uncertainty has, because of the "limited visibility" one can develop into the future. We can still imagine an incredibly fast brain—or a super-processor—that can compute complex problems in a fraction of the time normally required; the challenge, however, can be stretched through further lead time reductions. Complexity can of course be increased, too, for example introducing an extra chessboard line and an extra column. The resulting mathematical challenge increases exponentially, and it would make the game volatile and uncertain if it was introduced in the middle of the game. Faster technological progress, additional complexity, mutating market rules and dynamics, shorter time to react, etc.: isn't this the business environment we all operate in? And given its characteristics, does it still make sense to try to define a target landscape? And what mindset do clever players choose in order to succeed in these situations? The research in this book indicates that shorter term scenario analyses and decision cycles, together with risk taking and an experimental attitude, as well as retaining flexibility to adapt to a VUCA context, are more suitable approaches than the traditional "set a long term goal and a roadmap to reach it" (or backward planning) one. In other words, we are called to invest in improving our ability of producing good heuristics, and getting comfortable in being guided by them with agility and speed. The good news is that even though VUCA triggers an urgent need to learn and adopt new mindsets and practices, those are useful paradigms in general, so once matured they become additional valuable options in the toolkit of ICT practices and organizations in general.

**Your recipe for a successful business transformation seems to include three main ingredients: (1) staying optimistic, (2) focusing on opportunities rather than threats, (3) avoiding victimization. Is that so?**
**Do you believe that "resilience" is becoming the new emerging leadership paradigm?**

An uncertain future, as well as any change in sight, can trigger different reactions. Are we intimidated? Excited? Curious? Skeptical? Something else entirely? The trick is to choose where we stand. I often see CIOs and other ICT leaders who fall back into a victim posture,

which is of no help. When it comes to the digital transformation, what position do we choose? Do we look at the opportunities it offers, or at its threats? For example, I hear a lot of concerns about "pure-play digital retailers" (e.g. Amazon, Alibaba, etc.) seriously threatening brick & mortar ones. Of course that's a serious risk, but how do traditional retailers react? A few years ago, when we were stuck with the very same concern at my company, I heard a confident ICT leader asking a really good, energizing question: is it easier for an online retailer like Amazon to open 300 physical large stores, or for us to step up with our online channels? A simple question that paved the way for a much more positive mindset, and ultimately our omni-channel transformation. Resilience is also important, but not at the expense of adaptability and agility, otherwise there is a risk of becoming defensive of the past rather than willing to shape the future.

## You have extensive experience working in organizations that were relatively digitally mature. How would you define the role of a CIO in these new scenarios? In your view, what makes a CIO successful?
## How many question marks are scattered on the business transformation skyline?

We are talking about new digital organizations and enterprises, triggering important questions: to what extent should digital mastery be centralized in a company? How important is it to spread digital literacy across the organization? Or concentrate it in a few roles? And does that grant the CIO a unique/distinctive profile? Should there be a digital organization, and what is it exactly? Or are we evolving more and more towards eco-systems of competences? There probably isn't a one-size-fits-all answer, but that doesn't make those dilemmas less important, so what are the factors influencing the choice? In my opinion, digital technologies can be applied to so many different fields—product development, retail, manufacturing, customer engagement, logistics, etc.—that it's hard to think of a fully centralized competence pool, as it could become a bottleneck rather than an enabler. I would prefer to see "digital" as a resource that companies learn to utilize wherever suitable, in a mature way, just as they use different types of resources—financial, materials, processes, knowledge, etc. Still, I recognize the need for a transformational effort that addresses most of the above questions in the specific business context for the company and its culture; such transformation might require central stakeholders and dedicated resources, at least until it's well underway. Embedding digital competences in core business activities and development—hence in a decentralized way—can have a very positive impact on innovation, speed to market and suitability of new solutions; on the other hand, it creates complicated digital landscapes and the risk of diverging. How can CIOs play a proactive and stimulating role in this revolution, while preserving the information systems' integrity and efficiency? We should not see digital as being in contrast with information technology. Rather, they look to me like two sides of the same coin: the former much more visible and customer/user centric, the latter more internal and process efficiency driven.

What makes a CIO successful? What are the main leadership characteristics (distinctive and otherwise) that enable a CIO to be successful? One that stands out as crucial in my view is the ability to bridge different needs, ambitions and perspectives across the various areas of the business. The increasing level of digitalization increases the exposure of the CIO to virtually all the company's processes, and the importance of a bridge-builder grows with the complexity of organizations and their interactions. Further, the tension between control and innovation amplifies the importance of prioritization and allocation of company resources, so the CIO can facilitate at least the visibility of related opportunities, concurrent initiatives, interdependencies, etc. Such exposure can be perceived as overwhelming or as a privilege by the CIO; and the CIO's reaction is heavily influenced by her/his leadership: is the CIO leveraging the position for the advantage of the business, thus adding value, or just

troubleshooting and juggling between multiple demands? Is the CIO showing challenges and opportunities in an engaging way that can unlock positive energy, or creating resistance and push back by focusing on constraints and limitations? Probably no single answer exists for all these questions, and the organizational culture plays a significant role in finding the right balance. I, however, believe the CIO should define his/her leadership profile in order to maximize his/her impact—whether it is "leading from behind", leveraging interdependence, boosting innovation, etc.—and align it with the executive team.

## In your view, what can be considered the center of digital transformation? What is your professional advice to organizations that are undergoing digital transformation right now?

It is widely accepted that digital technology is driving a transformation across all industries. Its widespread adoption and exponential growth is disruptive to existing business models and its impact is accelerating. What's at the center of the digital revolution? Is there a center or are there multiple, concurrent pivot points conspiring into a "perfect storm"? Personally, although it would be easier to concentrate on a single factor, I am more inclined to look at the digital transformation as having multiple dimensions. The combined effect of concurrent trends amplifying each other is more important to understand and leverage than considering each of them in isolation. What is the combined effect of urbanization and digital? Is it compressing physical and time distance in such a way that it is generating a circular or shared economy, especially when adding the scarcity of natural resources? And what does a shared economy do to businesses that are heavily based on fixed assets? Those are just some examples of trends to be identified and assessed, but it's clear to me that the complexity of the situation requires looking at the reality with a holistic view and questioning established assumptions from the past. Once the context is understood well enough, the consequences can then be estimated by zooming into a single dimension, in our case "digital. "Is the digital transformation, that is currently challenging some of the ICT fundamental principles, as described in chapter "Human Being in the Digital World: Lessons from the Past for Future CIOs", so far universally accepted (reliability, security, stability, scalability, service continuity, etc.)? Are those principles still valid and necessary? Are organizations willing to sacrifice or compromise them in lieu of speed, agility, innovation, surprise, etc.? What competences should be involved in managing the transformation?

## Your CIO leadership has a potentially very strong impact and influence within top management. ICT has always represented a sort of horizontal level of company spirit and business process management knowledge. Industrial, marketing and sales processes have been historically reinterpreted and digitalized with a substantial contribution from ICT. How does this relate to the topics of personal leadership and possible prejudice in the context of the ongoing "digital revolution"?

One of the expressions that irritates me the most is "ICT people." It is often used in a derogatory, even discriminatory fashion. The same is true when an equivalent expression is applied to any branch of the corporation. In my opinion, we are all people, regardless of our professional background, and like any stereotype, this kind of expression create silos and prejudice. So, we hear that "ICT people don't understand the business", "HR people are always…", etc. And we even take it seriously, thus accepting the assumption that ICT and "the business" are disjointed realities. Such a perception has existed for many years, but nothing can be further from the current situation, in which the convergence between the core business and its digital components is rapidly accelerating. Coming back to the people aspect, influencing how we personally and our communities are perceived starts with us

internally: I cannot change others, I can only change myself. And yet, the impact of my own changes can definitely alter how I'm perceived by others (and ultimately influencing a change in them in some cases). Investing in our own leadership, customer understanding, professional mastery, etc., is the best way to earn respect and create a more accurate perception, regardless of what we do or are responsible for. Once I was fed up and raised my voice in a meeting with senior stakeholders when those derogatory expressions were used. I compared them to other categorization terms (e.g. "tall people", "southern people", etc.), and pointed out that they are in stark contrast with our own corporate values. It is important to draw a line on what is acceptable and what is not. In this case, the result is that I've never heard those expressions again in my presence. To reiterate, I was once hoping for others to change their rhetoric and opinions; not only was that not happening, but my frustration with them was growing. Instead, when I finally changed myself and reacted assertively, my colleagues changed, too, and my frustration decreased (I would like to say "vanished", but I cannot be sure that those expressions are not used when I'm not there, so I've decided to keep some healthy level of frustration so that I stay alert). What else shall I change in my leadership capabilities to increase the impact of my ideas, strategies, plans, etc.?

**Thank you for taking the time to answer our questions. We are confident that our readers will greatly appreciate your contribution and will find your observations valuable.**