

# Components and Strategic Routes of Corporate Transformations

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## **Components and Strategic Routes of Corporate Transformations**

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#### **ABSTRACT**

In response to modern day disruptions and to maintain competitiveness and viability, companies embark on corporate transformation journeys to enhance performance and boost organizational health. When transformations succeed, they fundamentally boost a company's key business drivers. This article is a first step in providing prescriptive literature to transforming companies that they can use to navigate their journey. The article defines the three components of corporate transformations - business model transformation, digital enabled transformation, and organizational transformation - and their interdependencies. The study is based on the systematic review of literature available on the components of corporate transformations which is mostly unidimensional and leads to the consolidation of the components into a framework. It also describes the strategic routes of corporate transformations (mesa-transformation and meta-transformation). The framework is applicable for academic research and for practitioners when diagnosing companies, strategizing their transformations, and planning their transformation journeys.

KEYWORDS: corporate transformation, business model transformation, digital enabled transformation, organizational transformation, meta-transformation, mesa-transformation

## 1. INTRODUCTION

In response to modern days disruptions, companies embark on transformation journeys (Flamholtz & Randle, 2008; Levy, 1986; Muzyka et al., 1995). When corporate transformations succeed, they fundamentally boost the key business drivers. However, research indicates that most companies fail to survive such journeys (Bucy et al., 2016; Jacquemont et al., 2015; Litré et al., 2018). The reality is that *companies spend trillions of dollars on corporate transformations*<sup>1</sup> and yet few succeed, hence the importance of this topic.

Corporate transformations are chaotic as leaders try frantically to survive the transformation journey. To prevent corporate transformation failures and avoid economic and employment losses, academics and practitioners can provide prescriptive literature to transforming companies to help them navigate their turbulent journey. This article is a step towards such a purpose as it introduces a framework applicable to academics' research and practitioners when diagnosing companies, strategizing their transformations, and planning their transformation journeys.

The article starts with a systematic review of available literature on the components of any corporate transformation: business model transformation, digital enabled transformation, and organizational transformation. The review covers their definitions, "what", "how", and enablers. The article then introduces a framework that not only consolidates the three components but identifies their interdependencies proving that these components are interconnected and consequently have to be managed as one ecosystem. As a by-product of the framework, the article describes the three strategic transformation routes with different destinations that any transforming company can take.

# 2. MATERIALS & METHODOLOGY

<sup>&</sup>lt;sup>1</sup> Worldwide spending on technologies and services that enable the Digital Transformation of business practices, products, and organizations is forecast to reach \$2.3 trillion in 2023, according to a new update to the International Data Corporation (IDC) Worldwide Semiannual Digital Transformation Spending Guide dated October 2019. Total spending on Corporate Transformation will be higher as it will additionally include spending related to Organizational Transformations.

## 2.1. Accelerated Disruptions

The theme of disruptions started back in 1942 when Joseph Schumpeter coined the term "creative destruction" (Schumpeter, 1942), which was later elaborated on by Clayton Christensen (Christensen, 1997). When a new revolutionary technology emerges, established players believe it will not fulfill the needs and wants of their core customers. They also believe its minimal forecasted profit margins are insufficient to cover their large cost structures. Consequently, the new technology is deemed unattractive and gets disregarded in favor of what is being adopted by the majority of customers. Eventually, a new player – usually in a form of a start-up – steps in to bring the emergent technology to a new identified customer segment. If incumbent players attempt to introduce radical innovations, these efforts tend to be significantly less productive than the entrant players (Henderson, 1993). As the emergent technology develops to become established, incremental innovations start to raise the technology's performance on attributes valued by the majority of customers. Eventually, the emergent technology conquers the established market (Cappelli & Tavis, 2018) and induces proliferation of new players and market dynamics (Decarolis et al., 2020). By time, the incumbent players realize that they are at a competitive disadvantage, albeit too late (Bower & Christensen, 1995; Tripsas & Gavetti, 2000). Disruptive innovation was later defined as "an innovation that changes the performance metrics, or consumer expectations, of a market by providing radically new functionality, discontinuous technical standards, or new forms of ownership" (Nagy et al., 2016). Across their value chain, companies will sense disruption differently and at an asynchronous momentum. To succeed in such turbulent environment, companies will have to envision where to position themselves in the future based on key identified megatrends and work backwards to bridge towards their vision (Hamel & Prahalad, 1994; Handy, 1989; Hillenbrand et al., 2019). For better-informed decisions in such ambiguous period, successful companies will zoom-in on satisfying the needs of their consumer base (Faelli et al., 2019).

The key change is the VUCA environment (<u>Barber, 1992</u>) witnessed the past 10 years, whereby innovative technologies (<u>Moore, 1998</u>) merged at an exponential speed (<u>Bughin et al., 2018</u>; <u>Kurzweil, 2004</u>) (hyperconnectivity, IoT, A.I. (<u>Brynjolfsson & McAfee, 2014</u>), robotics, neural networks, deep analytics (<u>Brynjolfsson & McElheran, 2016</u>), autonomous vehicles, Bitcoin and blockchain, self-learning systems, etc.) (<u>Forum, 2018</u>), consumer preferences, and behaviors evolved fast (<u>Johnson et al., 2018</u>; <u>Morgan & Barden, 2015</u>), e-commerce produced new channels, and nimble competitors emerged each year (<u>Greer, 2017</u>). These elements, together with deregulation, evolution to open standards, "prosumerism," and geopolitical, demographic, economic, environmental, and public health (e.g. COVID pandemic - though kind of Black Swan (<u>Taleb, 2005</u>)) structural changes have been sources of competitive discontinuity (<u>Faeste & Hemerling, 2016</u>; <u>Prahalad & Oosterveld, 1999</u>; <u>Webb, 2020</u>).

Today, companies are able to introduce better products and services from the onset therefore preventing them from price-skimming their early adopters. Hence, the classical product life cycle model that influenced pricing, expansion, or cost-cutting decisions might have become obsolete (Nunes & Breene, 2011). Consequently, the compressed bell-shaped curve brings with it new dynamics that warrant revised marketing and sales, product development, and product replacement strategies (Downes & Nunes, 2014).

#### 2.2. Corporate Transformation as a Response to (Potential) Disruptions

In response to disruptions and to maintain their competitiveness and viability (Sackmann et al., 2009), companies embark on transformation journeys - intense second-order change (Levy, 1986) and company-wide programs to improve performance and boost organizational health. These core changes lead to a fundamental change in organizational logic (Muzyka et al., 1995) involving a metamorphosis from one state to another (Flamholtz & Randle, 2008). Such changes are best described by an ecological view (Singh et al., 1986) with the principal tenet: "once founded, organizations are subject to strong inertial pressures, and alterations in organizational populations are largely due to demographic processes of organizational founding and dissolutions" (Singh & Lumsden, 1990). Three fundamental processes constitute essential aspects of organizational evolution: (1) variation - birth of organizational forms as an execution of new combinations; (2) adaptation; and (3) selection - death rates of organizational forms proportional to their relative fitness (Bruderer & Singh, 1996). When transformations succeed, they fundamentally boost a company's key business drivers. However, research done by McKinsey in 2016 indicates that 70% of

companies fail to survive such journeys (<u>Bucy et al., 2016</u>). Another study by Bain&Co in 2018 shows that only 12% of companies achieve their full transformation KPIs and 68% simply fail (<u>Litré et al., 2018</u>).

There are abundant examples of companies, some of which are digital natives (e.g. Symantec, when it shifted from selling enterprise software to offering cybersecurity platforms (Millhiser, 2019)) who either underwent or are undergoing transformations in all sorts of industries: insurance (Jacobs et al., 2017), banking (Jeruchimowitz et al., 2018), airline (Bouwer et al., 2019), retail (Everson et al., 2018), consumer goods (Cappelli & Tavis, 2018; Gillette et al., 2017; Jeruchimowitz et al., 2018), etc.

#### 2.3. Business Model Transformation

## 2.3.1. Introduction to Business Model Transformation

The literature on business models - which is a different concept from strategy (<u>Casadesus-Masanell & Ricart, 2010</u>) - is vast. Scholars do not concur on one definition of a business model (<u>Zott et al., 2011</u>) as academic literature advanced in silos following the interest of the respective researchers. However, there are mutual themes: (1) the business model is evolving as a new unit of research (<u>Prahalad & Hart, 2002</u>; <u>Seelos & Mair, 2007</u>; <u>Teece, 2010</u>); (2) business models emphasize a holistic approach to explain how companies operate (<u>Dubosson-Torbay et al., 2002</u>; <u>Timmers, 1998</u>); (3) company's line of business impacts its business model (<u>Roberts & Berry, 1985</u>); and (4) business models seek to explain "value creation" (<u>Shafer et al., 2005</u>), and not just how value is captured (<u>Baden-Fuller & Mangematin, 2013</u>). Some scholars went a step further and examined sustainable business model (SBM) activities that may contribute to building a business model for sustainability (<u>Bocken et al., 2014</u>) and their business model transformation process (<u>Roome & Louche, 2016</u>). And last, a few researches started their quest to include the business model as a new area of analysis for organization and strategy research (<u>Zott & Amit, 2013</u>).

The convolution of a strategy (Mintzberg et al., 2003), tied to limitations on managers' competitive knowledge, prevents imitation of successful business models. As the decisions behind a specific strategy are numerous and interlinked, a company that identifies an effective combination of choices is protected against imitation (Rivkin, 2000) with the aim of either securing a sustainable competitive advantage or exploiting a series of short-term competitive advantages (McGrath, 2013). Hence, the need to identify a business model that works best for the transforming company (Sinfield et al., 2012). Scholars researched companies that redesigned their business models after disruptions by studying the: (1) business model adaptation drivers, (2) revised strategies, and (3) redesigned business model (Cozzolino et al., 2018). Others researched methods to determine an organization's core elements and processes to detail these core elements (Siggelkow, 2002). Similarly, other scholars suggested roadmaps, matrixes (Davila et al., 2005), and transformation models (McKeown & Philip, 2003). Throughout their business model transformation, companies will toggle between running their core, today's engine, as efficiently as possible while creating their new business, tomorrow's engine (Allen et al., 2017; Birkinshaw & Gibson, 2004; Govindarajan, 2016; Raisch & Birkinshaw, 2008).

#### 2.3.2. The "What" of Business Model Transformation

Once the vision is defined, companies need to adapt their business models that are currently based on managing the supply of either a product or service to a business model based on providing whatever customers demand, using any means possible (<u>Bucy et al., 2016</u>). Depending on their competitive advantage and strategy (<u>Day, 1999</u>; <u>Hamel, 2001</u>; <u>Hamel & Prahalad, 1994</u>; <u>Porter, 1989, 1997</u>), this will entail transforming either their *customer & channel engagement*, *products and services innovation*, *economic model*, or *operations model*.

Customer & channel engagement driven business model transformations - We are at the forefront of the "experience economy" where companies delight their customers with memorable experiences that will boost the value of their products (Pine & Gilmore, 2009). Experience based marketing is different from traditional marketing (Kotler, 1980) in four ways: customer experience, consumption as a holistic experience, customer as rational and emotional being, and techniques are diverse (Schmitt, 1999). Consumer experience focuses on the consumer's reactions to a product or service across the customer's journey. The reactions range from mental, emotional, behavioral, sensorial, to social (Lemon & Verhoef, 2016). It has three elements: experience design, customer intelligence, and emotional engagement (Bonnet & Westerman, 2021). Companies will focus on customer centricity as a strategy that aligns their

products and services with the needs of their customers with the aim of maximizing their customers' long-term financial value. For this strategy to be successful, companies must ensure the cross-functional coordination needed to design, understand, and manage customer experience (Fader, 2012). As certain consumer behaviors influence specific phases of the consumer journey, companies have to gain deep insights into their consumer behavior (Puccinelli et al., 2009). Companies can also map their customers' journeys, track those journeys across all touch points (Schmitt, 2010), and develop omnichannel strategies (Brynjolfsson et al., 2013) equipped with predictive analytics that help sort promoters from detractors (Markey & Springer, 2017). To embrace this business model, companies will have to change their ways-of-working in siloes to around customer journeys (Camara et al., 2019).

Products and services driven business model transformations (through innovation) - Scholars have pondered on why companies do basic research (Ashish Arora et al., 2017; Kline & Rosenberg, 2010). User-centered innovation is a powerful phenomenon and becoming an important rival to manufacturer-centered innovation (Levitt, 1960; Von Hippel, 2005). To remain competitive, companies diversify their portfolio into products or services that are identified for potential growth (Cooper, 1983; Johnson & Lafley, 2010). Such diversification can be accomplished through radical innovation (O'Connor & DeMartino, 2006). To illustrate, some industrial companies added services and solutions to their product-centric portfolio (Adrodegari & Saccani, 2017). The sweet spot of innovation is: desirability (consumer) + viability (ROI) + feasibility (suppliers) (Brown, 2008). Consumers' desirability of a product or service is a function of price and perceived value which revolves around functional, emotional, life changing, and social impact (Infographics, 2018). Consumers are willing to pay a premium if they perceive the new product or service value is higher than what they currently use. To deliver in such an environment requires putting in place new predictive consumer-growth capabilities (Dziersk et al., 2018), facilitating knowledge management (Vicari & Troilo, 2000) and communication among the different groups involved in the development process (Clark & Fujimoto, 1991; Hargadon, 2003; Johnson, 2011; Rochford & Rudelius, 1992), mastering innovation planning (Burgelman et al., 2009; Utterback, 1996), and driving toward digital improvement in ways that less digitally mature companies do not (Kane et al., 2019). This process has been coined: "Management Innovation" (Birkinshaw et al., 2008).

Economic models driven business model transformations - To illustrate, we will provide examples from industrial (Padhi et al., 2018) and entertainment sectors (Smith & Telang, 2019). At automotive, advanced electronics, and aerospace & defense industries where massive advances in data generation, computing power, and connectedness drive scale and speed of disruptions, "Pay-per-use" is becoming extremely popular. Another economic model is "data monetization" – i.e., collecting data from the products you already sell and using it to offer new services – is a major line of business for many manufacturers today. A third economic model is "digital platforms2" (Eisenmann et al., 2006; Hagiu & Wright, 2015; Rochet & Tirole, 2003). `There are four types of platforms: exchanges, transaction systems, ad-supported media, and hardware/software standard (Evans & Schmalensee, 2005).

Operations driven business model transformations - The subject of how working life could be made more productive and efficient, is a topic that was researched for the last century (Taylor, 1913). Scholars introduced the concept of lean production and its tenets: to produce products just-in-time, to convert the organization into quality inspector, and to envision the company in terms of a value chain from suppliers to customers (Deming & Edwards, 1982). To realize the productivity gains needed to remain competitive, successful operations driven transformation efforts have three elements: core process automation, connected and dynamic operations, and data-driven decision-making (Bonnet & Westerman, 2021). Such transformations encompass several business units, functions, and their teams. They also emphasize the interactions between product development, procurement, manufacturing (by including Industry 4.0 elements into manufacturing processes), supply chain, capital expenditures, and services. On average, cross-functional transformations are 30% to 40% more successful compared to single-function transformation (Laczkowski et al., 2019; Padhi et al., 2018).

#### 2.3.3. The "How" of Business Model Transformation

<sup>&</sup>lt;sup>2</sup> According to Hagiu & Wright a platform is a business that creates value by facilitating direct interactions between two or more distinct types of customers.

Companies can change their business model either externally (through *M&A* or *Alliances*) or internally (through *direct integration* or *Corporate Venture Capital (CVC) and Incubator*).

M&A – one (or several) large Mergers & Acquisitions deal(s) above 30% of the acquirer's market capitalization is (are) needed. This is mainly applicable in mature or rapidly evolving industries (Nielsen, 2012).

Alliances – strategic alliances (<u>Bamford et al., 2003</u>; <u>Child et al., 2005</u>) can help to transform business models and keep abreast of disruptive technologies. Alliances have a lower risk option to achieve scale, provide speed and flexibility to respond to disruptions, and their investment can be tested and phased (<u>Doz et al., 1989</u>; <u>Teng, 2003</u>; <u>Weber-Rymkovska, 2017</u>). Companies' decision to transform their business model through an alliance is usually based on their core competencies (<u>Prahalad & Hamel, 1990</u>).

*Direct Integration* – in the case of high strategic importance and strong operational relatedness, the transforming company might decide to directly integrate its new business (Burgelman, 1984).

CVC and Incubator - in case the new business model is partly related to the core business - however with degree of uncertainty of its strategic importance - the transforming company might decide to invest, incubate, or accelerate (Brigl et al., 2018; Burgelman, 1984). By investing, the company avoids hampering entrepreneurship by the bureaucracy resulting from internal governance and reporting processes. And by incubating or accelerating, the company assists the start-up when internal capabilities, infrastructure, and resources are deployed (Forum, 2018).

#### 2.3.4. The Enablers of Business Model Transformation

There are two enablers of Business model transformation: risk management and investment & funding.

Risk Management – As transforming the business model entails risks, managing it is a key enabler. Risk-taking has been defined as "choice among alternative outcomes under conditions of probabilistic uncertainty". This definition comes from decision theory, where risk has been associated mainly with variation (Berglund, 2007; Kline & Rosenberg, 2010). It is not uncommon to realize that risk management is handled as a compliance issue. To address the different risks a company faces from its strategic choices or internal / external disrupting forces, companies have to create systems and fora aimed at generating debate.

Investment and Funding – Depending on the form of their corporate transformation, companies can manage their investments by focusing their resources on the core with the objective of incremental growth and maintaining profit (or Horizon 1), new to mid-stage products / business with an objective of profitable growth (or Horizon 2), and completely new products / business (or Horizon 3). The ratio for Meta-Transformation<sup>3</sup> will be 50:30:20 and for Mesa-Transformation<sup>4</sup> will be 70:20:10 (Perkin & Abraham, 2017; Terwiesch & Ulrich, 2009). At the early stage of a corporate transformation, funding the transformation journey is crucial and can be achieved through revenue, organizational simplicity (delayering), capital efficiency, and cost reduction. Many companies start by cost cutting and organizational simplicity (delayering) though revenue and capital efficiency can have the same avail (Bürkner et al., 2015).

# 2.4. Digital Enabled Transformation

#### 2.4.1. Introduction to Digital Enabled Transformation

The reality is that for most large companies today, it is not a question of "if" digital will overturn their business but "when" (<u>Arun Arora et al., 2017</u>). We witnessed the acceleration of this phenomenon during the recent global COVID pandemic. At the World Economic Forum, 130 initiatives impacting twelve industries over the next decade were identified (<u>Forum, 2018</u>). There are abundant examples of companies successfully using digital as an enabler for their business model from different industries, sectors, and geographies: financial (<u>Peña, 2018</u>), telecom (<u>Glaser et al., 2019</u>), and conglomerates (<u>Cakıroglu et al., 2018</u>).

In the context of corporate transformation, digital strategies focus on the transformation of products, processes, and organizational characteristics by leveraging emerging technologies and digital. A key objective of digital strategies can be securing customer interface in times of digital disintermediation (Goodwin, 2018). Digital

<sup>&</sup>lt;sup>3</sup> Please see section 4.2. for the description and details of Meta-Transformation strategic route.

<sup>&</sup>lt;sup>4</sup> Please see section 4.2. for the description and details of Mesa-Transformation strategic route.

strategies encompass activating customer networks and developing platforms by leveraging data and technologies (<u>Drnevich & Croson, 2013</u>), changes in value creation, structural changes, and financial aspects (<u>Hess et al., 2016</u>; <u>Matt et al., 2015</u>). More specifically, the digital strategy will have to identify how to access customers (provide ondemand services using mobile commerce and cloud technology in an omnichannel customer centric approach), engage with customers (deliver product demos and storytelling content), address customers' needs (through personalization), connect with customers (by deploying social listening, social customer care, and user generated content), and collaborate with customers (through passive and active contributions, crowdfunding, competitions, and collaborative platforms) (<u>Davenport et al., 2011</u>; <u>Rogers, 2016</u>). The key output of the digital strategy is the definition of both *data* and *digital ecosystems*. For clarity, there is a difference between information technology (IT) strategy and digital strategy. The latter, revolves around the efficient management of IT infrastructure and often lacks the business-centricity (<u>Bharadwaj et al., 2013</u>; <u>De la Boutetière et al., 2018</u>; <u>Hess et al., 2016</u>; <u>Isaev et al., 2018</u>; <u>McDonald, 2012</u>). When it comes to investing in digital technologies, there are four types: foundational (very costly but core to the transformation; like platforms), maintenance, RoI driven (projects), and early-stage (incubators, labs, etc.) (<u>Brynjolfsson & McAfee, 2014</u>).

Digital strategy drives digital maturity (Kane et al., 2016). Researchers identified four types of digital maturity: Beginners, Conservatives, Fashionistas, and Digirati<sup>5</sup>. Digirati managed to create value with digital transformation as they invested in new technologies *and* ensured the right mindset, capabilities, culture, vision, and leadership (Westerman et al., 2012). By focusing on digital maturity, companies will realize that it is a gradual company-wide process, that they may not fully know their end-state throughout its process, and that it will not happen automatically (Kane, 2017). Scholars have identified key practices of companies that are developing into more mature digital organizations (Bender et al., 2018; Brynjolfsson & McAfee, 2014; Dahlström et al., 2017; Kane, 2017; Westerman et al., 2011).

Digital should enable the business model transformation (<u>Sebastian et al., 2017</u>; <u>Westerman et al., 2011</u>) while adhering to digital business design principles (<u>Slywotzky et al., 2001</u>). Consequently, companies use digital technologies to expand their strategic options and design a unique business model.

Companies who embraced *customer & channel engagement business model* can deploy new technologies, processes, and organizational structures (<u>Woerner & Weill, 2021</u>) to lead customers throughout their digital journeys. They realize that the consumer is at the epicenter of an interconnected ecosystem of touchpoints and interactions both online and offline. By providing their customers with a personalized and holistic experience, companies can lure them, win their loyalty, and achieve a competitive advantage (<u>Desmet et al., 2017</u>; <u>du Toit et al., 2018</u>; <u>Edelman Marc, 2015</u>). In such context, customer data and single customer view are a pre-requisite.

For companies who embraced a *products and services driven business model*, digital technologies play a critical enabling role (Biesdorf et al., 2018) to ensure product superiority (through remote continuous augmentation and fixes) and service enhancement (through data collection, visualization, personalization, and recommendation). Instantaneous data acquisition and collection allows for near instantaneous response, corrections, and adaptation.

For companies who embraced *new economic business models*, Cloud computing<sup>6</sup> played a key role. To illustrate: Infrastructure-as-a-service (IaaS) when computers and computing resources are offered, Platform-as-a-service (PaaS) when a computing platform and programming tools are offered, Software-as-a-service (SaaS) when access to an application is offered, Content-as-a-service (CaaS) where content can be purchased, and Data-as-a-service (DaaS) where data can be aggregated and managed (Swamy, 2020).

Most of the companies who embraced an operations driven business model fall under Industry 4.0 as they deploy wide array of interdisciplinary technologies – with different levels of maturity and market availability – to

<sup>&</sup>lt;sup>5</sup> Authors later changed the term "Digirati" to "Digital Masters" Buvat, J., Krishna Puttur, R., Bonnet, D., Slatter, M., Westerman, G., & Crummenerl, C. (2018). Understanding digital mastery today *Capgemini*, Retrieved from https://www.capgemini.com/wp-content/uploads/2018/2007/Digital-Mastery-DTI-report\_20180704\_web.pdf.

<sup>&</sup>lt;sup>6</sup> Cloud computing is defined in the report of the US National Institute of Standards and Technology (NIST) as "a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction."

facilitate digitization, automation and process integration along the value chains (<u>Bughin & Catlin, 2017</u>; <u>Götz & Jankowska, 2017</u>).

# 2.4.2. The "What" of Digital Enabled Transformation

Digital enabled transformation optimizes companies' operations, transforms their products, engages their customers, and empowers their employees (<u>Haupter, 2021</u>). At the heart of the Digital enabled transformation are two ecosystems: *digital & data* (the first provides the software backbone that enables the latter) (<u>Russo & Albert, 2018</u>).

*Data Ecosystem* - In order to enable the business model, companies will have to design the right data ecosystem according to their data strategy and treat it as a strategic asset - a single source of truth, supported by a set of data monetization capabilities - that is accessible by all employees who need it (Wixom & Owens, 2019).

Digital Ecosystem – The technologies and digital platforms that permit devices, applications, data, products, and services to interconnect (Saleh et al., 2013). Technology is only part of the story in digital enabled transformations and often the least challenging one (Brynjolfsson & McAfee, 2014). The three elements of technical platforms are: core platform that controls a company's key processes, agile externally facing platform that connects to customers and partners, and data platform that performs complex analytics (Bonnet & Westerman, 2021).

#### 2.4.3. The "How" of Digital Enabled Transformation

Companies can digital enable their business model by focusing on agile, investing in "buy & scale" / corporate ventures / alliances, establishing a digital center of excellence, setting-up a digital business building, or building process / use-case transformation (Arun Arora et al., 2017; Forum, 2018).

Focusing on agile, design thinking, and lean -

Agile is when companies develop new product and services by instilling agile way of working across the organization with multi-functional teams who deploy iterative methods to build and test new concepts with minimum viable products (Sebastian et al., 2017). Agile boosts agility and speed within companies allowing them to overcome disruptions. To operate in such environment, companies will have to run traditional IT – in the context of stable operations – as well as agile IT – in the context of innovation and flexibility (Jöhnk et al., 2017). Consequently, agility ensures success in digital adoption (Bughin & Catlin, 2019). Scholars devised a strategic agility framework according to which top management interplay between strategic sensitivity, leadership unison, and resource flexibility (Doz & Kosonen, 2010). Practitioners represented agile businesses as: Agility = (Velocity x Focus x Flexibility) (Perkin & Abraham, 2017).

Design thinking is a customer-centric innovation methodology that integrates customer needs, prospects of technology, and conditions for business success<sup>7</sup>. The methodology comprises an application of design methods to business and innovation, using solution-focused thinking, starting with a future objective, and exploring both present and future conditions to iteratively generate multiple concepts and options while exploring different directions to achieving the goal.

*Lean* startup concept (Ries, 2011) is based on lean manufacturing (Krafcik, 1988) and shares agile principles. It advocates for build-measure-learn loops, minimum viable products (MVP), innovation accounting, and pivots.

Investing in "buy & scale" / corporate ventures / alliances - According to this option, companies can digital enable their business model by buying successful digital businesses, incubating & accelerating digital start-ups, equity investing to assess and access digital technologies, or by strategically partnering with digital players (Brigl et al., 2017).

Digital M&A can be instrumental to allow companies catch-up with competition and fill digital competencies gaps by merging with or buying digital companies (<u>Bughin & Catlin, 2019</u>).

External corporate venturing has been used by many companies to apply an open innovation approach (Vanhaverbeke et al., 2008). Scholars have identified three strategies that are proving effective against 80% of the major issues with corporate venturing: boosting the value of venturing to the rest of the

<sup>&</sup>lt;sup>7</sup> According to Tim Brown and David Kelley, the founders of design business IDEO.

business, looking outside traditional business startups, and eliminating conflicts of interest between the corporate venture unit and the startup (Prats & Siota, 2019).

Alliances - independently initiated inter-company link that involves exchange, sharing or co-development – are the third option which do create economic value (Kale et al., 2002). This option is mostly adopted by digitally mature companies (Kane et al., 2019). Alliances can also take the form of competitive alliances with the aim of enhancing internal skills and technologies while guarding against transferring competitive advantages to "ambitious" partners (Bouncken et al., 2015; Doz et al., 1989).

Establishing a digital center of excellence - According to this option, companies transform by building a new "digital hub" within the realm of their organization. A good illustration of this option is the case of Audi and its Audi Business Innovation GmbH<sup>8</sup> (ABI). ABI is a digital innovation hub that designs, develops and operate innovative business concepts, products, and services. The collaboration among the digital innovation hub, data analytics and strategy unit (within the sales and marketing department, and IT department) constitutes the core of Audi's analytics as-a-service initiative for leveraging big data analytics (Dremel et al., 2017).

Setting-up a digital business building - According to this option, companies build a new digital business outside the realm of their organization. A good illustration would be Amazon Go – the sans-checkout grocery store where Amazon benefits by avoiding costs related to checkout personnel. Customers scan their phones upon entry, do their purchases, and exit without a physical check-out (Polacco & Backes, 2018). This option allows companies to acquire technology and talents rapidly with the full benefits of a start-up (Schoemann, 2018).

Building process / use-case transformation - According to this option, companies radically rethink certain processes and functions to create beacons for larger transformations. Business Process Reengineering (BPR) focus is on automating rule-based processes and digital transformation's focus is on obtaining new data and using these data to reimagine the old rule-based processes (Schallmo & Williams, 2018). Nevertheless, companies can initiate business process redesign after determining the changes in its key business processes. Consequently, BPR is not "zero or one" but rather a reflection of various alternatives (Venkatraman, 1994).

#### 2.4.4. The Enablers of digital transformation

Data & Analytics – Data-driven decisions are better decisions. The challenge is the exponential increase in the amount of data generated by the expanding number of connected devices and services. It is estimated that the size of the digital universe in 2020 is forty zettabytes<sup>10</sup>. By harnessing big data, leader can make decisions based on evidence rather than intuition (Daepp et al., 2015). Companies need to hire scientists who can translate data into useful business information to spot customer behavior patterns, respond in real-time, and ensure data-driven market ambidexterity (De Luca et al., 2021). To succeed, companies need to change their executives' paradigm about "judgment" (McAfee et al., 2012) and ensure they focus on their business need (Anderson et al., 2019). According to Gartner's model for maturity in data analytics, companies can capture progressive value as they move from fundamental descriptive analytics, to diagnostic analytics, to predictive analytics, up to prescriptive analytics<sup>11</sup>. Big data's predictive potential has attracted the most widespread interest (Andersson et al., 2018). Nowadays, analytics has the most impact when it comes to speed of decision-making and risk management (TIBCO, 2016).

Technologies – Technology (including Artificial Intelligence (AI) (Ransbotham et al., 2019)) and business executives need to work hand-in-hand to enable their business model with digital. Consequently, companies with a history of strained IT-business relationships have an additional obstacle to overcome in contrast to companies that have solid internal IT-business relationships (Westerman et al., 2012).

Systems Integration – Though technology doesn't create value on its own, it can surely impede value if done inadequately. Many companies suffer with their legacy platforms – outdated and intertwined IT systems. To avoid hindering their digital transformation efforts, companies have no other option than investing in fixing their legacy

<sup>&</sup>lt;sup>8</sup> https://www.audibusinessinnovation.com/abi/en.html

<sup>&</sup>lt;sup>9</sup> Business Process Reengineering is the rethinking and reengineering of business-related processes.

<sup>&</sup>lt;sup>10</sup> According to EMC's Digital Universe Study in 201 using research conducted by IDC.

<sup>&</sup>lt;sup>11</sup> According to Gartner IT Glossary.

platforms (Westerman, 2019). This will (1) provide access to more accurate information more quickly so that better and faster decisions could be made, and (2) streamline and integrate company's core business processes and system across geographies and functions (Collyer, 2000). Another approach is data and digital platforms (DDP). It leverages cloud infrastructure and decouples digital business transformation from core IT transformation by creating a data layer under a smart business layer. As a result, data is separated from systems like ERP and CRM and modular interfaces between systems are created (Close et al., 2020).

## 2.5. Organizational Transformation

# 2.5.1. Introduction to Organizational Transformation

An organizational transformation is an extreme change in an organization, "a drastic reshuffling in every dimension of its existence: its missions, goals, structure, and culture" (Levy, 1986). When modelling organizational change, scholars are divided into two camps. The first includes theories from the adaptational mechanism of organizational change (Siegal et al., 1996) that occurs mainly through the adaptive responses. Theories residing in this camp are: contingency theory (Lawrence & Lorsch, 1967; Woodward, 1965), resource dependence theory (Burt, 1992; Pfeffer & Salancik, 1978), institutional theory (Meyer & Rowan, 1977), and transaction cost economics (Williamson, 1985). The second camp adheres to a selection mechanism of organizational change which assumes that change is difficult and slow. Theories residing in this camp are organizational ecology (Hannan & Freeman, 1984, 1989) and evolutionary economics (Winter & Nelson, 1982). Recently, scholars have been advocating to converge the organizational and evolutionary analysis of transformational change (Sammut-Bonnici & Wensley, 2002).

#### 2.5.2. The "What" of Organizational Transformation

For a successful organizational transformation, companies need to build the right capabilities, embrace new ways of working aiming for Continuous Improvement, and redesign their organization structure to fit the newly adapted business model. The result will shape their organization DNA and culture.

Building capabilities - Many scholars (Kale et al., 2002) covered the topic developing organizational capabilities. These insights primarily include perspectives from the resource-based view (Barney, 1991), dynamic capabilities (Teece et al., 1997), evolutionary economics (Winter & Nelson, 1982), and the emerging literature on organizational learning and the knowledge-based view of the company (Grant, 2002; Henderson & Cockburn, 1994; Kogut & Zander, 1992). To achieve a strategic competitive advantage, companies can bring together integrated data and analytic capabilities (Mohr & Hürtgen, 2018). This requires developing digital leaders (Kane et al., 2018) and employees (De la Boutetière et al., 2018; De Raedemaecker et al., 2017; Snow et al., 2017), and leveraging technology knowledge (Buvat et al., 2018) as well as employees capabilities. The latter requires changes to competencies (Furr et al., 2018), soft skills (Buvat et al., 2017; Kane et al., 2016), culture, as well as investments in information technology (Westerman et al., 2012) and analytics academies (Brown et al., 2019). If building capabilities by either reskilling or upskilling will take too long and consequently endangers the business survival, companies will opt to "buy" these capabilities (Kanter, 1984).

Embracing new ways of working aiming for Continuous Improvement (Kaizen)- New ways of working lead to agility and employees' retention as they remove bureaucracy and obsolete management styles. They also facilitate innovation in an agile and scalable approach.

*Making innovation happen* – Companies are hubs, connecting their customers, their cross-functional teams (Kane et al., 2019), and those who generate information about their projects (Lessl et al., 2018). They make innovation happen by encouraging new idea development, risk taking, and entrepreneurship (Felberg & Demarco, 1992; Tushman & Nadler, 1986).

Agile – The "agile" tenets are developing iteratively, releasing frequently, focusing on the customer, and collaborating through a cross-functional team (De Smet et al., 2019; Dikert et al., 2016). It is about prioritizing iterative test-and-learn (Brosseau et al., 2019; Kane et al., 2018) methods over detailed planning. This can shorten the time to market for a new campaign to just days (Glaser et al., 2019).

Scaling – Companies can scale up agile successfully, however leaders must be realistic (Rigby et al., 2018).

Continuous Improvement (Kaizen) – Kaizen implies a method of continuous improvement of the basic way of work (Chen et al., 2001). It is a composite word involving two notions: Kai (change) and Zen (for the better) (Palmer, 2001). Continuous Improvement is critical especially in competitive environments (Schroeder & Robinson, 1991). It demands restless attempts for improvement by everyone and across the organization (Ashmore, 2001; Caruso, 2013; Malik & YeZhuang, 2006).

Redesigning the organization structure to fit the new business model - Scholars have studied the behavior of complex organizations (Thompson, 1967) and their design as a solution to the bounded rationality challenge (Galbraith, 1974; Sah & Stiglitz, 1985). In a stable context and in the absence of the need to innovate, organizations are structured hierarchically. Such organizations can be also classified as "mechanistic" versus "organic" (Burns & Stalker, 1961) that are highly flexible and adaptable making them more applicable in today's environments. Organic organizations depend heavily on the agency of their members (Snow et al., 2017). Strategy and structure are intertwined and new challenges or business models give rise to new structures (Chandler, 1990; Sloan, 1963). The "right" organization has to be devised as an organism around common objectives (Brosseau et al., 2019) - rather than a machine (De Smet, 2018). For companies that decided to go for a customer & channel engagement driven business model, their key unit of management will become the customer "episode" that consists of all the activities involved to successfully fulfill a customer's need (du Toit et al., 2018). And for those companies who decided to go for products and services driven business model, they will have to bring sales and marketing (Guenzi & Troilo, 2007), including product development, into one active and combined organism to achieve pre-defined marketing KPIs (Buck et al., 2019).

Shaping the organization DNA and culture - An organizational culture is a complex set of values, beliefs, assumptions, and symbols that influence the way a company runs its business (Barney, 1986; Schein, 1985). A strong culture is essential for excellence in organizations and augmenting corporate performance (Kotter, 2008). The right culture can even influence a company's speed to market (Litré et al., 2018). Culture, therefore, is of central importance - change anything in the organization (technology, structure, strategies) and the culture changes (Bate, 1994). Companies who will use digital as an enabler for their chosen business model have to create an effective digital (Kane et al., 2016) and customer-focused culture (Gulati & Oldroyd, 2005). One example of digital-native companies who embarked on such endeavor is Microsoft when they identified the culture they want to have: (1) customer obsession, (2) diversity & inclusion, and (3) one Microsoft (Ibarra et al., 2018). As culture has been cited as one of the most significant self-reported barriers (Goran et al., 2017), companies who are about to embark on a transformation journey must think culturally rather than think about culture. This means adding the dimension of "where have we been" to the traditional organizational development themes of "where are we now" and "where do we want to go" (Buvat et al., 2017) to avoid becoming "sticky" (Newman, 2011).

#### 2.5.3. The "How" of Organizational Transformation

Companies can transform their organizations by building commitment at all levels, creating & sharing the company's vision & purpose with a sense of urgency, addressing heuristics and biases, and accelerating the organizational learning.

Building commitment at all levels starting by leadership - When companies use digital as an enabler for their business model, they will have to push decision making further down into the organization, however some scholars suggest that employees may be hesitant to adopt their roles as digital leaders (Kane et al., 2018). True transformation requires the involvement and commitment across all levels of an organization (Pascale et al., 1997). To ensure the employees feel respected and involved, executives have to engage all of them (Faeste & Hemerling, 2016) after giving them time to assimilate the logic of the transformation. By doing so, a virtuous cycle will be created where employees embrace the change and sustain it (Litré et al., 2018). Therefore, companies will not be able to successfully transform without empathy to better understand their employees' perspectives (Sanchez, 2018) and type A leaders - who overly emphasize process, effort, and control - will have to adopt an "antihero" style, characterized by empathy, humility, self-awareness, flexibility, and an ability to acknowledge uncertainty (Johansen, 2017; Lancefield, 2019; Wilson et al., 2013). Leaders will also have to act as role models in displaying openness to change (Buvat et al., 2017) and

fundamentally shift their behavior by asking questions rather than giving answers, digging for root causes of problems, and connecting the future to today (Jenkins, 2017).

Creating and sharing the company's vision and purpose with a sense of urgency – In the current era of technology and knowledge, organizations are deemed too complex and employees are considered an adaptive resource. Creating the company's vision became an opportunity for the management team to set out their understanding of the strategic intent of the business (Hamel & Prahalad, 2010). Furthermore, successful change requires developing a shared vision with a sense of urgency (Beer et al., 1990; Kanter, 1984) and the use of "authentic informal leaders" who can act as internal ambassadors (Caglar & Duarte, 2019). Purpose took center stage and process became the bridge between people and purpose (Ghoshal & Bartlet, 1998; Keller, 2015). When a company has purpose, its employees find meaning in its goals (Csikszentmihalyi, 2002; Mourkogiannis, 2007), connection, and joy in their work, as well as the desire to contribute, develop, and achieve. Purpose is a compelling motivator as it addresses both the Head and the Heart (Carlisi et al., 2017).

Addressing heuristics and biases - Decision making is synonymous with management. Simon realized that most people's assumptions were unrealistic and regarded the organization as an interconnected and intercommunicating body. For him, the difference between effectiveness and ineffectiveness in organizations hinged on the ability to make decisions effectively (Simon, 1947). He proposed that bounded rationality is a substitute for the mathematical modeling of decision-making (Simon, 1955) which contends that decision makers are intentionally rational however due to their human mental and emotional construct, they at times fail in important decisions. There are two types of limits on rational adaptation: procedural and substantive (Jones, 1999). To reduce complexity of decision making, people rely on heuristics though sometimes they lead to systematic errors (Tversky & Kahneman, 1978). Scholars also researched decision making in innovative settings which is seen as providing a third, missing model of decision making that in the course of being "heuristic" (oriented to empirical discovery) is also "logically sound", hence arguably rational (Grandori, 2013). There are variety of flaws that prevent individuals from learning effectively and scholars suggested organizational practices that may address them (Heath et al., 1998; Lovallo & Sibony, 2010).

Accelerating the organizational learning - Organizations help their employees cope with their bounded rationality by sculpting bounded rational thought processes and decisions through learning. Organization learning is the summation of the learning of its current members and the assimilation of the incremental knowledge brought by newly hired members (Simon, 1991). As such learning is typically viewed as an organization-level or industry-level phenomenon (Baum & Ingram, 2000; Cyert & March, 2007). Learning organizations continually enhance their capabilities to create their future (Senge, 1990) and pursue the goal of Knowledge Velocity<sup>12</sup> (Slywotzky et al., 2001). Scholars analyzed how companies learn and suggested frameworks like learning curves (Wright, 1936) and experience curves (Hax & Majluf, 1982) with the assumption that prior success experience can lead to beneficial knowledge when transferred to a new organization (Eesely & Roberts, 2006). Scholars also studied exploration of new prospects versus exploitation of old beliefs in organizational learning. They concluded that though refining exploitation more rapidly than exploration is effective on the short term can be self-destructive on the long term (March, 1991). Scholars also identified two organizational learning models whereby: Model 1 (or single-loop learning) when the detection and correction of organizational error allow the organization to achieve its current objectives, and Model 2 (or doubleloop learning) when organizational error is detected and corrected by adjusting fundamental norms, policies, and objectives (Argyris & Schön, 1997). Model 2 is harder, but much needed in a corporate transformation context. Scholars also defined a company's absorptive capacity as its ability to identify the value of new external information, absorb it, and apply it in business (Cohen & Levinthal, 1990; Hagel et al., 2012). As a result, learning and talent development has become strategic to companies' transformation success (Argote, 2011; Brassey et al., 2019). Once the required skills are identified, suitable learning programs can be conceived and delivered online or offline (Dumitrescu et al., 2017). Furthermore, to survive digital disruption, companies as well as employees need to embrace a growth mindset (Kane et al., 2018).

<sup>&</sup>lt;sup>12</sup> Knowledge Velocity is the rate at which an organization generates, disseminates, reuses, and modifies knowledge among all its talent.

#### 2.5.4. The Enablers of Organizational Transformation

Communications – Many scholars have emphasized the important role of communication in change processes (Catrin & Mats, 2008; Kanter, 1984; Slatter & Lovett, 1999). Communication continuously increases the odds to achieve a successful transformation (Litré et al., 2018). Hence the need to develop an integrated, strategic approach to communications to ensure successful transformations (Argenti et al., 2005; McAfee, 2009) ideally using digital technology<sup>13</sup> to wire the organization so that everyone gets a voice and can collaborate (Brynjolfsson & McAfee, 2014). Here, enterprise social platforms are key.

Trust and Empowerment – Trust is linked to human beliefs, sentiments, and intentionality. It can be defined as preserving mutual faith in each other in terms of intention and behaviors. Trust can facilitate open, significant, and persuasive information exchange. High levels of trust can alleviate employees' fear, skepticism, and uncertainty. Trust can conduct the organization's climate towards better knowledge creation by reducing the fear of risk and uncertainty (Nejatian et al., 2013). Scholars identified three elements of trust: positive relationships, good judgement, and consistency (aka walking the talk) (Zenger & Folkman, 2019) that can be achieved through humble leadership where employees feels psychologically safe (Schein & Schein, 2018). An example is China's Tencent<sup>14</sup> - and its messaging apps WeChat<sup>15</sup> and QQ<sup>16</sup> - that advocates building a solid foundation of trust and empowerment for a culture that fosters creativity, agility, and speed (Ready, 2018). Empowerment results in flat organizational structures and boosts productivity and employee satisfaction (Love & Gunasekaran, 1997). To be successful, empowerment necessitates a clear vision, a learning mindset among rank and file, and adequate implementation tools (Clarke, 2012; Margaret & Erstad, 1997). Both digital-native and non-digital-native companies can empower employees with the aim of originating, nurturing, and developing a continuous stream of new ideas. Examples range from Google's famed 20% time, LinkedIn's (in)cubator, Apple's "Blue Sky", Spotify's "Hack Weeks", Facebook's "Hackdays", and 3M's "Time to Think" (Perkin & Abraham, 2017).

# 2.6. Corporate Transformation Failures

Failures Attributed to Business Model Transformation - Scholars identified the blockers for adopted business models. Deciding what to change depends on fully understanding the trigger for transforming, the company's fundamental mission, and the required leadership capabilities (Anand & Barsoux, 2017).

Failures Attributed to Digital Enabled Transformation - Scholars identified gaps in digital transformations ranging from missing skills (Buvat et al., 2018; Westerman et al., 2011), culture / ways of working issues (Handscomb et al., 2018), ineffective IT (Fitzgerald et al., 2013), and other shortfalls (Bughin & Catlin, 2017; Bughin et al., 2018; Davenport & Westerman, 2018). Scholars also addressed myths around digital transformations (Andriole, 2017).

Failures Attributed to Organizational Transformation - Scholars identified a plethora of reasons ranging from skipping phases of the change process (Kotter, 2007), falling into assumptions (Beer et al., 1990), missing blind-spots (Haudan & Berens, 2018), misaligning (Ates et al., 2019; Maor et al., 2017), failing to transform the culture / new ways of working (Aiken & Keller, 2009; Berlin et al., 2012; De Smet et al., 2019), and other shortfalls (Miles, 2010; Thorne, 2000).

## 2.7. Interdependencies

A company's strategy, its structure, and its processes must "fit" like a puzzle. But there are challenges in achieving fit in new contexts (Milgrom & Roberts, 1995; Mintzberg, 1979). However, if such fit is achieved, a company's competitive advantage can turn sustainable (Porter & Siggelkow, 2008). Consequently, managers within companies must make choices along many components leading to companies being envisioned as systems of

<sup>&</sup>lt;sup>13</sup> Key players in employees' communication: Facebook's Worplace @ workplace.com, Microsoft's Yammer @ microsoft.com, Unily @unily.com.

<sup>&</sup>lt;sup>14</sup> https://www.tencent.com/en-us

<sup>15</sup> https://www.wechat.com/

<sup>16</sup> https://www.imqq.com/

interdependent choices (Khandwalla, 1973; Siggelkow, 2011). To be successful, a company must seek the right sets of decisions while balancing search and stability (Rivkin & Siggelkow, 2003). Complementarity theory suggests that successful companies mix a number of practices simultaneously and that the outcomes are greater than the sum of the parts (Whittington et al., 1999). Nevertheless, managers still misperceive these combinations including bounded rationality, outdated mental models, and narrow incentive systems that lead them to overlook externalities (Siggelkow, 2002).

Extensive literature covered the topic of congruence and causality. Studies on the relationship between the environment, strategy, and performance proved that strategy variables accounted for 40% of the variance in the relationship; environment accounted for 2%; and the interaction term was not significant (Prescott, 1986). Other studies on the relationship between the environment and organization showed that managers' ability to meet successfully environmental conditions of tomorrow revolves around their understanding of organizations as integrated and dynamic wholes (Miles et al., 1978). Similar studies on the relationship between culture and performance showed that certain culture aspects are more important than others (Wilkins & Ouchi, 1983). This leads to the conclusion that identifying and managing interdependencies is among the most important transformation management component with the highest need for action (Lahrmann et al., 2012). Accordingly, scholars devised methodologies that offer linkages amongst interdependencies in the context of transformations (Burke & Litwin, 1992; de Waal, 2018; Kilmann, 1995; Stiles & Uhl, 2012).

## 2.8. Methodology

Corporate transformations is a multi-faceted topic. To ensure proper coverage and integration, we opted for a systematic literature review. We started with the search for "corporate transformation". As text mining showed a recurrence of "business model", "organizational transformation", and "digital transformation", we expanded our search and included them. The search was done over (1) multiple databases - Business Source Complete, Emerald Insight, JSTOR, SAGE Journals, ScienceDirect, SpringerLink, Web of science, and Wiley online library, (2) websites of consultants - McKinsey, Bain & Co, Boston Consulting Group, Capgemini Consulting, and PricewaterhouseCoopers, and (3) practitioners magazines - Harvard Business Review and MIT Sloan Management Review.

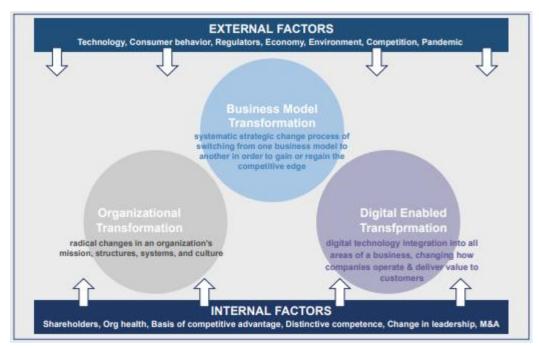
#### 3. RESULTS

#### 3.1. Consolidating The Three Components of Corporate Transformation

Section 2 revealed that numerous practitioners and academic literature are available on the components of corporate transformations; however, they are mostly unidimensional. Figure 1 consolidates the three components of corporate transformation: (1) *business model transformation*: the methodical strategic change process of switching from one business model to another in order to gain or regain the competitive edge (Cozzolino et al., 2018; Osterwalder & Pigneur, 2010; Rivkin, 2000; Siggelkow, 2002); (2) digital enabled transformation: the integration of digital technology into all areas of a business, altering how companies operate and deliver value to customers (Sebastian et al., 2017); and (3) *organizational transformation*: the radical changes in an organization's mission, structures, systems, and culture (Brosseau et al., 2019; Levy, 1986; Siegal et al., 1996; Troilo et al., 2017).

Figure 1 additionally reveals the external factors and internal factors that influence the three components of a corporate transformation. The latter factors can have the form of one or a combination of the following: activist shareholders calling for radical changes, a weak organizational health on the brink of collapse, loss of a competitive advantage or distinctive competence leading to corporate obsolescence, new leadership seeking fundamental changes, or a company takeover as a result of a merger or acquisition.

This finding builds on the available unidimensional literature. Furthermore, the framework (Figure 1) is novel and has not been sighted in any literature.



# 3.2. Identifying the Interdependencies Among the Three Components

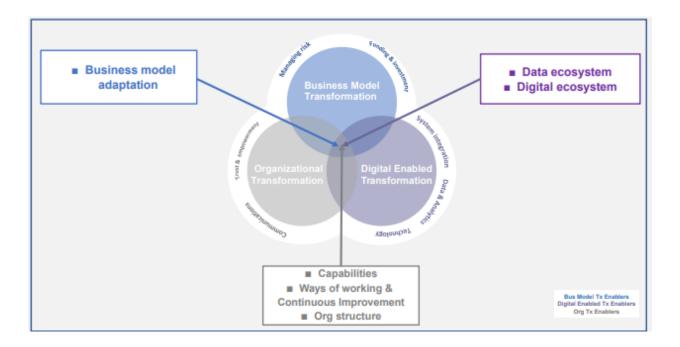
Scholars observed that a successful transformation from one system to the other requires a sizeable change across a wide range of a company's activities (Milgrom & Roberts, 1990). Identifying the interdependencies among the three components of corporate transformations will narrow down those activities and zoom-in on the ones that are of essence. With that objective, we cross-referenced available literature from academia and practitioners <sup>17</sup> (Table 1). First, we researched literature on Business Model Tx and Digital Enabled Tx and inferred their interdependencies (where activities of one component are interdependent on activities of the other component). Subsequently, we did the same for Business Model Tx and Organizational Tx, Organizational Tx and Business Model Tx, Organizational Tx and Digital Enabled Tx and Organizational Tx. As an outcome, we confirmed that the three components of corporate transformations (business model, organizational, and digital as enabler) are not mutually exclusive. Furthermore, we were able to identify the interdependencies among the three components as plotted in Figure 2, and they are:

- business model adaptation that belongs to the Business model Tx component
- data ecosystem and digital ecosystem that belong to the Digital enabled Tx component
- capabilities, ways of working & continuous improvement, and org structure that belong the Organizational Tx component

To validate our work, we cross referenced the identified interdependencies with literature about Corporate Transformation failures. As Table 2 shows, each of the references addressed interdependencies belonging to two or more component.

This finding suggests that all interdependencies are interlinked, any change in any of the interdependencies will imply a change in the other interdependencies.

<sup>&</sup>lt;sup>17</sup> We used blue color to denote references from practitioners.



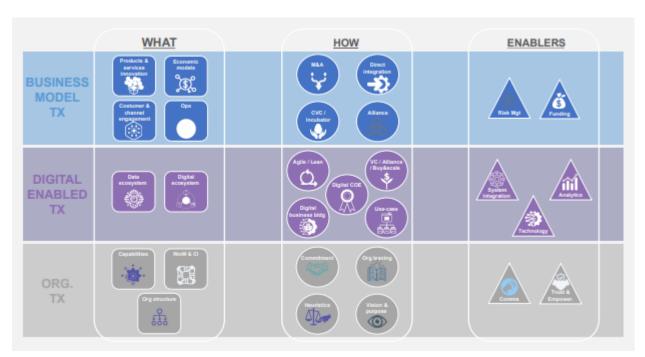
# 4. DISCUSSION

# 4.1. Implication Of Identifying The Three Components

Section 2 identified the three components of a transformation and enumerated their "what", "how", and enablers. Consequently, scholars and practitioners are provided with a comprehensive list, by component, that answers what needs to be done, how can it be done, and what are the enablers that have to be secured. As transformations are messy and bring chaos among executives and their employees preventing them from seeing all the options around them, the comprehensive list will be a key resource.

# **4.2. Implication Of Consolidating The Three Components**

The consolidation will prevent the common shortfall of approaching corporate transformations in a unidimensional angle. An example of such shortfall is investing in a digital transformation (the core of the digital enabled transformation component) while disregarding the ways of working (part of the organizational transformation component). This framework can have multiple applications for academics and practitioners. Consequently, diagnosing a company will have to be three-dimensional to cover the business model, digital, and organizational aspects. Furthermore, the diagnosis will cover the external and internal factors influencing the transformation. Subsequently, as the three components have been proven to be interdependent, strategy and its action plans will also have to be three-dimensional otherwise will be incomplete. As a result, the corporate transformation initiatives that address the components' "what", "how" will constitute an ecosystem as portrayed in Figure 3. This finding compliment previous practitioners and academics' findings that companies that took a thorough approach and implemented all their corporate transformation initiatives report a 79% success rate and that the more actions a company takes the more likely its transformation is to succeed (Goldstrom, 2019; Jacquemont et al., 2015; Kilmann, 1995).



# 4.3. The Strategic Routes of Corporate Transformation

Companies can embark on both digital enabled transformation coupled with organizational transformation irrespective of whether the business model is "new" or "transformed." Consequently, they have three strategic transformation routes with different destinations:

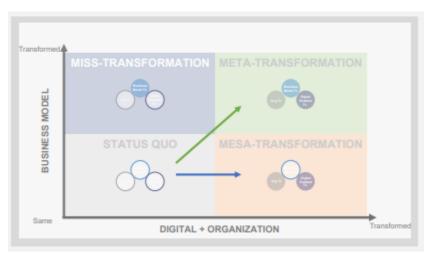
- (1) Transform only their business model without enabling it digitally and without transforming their organization. In the absence of academic denomination, we refer to this destination as *miss-transformation*.
- (2) Integrate digital into all areas of their incumbent business model coupled with an organizational transformation. In the absence of academic denomination, we refer to this destination as *mesa*<sup>18</sup>-transformation.
- (3) Transform all three corporate transformation components. In the absence of lack of academic denomination, we refer to this destination as *meta*<sup>19</sup>-*transformation*.

Figure 4 describes the strategic routes where the X axis refers to the coupled digital enabled transformation with organizational transformation (or lack of) and the Y axis to business model transformation (or lack of). Companies start their transformation journey in the *status quo* quadrant (bottom left) with no changes to their components.

1:

<sup>&</sup>lt;sup>18</sup> Mesa is a prefix denoting intermediate or connective.

<sup>&</sup>lt;sup>19</sup> Meta (from the Greek μετα-, meta-, meaning "after" or "beyond") is a prefix meaning more comprehensive or transcending. Meta does not refer to Facebook corporate company nor to software engineering.



# 4.4. The limitations of the article

The article's findings are mainly based on systematic review of available literature and not based on any statistical analysis. Though this fact does not endanger the consolidation of the three components (Section 3.1) nor the identification of the strategic routes of corporate transformations (Section 4.3), we believe that a statistical analysis on the interdependencies (Section 3.2) would have rendered our findings more rigorous.

# 5. CONCLUSION

This article contributes to the study and literature of corporate transformations. Based on a systematic review of available literature, we (1) identified the three components of any corporate transformation: business model transformation, digital enabled transformation, and organizational transformation; and (2) validated that they are not unidimensional. As a result, we provided a framework (Figure 3) that consolidates the components of corporate transformations towards managing them and their interdependencies as one ecosystem. Furthermore, we identified the different strategic routes that any transforming company can take (Figure 4). The framework and strategic routes can be useful to academic research and practitioners when diagnosing companies, strategizing their transformations, and planning their transformation journeys.

We believe that this article paves the way for prescriptive literature from academics and practitioners to transforming companies to help them navigate their turbulent journey. Further research on the topic of corporate transformation is encouraged with the aim of avoiding colossal economic value destruction resulting from unsuccessful transformations.

Two future researches avenues can be envisioned. As the topic of leadership on the success of companies is a vast subject that has been studied, the first research can deep dive into the impact of leadership on the success of corporate transformations. And, as transforming companies struggle in sorting out their transformation agenda, the other research can address the ideal phases executives have to follow towards a successful transformation.

<u>Table 1: Interdependencies among the three components – Cross examination of their related literature</u>

Componer	nt 1	Compon	ent 2	Interdependency	Reference
Business	Model	Digital	Enabled	Enabling business	• A Padhi, R Dhawan, B Wisemann, P Küderli, T Baumgartner, B Heid, J Schlindwein -
Tx		Tx		model transformation	"Disruptive forces in the industrial sectors" – McKinsey, (2018)
					• PWC Strategy + Business: leading a bionic transformation
					• E Brynjolfsson, K McElheran – "The Rapid Adoption of Data-Driven Decision-Making" -
					The American Economic Review, (2016)
					• O Lancry – <b>Digital Transformation: Business Model</b> - Bain&Co, (2018)
					• M Dziersk, S Haas, J McClain, B Quinn – "From lab to leader: How consumer companies
					can drive growth at scale with disruptive innovation" – McKinsey, (2018)
				Digital	• A Padhi, R Dhawan, B Wisemann, P Küderli, T Baumgartner, B Heid, J Schlindwein –
				Transformation	"Disruptive forces in the industrial sectors" – McKinsey, (2018)
				enablers	• PWC Strategy + Business: leading a bionic transformation
					• R Markey, T Springer – "The Future of Feedback: Sometimes You Don't Have to Ask
					Advanced analytics can predict when a customer is happy (or not)—and then help you
					take action" – Bain&Co, (2017)
					• E Brynjolfsson, A Mcafee – "Artificial intelligence, for real" – Harvard Business Review, (2017)
					• G O'Connor, R DeMartino - "Organizing for Radical Innovation: An Exploratory Study of
					the Structural Aspects of RI Management Systems in Large Established Firms" – Journal of Product Innovation Management, (2006)
					• T Davila, MJ Epstein, R Shelton - Making innovation work: how to manage it, measure it,
					and profit from it - Wharton School Publishing, (2006)
					• T Camara, A Hu, A Singla, R Sood, J van Ouwerkerk - Six lessons on how to embrace the
					next-generation operating model - McKinsey, (2019)
					• R Burgelman, C Christensen, S Wheelwright - "Strategic Management of Technology and Innovation" - McGraw-Hill, (2008)
		Organiza	tional Tx	Capabilities	• A Levy – "Second order planned change: definition and conceptualization" - Organizational
				W C 1 O	Dynamics, (1986)
				Ways of working &	• T Camara, A Hu, A Singla, R Sood, J van Ouwerkerk - Six lessons on how to embrace the
				CI	next-generation operating model - McKinsey, (2019)
					G Kane, D Palmer, A Phillips, D Kiron, N Buckley – "Accelerating Digital Innovation Inside and Out: Agile Teams, Ecosystems, and Ethics". MIT Sleep Povious and Deloitte University.
					and Out; Agile Teams, Ecosystems, and Ethics" – MIT Sloan Review and Deloitte University Press, (2019)
					11000, (2017)

Component 1	Component 2	Interdependency	Reference
			<ul> <li>M Everson, J Sviokla, K Barnes – "Leading a bionic transformation" – PWC Strategy + Bus, (2018)</li> <li>G O'Connor, R DeMartino - "Organizing for Radical Innovation: An Exploratory Study of the Structural Aspects of RI Management Systems in Large Established Firms" – Journal of Product Innovation Management, (2006)</li> <li>A Kent, D Lancefield, K REILLY – "The four building block of transformation" – PWC Strategy + Bus, (2018)</li> <li>E Bruderer, JV Singh – "Organizational evolution, learning, and selection: A genetic algorithm based model" – Academy of Management Journal, (1996)</li> <li>H. Yu – "What Big Consumer Brands Can Do to Compete in a Digital Economy" – Harvard Business Review, (2018)</li> <li>M Dziersk, S Haas, J McClain, B Quinn – "From lab to leader: How consumer companies and drive growth at scale with digmentive imposetion". McKinson (2018)</li> </ul>
		Org Structure	<ul> <li>can drive growth at scale with disruptive innovation" – McKinsey, (2018)</li> <li>G O'Connor, R DeMartino - "Organizing for Radical Innovation: An Exploratory Study of the Structural Aspects of RI Management Systems in Large Established Firms" – Journal of Product Innovation Management, (2006)</li> <li>J Bower, C Christensen – "Disruptive Technologies Catching the Wave" – Harvard Business Review, (1995)</li> </ul>
		Organizational Transformation enablers	<ul> <li>K Clark, T Fujimoto - "Product Development Performance: Strategy, Organization, and Management in the World Auto Industry" - Harvard Business School Press, (1991)</li> <li>E Bruderer, JV Singh - "Organizational evolution, learning, and selection: A genetic algorithm based model" - Academy of Management Journal, (1996)</li> <li>A Kent, D Lancefield, K Reilly - "Transforming a Traditional Bank into an Agile Market Leader" - PWC Strategy + Bus, (2018)</li> </ul>
			<ul> <li>H. Yu – "What Big Consumer Brands Can Do to Compete in a Digital Economy" – Harvard Business Review, (2018)</li> <li>M Dziersk, S Haas, J McClain, B Quinn – "From lab to leader: How consumer companies can drive growth at scale with disruptive innovation" – McKinsey, (2018)</li> <li>G O'Connor, R DeMartino - "Organizing for Radical Innovation: An Exploratory Study of the Structural Aspects of RI Management Systems in Large Established Firms" – Journal of Product Innovation Management, (2006)</li> </ul>
Organizational	Business Model	Customer & channel	• R Buck, A Harper, J Lowrie, S Prince - "Agile in the consumer-goods industry: The
Tx	Tx	engagement	transformation of the brand manager" – McKinsey, (2019)

Component 1	Component 2	Interdependency	Reference
			<ul> <li>D Glaser, J Ludolph, R Schaubroeck, T Vendrig – "A new path for teleco marketing" – McKinsey, (2019)</li> <li>D Michels - "Culture's Role In Corporate Transformation" - Bain&amp;Co, (2018)</li> <li>D Bonnet, P Ferraris, G Westerman, A McAfee - "Talking 'bout a Revolution" - Digital Transformation Review, (2012)</li> </ul>
		Products & services	<ul> <li>M Hannan, J Freeman – "Structural inertia and organizational change" - American Sociological Review, (1984)</li> <li>G Kane, D Palmer, A Phillips, D Kiron, N Buckley – "Accelerating Digital Innovation Inside and Out; Agile Teams, Ecosystems, and Ethics" – MIT Sloan Review and Deloitte University Press, (2019)</li> </ul>
		Econ models	<ul> <li>W Barnett, G Caroll – "Modeling internal organizational change" – Annual Review of Sociology, (1995)</li> <li>RK Sah, J Stieglitz – "Human fallibility and economic organization" - American Economic Review, (1985)</li> </ul>
		Operations	<ul> <li>A Pettigrew, R Whipp – "Managing Change for Competitive Success" - Blackwell, (1991)</li> <li>D Rigby, J Sutherland, A Noble – "Agile at scale: How to go from few teams to hundreds" – Harvard Business Review, (2018)</li> <li>D Kahneman, P. Slovic, A. Tversky – "Judgment under Uncertainty: Heuristics and Biases" - Cambridge University Press, (1982)</li> <li>P Love, A. Gunasekaranb – "Process reengineering: A review of enablers" – International Journal of Production Economics, (1997)</li> <li>D Ready - "The Enabling Power of Trust" - Sloan Management Review, (2018)</li> </ul>
	Digital Enabled Tx	Enabling business model transformation	<ul> <li>D Ready - "The Enabling Power of Trust" - Sloan Management Review, (2018)</li> <li>G Kane, D Palmer, A Phillips, D Kiron, N Buckley - "Coming of Age Digitally; Learning, Leadership, and Legacy" - MIT Sloan Management Review and Deloitte University Press, (2018)</li> <li>R Buck, A Harper, J Lowrie, S Prince - "Agile in the consumer-goods industry: The transformation of the brand manager" - McKinsey, (2019)</li> <li>G Kane, D Palmer, A Phillips, D Kiron, N Buckley - "Accelerating Digital Innovation Inside and Out; Agile Teams, Ecosystems, and Ethics" - MIT Sloan Review and Deloitte University Press, (2019)</li> <li>G Kane, D Palmer, A Phillips, D Kiron, N Buckley - "Aligning the Organization for Its Digital</li> </ul>
			Future" - MIT Sloan Management Review and Deloitte University Press, (2016)

Component 1	Component 2	Interdependency	Reference
			<ul> <li>P Jeruchimowitz, E Colwill, N Hudson, K McMillan – "Zeroing out of the past" – Accenture, 2018</li> <li>D Glaser, J Ludolph, R Schaubroeck, T Vendrig – "A new path for teleco marketing" – McKinsey, (2019)</li> <li>J Goran, L LaBerge, R Srinivasan - "Culture for a digital age" – McKinsey, (2017)</li> <li>H Boutetière, A Montagner, A Reich – "Unlocking success in digital transformations" – McKinsey, (2018)</li> </ul>
		Digital Transformation enablers	<ul> <li>D Ready - "The Enabling Power of Trust" - Sloan Management Review, (2018)</li> <li>G Kane, D Palmer, A Phillips, D Kiron, N Buckley - "Coming of Age Digitally; Learning, Leadership, and Legacy" - MIT Sloan Management Review and Deloitte University Press, (2018)</li> </ul>
			<ul> <li>S Ghoshal, C Bartlet – "The Individualized Corporation" - William Heinemann, (1998)</li> <li>M Beer, R Eisenstat, B Spector – "Why Change Programs Don't Produce Change" – Harvard Business Review, (2006)</li> <li>J Brassey, L Christensen, N van Dam – "The essential components of a successful L&amp;D strategy" – McKinsey, (2019)</li> </ul>
Digital Enabled Tx	Business Mode Tx	Customer & channel engagement	<ul> <li>G Westerman – "Digital Transformation: A Roadmap for Billion Dollar Organizations" - Capgemini Consulting and MIT Center for Digital Business, (2011)</li> <li>D Bonnet, P Ferraris, G Westerman, A McAfee - "Talking 'bout a Revolution" - Digital Transformation Review, (2012)</li> </ul>
		Products & services	<ul> <li>C Matt, T Hess, A Benlian – "Digital Transformation Strategies" – Business &amp; Information System Engineering, (2015)</li> <li>F Li - "The digital transformation of business models in the creative industries: A holistic framework and emerging trends" - Technovation, (2018)</li> <li>J Bughin, L LaBerge, A Mellbye – "The case for digital reinvention" – McKinsey, (2017)</li> <li>I Sebastian, J Ross, C Beath, M Mocker, K Moloney, N Fonstad – "How Big Old Companies Navigate Digital Transformation" – MIS Quarterly Executive, (2017)</li> <li>C Dremel, M Herterich, J Wulf, JC Waizmann, W Brenner - "How AUDI AG Established Big Data Analytics in Its Digital Transformation" – MIS Quarterly Executive, (2017)</li> <li>D Schallmo, C Williams - "Digital Transformation Now! Guiding the Successful Digitalization of Your Business Model" – Springer, (2018)</li> <li>D Bonnet, P Ferraris, G Westerman, A McAfee - "Talking 'bout a Revolution" - Digital Transformation Review, (2012)</li> </ul>

Component 1	Component 2	Interdependency	<u>Reference</u>
			• T Hess, A Benlian, C Matt, F Wiesböck – "Options for Formulating a Digital
			<b>Transformation Strategy"</b> – MIS Quarterly Executive, (2016)
		Econ models	• M Götza, B Jankowskab - "Clusters and Industry 4.0 – do they fit together?" – European
			planning studies, (2017)
			• P Kale, J Dyer, H Singh – "Alliance capability, Stock Market response, and Long-term
		0 '	alliance success: The role of the alliance function" – Strategic Management Journal, (2002)
		Operations	• C Matt, T Hess, A Benlian – "Digital Transformation Strategies" – Business & Information System Engineering, (2015)
			• J Jöhnk, M Röglinger, M Thimmel, N Urbach – "How to implement agile IT setuips: a
			Taxonomy of design options" – Association for Information Systems, (2017)
	Organizational Tx	Capabilities	• G Kane, D Palmer, A Phillips, D Kiron, N Buckley - "Achieving Digital Maturity" - MIT
			Sloan Management Review and Deloitte University Press, (2017)
			• P Kale, J Dyer, H Singh – "Alliance capability, Stock Market response, and Long-term
			alliance success: The role of the alliance function" – Strategic Management Journal, (2002)
			• D Bonnet, P Ferraris, G Westerman, A McAfee - "Talking 'bout a Revolution" - Digital
		XXX	Transformation Review, (2012)
		Ways of working &	G Westerman – "Digital Transformation: A Roadmap for Billion Dollar Organizations" -  Grant in Grant Mark of A Digital Business (2011)  Grant in Grant Mark of A Digital Business (2011)
		CI	Cappemini Consulting and MIT Center for Digital Business, (2011)
			• M Collyer - "Communication – The Route to Successful Change Management" – Supply Chain Management International Journal, (2000)
		Org Structure	• G Westerman – "The First Law of Digital Innovation" – MIT Sloan Management Review,
			(2019)
			• C Matt, T Hess, A Benlian – "Digital Transformation Strategies" – Business & Information
			System Engineering, (2015)
			• P Kale, J Dyer, H Singh – "Alliance capability, Stock Market response, and Long-term
			alliance success: The role of the alliance function" – Strategic Management Journal, (2002)
			• T Hess, A Benlian, C Matt, F Wiesböck – "Options for Formulating a Digital Transformation Strategy" – MIS Quarterly Executive, (2016)
			<ul> <li>D Bonnet, P Ferraris, G Westerman, A McAfee - "Talking 'bout a Revolution" - Digital</li> </ul>
			Transformation Review, (2012)
		Organizational	O Lancry, N Anderson, G Caimi, L Colombani, L Cummings, R Morrissey – "Scaling Your"
		Transformation	Digital Transformation" – Bain & Co, (2019)
		enablers	

Component 1	Component 2	Interdependency	Reference
			• M Götza, B Jankowskab - "Clusters and Industry 4.0 – do they fit together?" – European
			planning studies, (2017)
			• M Collyer - "Communication - The Route to Successful Change Management" - Supply
			Chain Management International Journal, (2000)
			• P Kale, J Dyer, H Singh – "Alliance capability, Stock Market response, and Long-term
			alliance success: The role of the alliance function" – Strategic Management Journal, (2002)
			• G Kane, D Palmer, A Phillips, D Kiron, N Buckley - "Achieving Digital Maturity" - MIT
			Sloan Management Review and Deloitte University Press, (2017)
			• M Bender, N Henke, E Lamarre – "The cornerstones of large-scale technology
			transformation"- McKinsey, (2018)
			• J Bughin, T Catlin – "3 Digital Strategies for Companies That Have Fallen Behind" –
			Harvard Business Review, (2019)
			S Schoemann - "It's Time to Rethink How You Execute Your Digital Business Model" -
			ATKarney, (2018)

<u>Table 2: Interdependencies among the three components – Cross examination of Transformation Failures literature</u>

		Organizational Tx				Digital Tx		
			Ways of			Data &		
	Business		Working &	<u>Org</u>		<u>Digital</u>		
Reference	Model Tx	<u>Capabilities</u>	<u>CI</u>	Structure	<u>Enablers</u>	Ecosys.	<u>Enablers</u>	
N Anand, JL Barsoux - "What Everyone Gets								
Wrong About Change Management" - Harvard	X	X	X	X	X		X	
Business Review, (2017)								
J Kotter - "Leading change: Why transformation		X			X			
efforts fail" – Harvard Business Review, (1995)		Λ			Λ			
M Beer, RA Eisenstat, B Spector – "Why change								
programs don't produce change" - Harvard	X	X		X	X		X	
Business Review, (1990)								
M Thorne - "Interpreting corporate								
transformation through failure" -Management	X	X	X		X			
Decision, (2000)								
J Haudan, R Berens – "What Are Your Blind								
Spots? Conquering the 5 Misconceptions that	X	X	X		X			
Hold Leaders Back" - McGraw-Hill, (2018)								
N Ates, M Tarakci, J Porck, D van Knippenberg, P								
Groenen – "Why Visionary Leadership Fails" –			X	X	X			
Harvard Business Review, (2019)								
R Miles – "Accelerating corporate								
transformations (don't lose your nerve!)" -	X	X			X			
Harvard Business Review, (2010)								
D Maor, A Reich, L Yocarini - "The people power			X	X	X			
of transformations" – McKinsey, (2017)			Α	Λ	A			
A De Smet, M Lurie, A St George - "Leading agile								
Tx: The new capabilities leaders need to build	X	X	X			X	X	
<b>21st-century Organizations"</b> – McKinsey, (2018)								
C Aiken, S Keller - "The irrational side of change		X	X		X			
management" – McKinsey, (2009)		21	71		7.1			

		Organizational Tx				Digital Tx		
			Ways of			Data &		
	Business		Working &	<u>Org</u>		<u>Digital</u>		
Reference	Model Tx	<u>Capabilities</u>	<u>CI</u>	<u>Structure</u>	<u>Enablers</u>	Ecosys.	Enablers Page 1985	
M fitzgerald, N Kruschwitz, D Bonnet, M Welch -								
"Embracing digital technology" - MIT Sloan	X	X	X	X	X	X	X	
Management Review, (2013)								
J Bughin, T Catlin - "What Successful Digital								
Transformations Have in Common" - Harvard	X		X		X	X	X	
Business Review, (2017)								
T Davenport, G Westerman - "Why So Many								
High-Profile Digital Transformations Fail" -	X				X	X	X	
Harvard Business Review, (2018)								
S Andriole - "Five Myths About Digital	X	X				X	X	
<b>Transformation"</b> – MIT Sloan Review, (2017)	Λ	Λ				Λ	Λ	
G Westerman – "Digital Transformation: A								
Roadmap for Billion Dollar Organizations" -		X			X	X	X	
Capgemini Consulting and MIT Center for Digital		A			Λ	A	24	
Business, (2011)								
C Handscomb, A Jaenicke, K Kaur, B Vasquez-								
McCall, A Zaidi - "How to mess up your agile	X	X	X		X	X	X	
transformation in seven easy (mis)steps" -	Λ	Α	Λ		Λ	A	Λ	
McKinsey, (2018)								
J Bughin, T Catlin, M Hirt, P Willmott – "Why	X					X	X	
digital strategies fail" – McKinsey, (2018)	Α					Λ	A	
J Ward, A Uhl – "Success and Failure in								
Transformation: Lessons from 13 Case Studies"	X	X	X	X	X		X	
- Business Transformation Journal, (2012)								
D Francis, J Bessant, M Hobday - "Managing								
radical organizational Tx" - Management	X	X			X		X	
Decision, (2003)								
A de Waal – "Success factors of high performance								
organization transformations" – Measuring	X	X	X	X	X		X	
Business Excellence, (2018)								

		Organizational Tx				Digital Tx	
			Ways of			Data &	
	Business		Working &	<u>Org</u>		<u>Digital</u>	
Reference	Model Tx	<u>Capabilities</u>	<u>CI</u>	<u>Structure</u>	<u>Enablers</u>	Ecosys.	Enablers
W Burke, G Litwin - "A causal model of							
organizational performance and change" -	X	X		X	X		
Journal of Management, (1992)							
R Kilmann - "A Holistic Program and Critical							
Success Factors of Corporate Tx" – European	X	X		X	X		
Management Journal, (1995)							
D Jacquemont, D Maor, A Reich - "How to beat	Х	X	Х		X		
the Tx odds" – McKinsey, (2015)	Λ	Α	Λ		Λ		
S Goldstrom - "Why transformations fail" -	Х		Х		X		
McKinsey, (2019)	Λ		Λ		Λ		

# FIGURE CAPTIONS

- Fig. 1 The three components of a Corporate Transformation: Business Model Transformation, Digital Enabled Transformation, and Organizational Transformation
- Fig. 2 The interdependencies among the three components of Corporate Transformations
- Fig. 3 The ecosystem that encompasses the defined three Corporate Transformation components' "what", "how", and enablers
- **Fig. 4** The two strategic routes of Corporate Transformations: Meta-Transformation (Business Model Tx + Digital Enabled Tx + Organizational Tx) and Mesa-Transformation (Digital Enabled Tx + Organizational Tx)

#### DISCLOSURE STATEMENT

The authors report there are no competing interests to declare.

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