

# What are the effects of a hierarchal organisational culture on the ability of a company to innovate?

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**Abstract.** The hierarchical culture within companies is defined as a formalised and structured place to work. Furthermore, this culture is characterised by rules and top-down control to streamline business processes. The hierarchical culture, as described in the competing values framework, is often seen as unable to innovate. This paper investigates the assumption that companies with a hierarchical culture are not able to adapt. Three case studies have been performed to test this claim. The case studies examine the effect of culture and structure on a company's ability to innovate. The outcomes show that there are mechanisms that a company can introduce to increase flexibility and creativity while sustaining the top-down control.

**Keywords:** Organizational Culture, Competing Values Framework, Innovation, Resilience, Case Studies, Hierarchical Culture

## Introduction

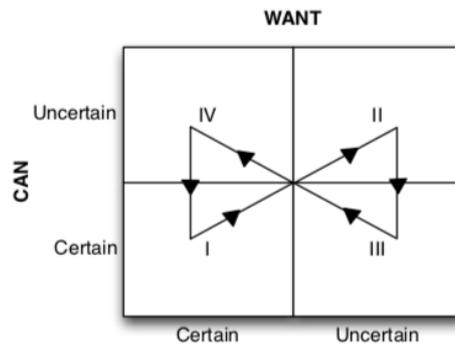
Organisations have to deal with a noticeable increase in the importance of innovation, partly caused by the globalisation of markets and digitalisation of the world (Schilling, 2016). However, organisational culture could make or break an organisation when they need to adapt to changing business environments and need to innovate (Meijer 2004; Cancialosi 2017). Innovation in organisations might not succeed since people are attached to their habits and environment and are not willing to change and innovate even though this is necessary (Hogan & Coote, 2014).

## 1 Literature

Organisational culture could, for example, be seen as the values, beliefs and hidden assumptions that organisational members have in common (Naranjo-Valencia, Jiménez-Jiménez, & Sanz-Valle, 2011). Another description of organisational culture is that "Organisational culture includes an organisation's expectations, experiences, philosophy, and values that hold it together, and is expressed in its self-image, inner workings, interactions with the outside world, and future expectations. It is based on shared attitudes, beliefs, customs, and written and unwritten rules that have been developed over time and are considered valid." (Organizational Culture, 2018; Schein, 1985; Deal & Kennedy, 1982; Peters & Waterman, 2004). Innovation can take on

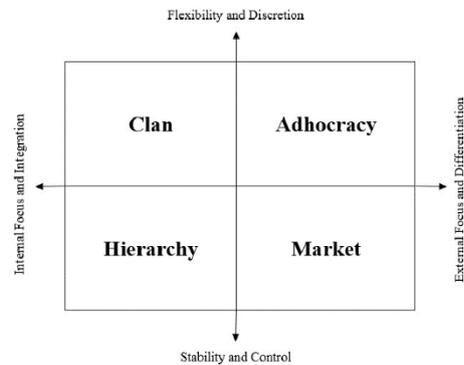
various forms, for example, product or process innovation or administrative and technical innovation (Laforet, 2016). Technological innovation could be seen as the act of introducing a new device or method for application to commercial or practical objectives (Schilling, 2016). Incremental and discontinuous innovation are both necessary for a company's success. The incremental innovation enables the company to stay competitive within mature market segments while the discontinuous change enables for newly emerged markets to be conquered (Tushman & O'Reilly, 1996). "Innovation of discontinues new products play an important role in building competitive advantage and can significantly contribute to a firm's growth and profitability" (Veryzer, 1998). This paper explains innovation in the context of the adaptive cycle of resilience as explained by A.W. Abcouwer and B.G. Parson (Abcouwer & Parson, 2017). They state that organisations move in a four-quadrant model as can be seen in the figure below.

**Fig. 1.** The Adaptive Cycle



Innovation can be a necessity because of existing working methods and insights that are no longer sufficient within a changing environment or market (Abcouwer & Smit, 2015). This paper focuses explicitly on the adaptiveness of companies when they need to innovate and move from stage three to stage four in the adaptive cycle. Adaptive capacity can be defined as "the ability of a system to adjust to climate change, to moderate potential damages, to take advantage of opportunities or to cope with the consequences" (IPCC, 2001). The hierarchical culture, as stated in the competing values framework of Quinn (1988), is used to explain the effect of organisational culture on the adaptiveness in the competing values framework and so, the ability to innovate.

**Fig. 2.** The Competing Values Framework



The competing values framework of Quinn (1988) makes a distinction between four different types of organisational culture (Hooijberg & Petrock, 1993).

The clan is considered as an organisational culture which can be characterised as a friendly place to work, high loyalty of employees, high commitment and where success is defined in terms of sensitivity to customers and concern for people. Japanese firms after World War II could be seen as an example of the clan culture (Gaál, Ober-mayer-Kovács, Csepregi, Antonova, & Jenei, 2010).

The adhocracy culture is characterised as an entrepreneurial, innovative and creative workplace where individual initiative, and freedom are encouraged. Success in such an organisation means having unique products or services and being a market leader in this product or service, for example, the filmmaking industry (Gaál et al., 2010).

The market culture is considered a result-oriented organisation. The people and leaders in the organisation have the drive to win and are very demanding of themselves and others in the organisation. Success in this organisation is defined in terms of market share and penetration. An example of such a company is General Electric (Tichy & Charan, 2014).

The final organisational culture type is the hierarchy culture. This culture can be specified as a formalised and structured place to work. There are often formal rules and policies in place and procedures govern people what to do. Respect for position and power is in place, and leaders are typical coordinators and organisers. Decisions are centralised, made at the top (Schilling, 2016). So, the hierarchy culture is a control-oriented culture. The control-culture improves the ability to manage a large number of employees in an efficient manner (Schilling, 2016). Large organisations, government agencies and U.S. fast-food restaurants are examples of hierarchical cultured companies (Gaál et al., 2010). The hierarchical culture makes it hard for a company to innovate because decisions are made at the top of an organisation which results in long decision chains and slow decision making (Ahmed, 1998).

This report will focus on three different companies: McDonald's, Apple and Johnson & Johnson. All of these companies are considered key players in their domain and have a hierarchical culture in place (Schlossberg & Roach, 2015; Hall & Anderson, 2009; Johnson & Johnson, 2017). These characteristics make it possible to compare these three companies and to test the idea of hierarchical cultured companies of not being able to innovate (Arad, Hanson, & Schneider, 1997).

## **2 Case Studies**

### **2.1 McDonalds**

In 1955 Ray Kroc founded McDonald's system Inc. which later became the McDonald's Corporation. The general concept of the restaurants was to make their operations as efficient as possible by offering a limited menu, concentrating on burgers, fries and soda (McDonald's, 2018). Nowadays McDonald's is the largest restaurant chain in revenue (Schlossberg & Roach, 2015), with a total of 35.4 billion dollars in sales in 2015. McDonald's is centralised, meaning that the decision-making authority is the top-level managers in the company. Looking at the culture of McDonald's, it can be classified as a control-oriented culture. Control-oriented cultures like McDonald's can manage a large number of employees efficiently. The enormous growth that McDonald's went through can be partly attributed to the mechanistic structure of the company. A mechanistic organisation structure is characterised by a high degree of formalisation and standardisation, causing operations to be almost automatic or mechanical (Schilling, 2016). McDonald's standardised their services to the smallest detail. Furthermore, McDonald's is famous for its bureaucratic structure, where employee jobs are highly, and there is a clear line of communication (Carpenter, Bauer & Erdogan, 2010). A mechanistic organisation structure allows managers to retain strict control over the quality of the services. McDonald's combines this mechanistic structure with cheap, young and unskilled labour. By strictly supervising these employees, McDonald's produces a global uniform product at a minimal cost (Carpenter, Bauer & Erdogan, 2010). Tasks of employees at McDonald's are standardised, and rules are in place for every minor detail. Employees are not granted much responsibility and innovation comes from the top management within the company. This influences the culture greatly since employees have little to no influence on the innovation of products. Furthermore, restaurants are unable to respond quickly to local competitive threats due to the top-down decision-making structure. Incremental innovation is possible for McDonald's since they can build upon the products already established. However, discontinuous innovation is hard to accomplish since it required creativity and flexibility.

High standardisation and formalisation are partly responsible for McDonald's global success. However, there are some downsides to this control-oriented culture. Hierarchically structured companies often have trouble with the innovation of their products. For a long time, McDonald's was able to dominate the fast food industry with just little innovation. McDonald's lacks dynamic capabilities due to its mechanistic structure. Dynamic capabilities enable firms to quickly adapt to emerging markets or

significant technological discontinuities (Schilling, 2016). Furthermore, dynamic capabilities allow firms to respond to changing markets, of which the global food industry is an example. A mechanistic structure of a company makes it rigid, making it more difficult to respond to changing conditions. Over the last four years, McDonald's revenue in the United States has decreased (McDonald's Corporation, 2015; McDonald's Corporation, 2016; McDonald's Corporation, 2017; McDonald's Corporation, 2018). This decrease in revenue can be partially attributed to the consumers' drift towards healthier food. Fast food restaurants are generally perceived as unhealthy. Furthermore, fast casual restaurants, which are restaurants serving slightly healthier food for a higher price, are stealing market share of the traditional fast food restaurants. The number of food establishments in the United States almost doubled over the last thirty years (Story, Kaphingst, Robinson-O'Brien, & Glanz, 2008). Hierarchically structured companies influence the flexibility of the company and the employees — the rules and formalisation limit responsibility and authority, which reduces a company's ability to adapt to changing market conditions. This was the case at McDonald's over the last four years. Due to the hierarchical culture decision making is slow, even when the landscape for fast food restaurants changed.

During the last few years, McDonald's has been confronted with a decrease in revenue. They recognised the changing market and have come up with ways to attempt to regain their strong position in the global fast food market. Three pillars for their growth strategy were introduced in their velocity growth strategy plan. First off, McDonald's will attempt to retain customers by focusing on breakfast and family occasions. Secondly, McDonald's will attempt to regain customers that it lost to competitors. It will attempt to do so by improving quality, convenience and value. Lastly in the growth plan, is converting casual customers to committed customers. McDonald's will focus on being more present in categories and occasions in the untapped market (McDonald's, 2017). Furthermore, McDonald's introduced three accelerators, which should spark growth even more. The first accelerator is reshaping interactions by enhancing digital capabilities. These digital capabilities will be used to improve the customer's experience. Another accelerator in the plan is the introduction of delivery, which redefines customer convenience. Lastly McDonald's attempts to improve the customer's experience in restaurants by offering customers the experience of the future through technology and the restaurant personnel. This accelerator has already been implemented at many locations in the form of a self-ordering kiosk, which in McDonald's opinion should give customers a choice in their experience.

The growth plan introduced by McDonald's does not show a change in the hierarchical structure and organisational processes. Standardisation and formalisation are still the pillars of the organisation. These pillars are especially useful for efficiency and effectiveness. However, these characteristics alone are no longer up to the task for growth in a faster-moving market (Kotter, n.d.). The hierarchical culture combined with the mechanistic structure of McDonald's makes the company less flexible and restrict creativity. Significant discontinuities in markets require innovation and rethinking of strategy.

## 2.2 Apple

Apple Inc. was founded by Steve Jobs, Steve Wozniak and Ronald Wayne on the first of April 1976 (Zantingh, 2011). Apple is a technology company that is mainly focused on computer, smartphones and tablets (Apple Inc., 2018). Apple is one of the most influential, fast growing and profitable companies in the world, nowadays. With \$850 billion in the market cap and a \$48 billion profit in 2018, the company is ranked number four on the Fortune 500 list (Fortune, 2018). Apple is known to have one of the biggest loyal customer bases and can keep their customers by amazing them with their products (Tansim, 2018). The company is competing in a very rapidly changing environment. Therefore, Apple has to continually improve their products and be innovative, in order to survive.

With 132,000 employees, Apple has a centralised and hierarchical organisation structure (Statista, 2018). The CEO, Tim Cook, leads the organisation, and has the responsibility of the whole organisation (Apple Inc., 2018). The organisation is divided into several departments, and every department is led by a senior executive who reports to the CEO (Tansim, 2018). The employees are specialised in their jobs and know their job responsibility and management expectations (Tansim, 2018). Every employee is held accountable for their actions, "Direct Responsible Individual" (DRI) is a popular term in the organisation (Arthur, 2011). Eventually, all the essential and end-decision making is top-down and done by the CEO.

As already explained, Apple is competing in a very intense and rapidly changing environment. For technology companies, it is essential to invent new products or make the already existing products better and unique. One of the things that mark Apple is their discontinuous innovation. When Apple introduced the iMac, they had slight success, but when Apple introduced the iPod, iPhone and iPad, their market growth went to another level (Zantingh, 2011). Apple changed the way we look at computers, music players and smartphones. In order to be able to invent, develop and create new products, one of the key elements of Apple's core values is innovation. They thrive to destroy the competition and be the best in what they do (Tansim, 2018). Furthermore, Apple also focuses a lot on their incremental innovation. They launch multiple versions of their products. For example, they launched every year from the start of the iPhone, a new version of the iPhone (Apple Inc., 2018).

Another example which shows that Apple wants to be unique from their competitors, and show this to the world, is the way they advertise. Advertisement campaigns such as "Think Different" and "Get a Mac, aka: Mac vs PC" changed the way people think about Apple. All the essential products of Apple are designed by a small design team, consisting of 12-20 individuals. When a team is working on a new product, they are cut off from the rest of the company (Interaction design foundation, 2018). Those designers are also removed from Apple's hierarchy and can take their own decisions (Interaction design foundation, 2018). This is a primary method used in several industries, which breaks down the firm into subunits and encourage an innovation culture within these subunits (Schilling, 2016). Besides the designers, employees are also encouraged to think differently and come up with creative and innovative ideas (Tansim, 2018).

Keeping the information inside of the organisation is essential for Apple to maintain their strong market position. Secrecy can be seen as one of the critical elements of their organisational culture (Colt, 2014). Employees of Apple are bound to maintain all information inside the organisation and no leaking of information to the world. Secrecy also plays a significant role in the organisation itself. Employees often do not know which product they are working on and are not allowed to talk about projects (Tansim, 2018). This secrecy and wanting to be the best in the game, affect the working culture of Apple. Former employees reveal that there is a high-tension working culture, with a paranoid management team, very long working hours and all the communication is in one direction (Arthur, 2011). The lack of horizontal communication and the high level of secrecy causes that there is no open communication in the company (Tansim, 2018). The research of Tansim (2018) states that this results in an imbalance of power between employees, which causes uncertainty. This undesirable and unconventional culture is often criticised but is hard to argue seeing the results of the company (Edwards, 2016).

### **2.3 Johnson & Johnson**

Johnson & Johnson, from now on referred to as J&J, was founded by Robert Wood Johnson I, James Wood Johnson and Edward Mead Johnson Sr. in 1886. J&J is headquartered in New Brunswick, NJ, and is one of the largest public companies in the world (Forbes, 2018). In the latest fiscal year (2017) they have, once again, reported an increase, of 6.3%, over the previous fiscal year. The revenue reported for that year was \$76.5 billion, and their market capitalisation was recent, September 2018, valued at over \$367.5 billion (Macrotrends LLC, 2018). The company operates in three primary business segments: Pharmaceuticals, Medical Devices, and Consumer Products. J&J currently employs over 130,000 people and is one of the world's best employers in the world according to Forbes (2018). This section will look into what enabled J&J to sustain a competitive success for so many years. More specifically, it will focus around their culture, and which aspects of that culture enabled the success.

A significant challenge of leading a large organisation, like J&J, is being able to pursue incremental and discontinuous innovation simultaneously. While an evolutionary change is a continuous process and requires managers to repetitively work on better alignment of strategy, structure and culture, a revolutionary change is much more abrupt and requires for all alignment to be destroyed when needed (Tushman & O'Reilly, 1996). Leaders of J&J have managed to accommodate these different management approaches and pursue both evolutionary and revolutionary changes. The success of pursuing the first one is shown in the numbers and reports mentioned above. As for effective disruptive change, a prime example for that is J&J getting into the pharmaceutical market from consumer products back in 1959 (Blake, 2013). In that year, J&J acquired McNeil Laboratories in the US and Cilag Chemie AG in Europe. In 1961, J&J increased its presence in the segment by getting Belgium's Janssen Pharmaceutical N.V. to join the J&J family of companies (Blake, 2013). At present, J&J Pharmaceuticals are among the fastest growing segments in U.S., Europe and Japan (Johnson & Johnson, 2015). The segment has had the biggest share in the total revenue of J&J (44.9% in 2015), and the most recent statistics show that it has been driving

J&J's business and beat the third-quarter revenue estimates in this fiscal year (Johnson & Johnson, 2016). The significant growth is a result of their new innovation strategy encompassed in a four-year plan for 2015-2019 and introducing a number of new products, more specifically, speciality medicines (Johnson & Johnson, 2015).

Experts argue that J&J's efficiency and innovativeness, and adaptiveness of organisations in general, is a result of their ambidexterity (Tushman & O'Reilly, 1996). It is claimed that, through being able to accommodate differently, even contrasting, managerial needs, ambidextrous organisations have a better capability of introducing both incremental and disruptive innovations (Tushman & O'Reilly, 1996). Ambidextrous companies can behave almost like two separate companies at once by allowing different divisions to have different control systems and structures (Schilling, 2016). So, different processes and sub-cultures can be present within a single company.

J&J has an active culture setting that can be viewed as a social control system based on shared norms and values (O'Reilly & Tushman, 2008). J&J relies on these strong social controls as they shape interpretations of events and guide attitudes and of the behaviour of members of the organisation. The ambidexterity is shown in these controls being tight and loose at the same time (Tushman & O'Reilly, 1996). On the one hand, the fundamental norms are shared across the organisation and continuously emphasised and set in order to act as a guideline for members at all times. That set of shared values is designed to include norms needed for innovation, for example, openness, autonomy, initiative and risk-taking. However, depending on the situation and, more specifically, what type of innovation is needed, it was shown that these norms could be interpreted differently. For example, the autonomy value usually means that managers have the freedom to make their own decisions regardless of the wishes or recommendations of senior managers. However, it should be recognised that when a disruptive change is needed, managers at the top of the hierarchy take the control and everyone else needs to subordinate. A situation like that took place at J&J when their sector of supplying hospital was failing. The autonomy was then (partly) taken away from managers, and the service was centralised (Tushman & O'Reilly, 1996).

This is not the only way in which organisational culture of J&J is ambidextrous. J&J also emphasises a shared culture (Schwartz, 2013) while employing different subcultures across their divisions (Tushman & O'Reilly, 1996). J&J's shared ethical corporate culture was developed based on a Credo written in 1943 (Johnson & Johnson, 2018) and emphasises honesty, integrity and respect for people. The senior management of J&J takes a number of actions to sustain the culture and ensure that their employees live by its values (Senge, 1990) (Bennis, 1989). The shared culture brings all members of the J&J family together and promotes cooperation, trust and consistency. At the same time, however, individual units of J&J accommodate their own subcultures that align with the requirements specific to their operation market. For instance, in a new division trying to win over a market niche, the approach towards risk-taking of all involved will differ from the approach in a division operating within a mature market segment, like, i.e. Tylenol. What follows, the culture tends to be less conservative within new divisions.

Summing up, the culture of J&J as an ambidextrous organisation is, on the one hand, tight-loose as lower-in-rank and local managers are given a lot of autonomy (Tushman & O'Reilly, 1996). This encourages creativity and entrepreneurship and helps J&J conquer niche markets. On the other hand, the last word still belongs to the senior management, and they intervene and implement change when needed. Furthermore, while the whole family of J&J shares the same ethical corporate culture, individual units, companies, have their own subcultures.

### **3 Discussion**

According to the criteria defined by the competing values framework, most large companies employ hierarchical cultures (Gaál et al., 2010). This culture arises because of the need for structuration and formalisation. Rules and policies are clearly defined to make sure the operations in the business are streamlined. This helps companies achieve their, key, long-term goals, which are stability and efficiency. The case studies presented in the previous sections described companies with a hierarchical culture. Hierarchical companies are often believed to be inflexible, slow in responding to changing market conditions and resistant to creativity. These characteristics affect the ability of a company to innovate. Although this assumption might be correct for some companies, the case studies show that it is not right for all.

McDonald's, J&J and Apple all have a centralised governing body, meaning that critical decision making is done by a small group of top-level managers within the company. This clearly affects the culture since it takes away responsibilities and authority from other employees. For instance, McDonald's takes away almost all responsibility and authority of their employees by standardising and formalising even the slightest of details in order to run operations as smooth and efficient as possible. J&J, on the other hand, is divided into strategic business units, the managers of which are granted autonomy to make their own business decisions. However, their responsibility is still limited, and the top-level management takes their authority away if they do not meet certain standards. This is not the only inconsistency present in J&J, the company employs contradictory processes and cultures both within and across different business units. As an effect, while their overall culture could be defined as hierarchical, there are various subcultures present along with the main culture. Apple's situation of decision making is more similar to the one of McDonald's. The CEO does all the essential and end-decision making in Apple. The leadership of Apple is top-down, and all the executives report to the CEO. Interestingly is that not all the decision making is done top-down. A unique case in Apple is when important products have to be designed. A small group of designers will be set in a team, cut off of the rest of the business and removed from the Apple's hierarchy, granting authority to this team of designers.

In general, the case studies have shown that the culture in companies significantly affects the company's ability to innovate. Hierarchical cultures are typically seen as a negative influence on an organisation's innovation capabilities, whether it is incremental or discontinuous innovation. McDonald's has sustained global dominance

for over thirty years with little incremental innovation and almost no discontinuous innovation. However, due to recent changes in the landscape of fast food restaurants and developments in Information Technology strongly affecting most industries, the need for discontinuous innovation is there. Even though, McDonald's has not adapted to that yet. The company introduced a growth plan that saw some incremental innovation, such as the introduction of self-ordering kiosks and McCafé. However, it showed no plans concerning discontinuous innovation. This might be due to the fact that the culture of McDonald's restrains the creativity of its employees and is highly inflexible. Although, procedures and rules help operations run smoothly and efficiently, at the same time they take away responsibility and authority of almost all of McDonald's employees. J&J, on the other hand, has shown that they can innovate in both incremental and discontinuous manners. This high adaptivity is most likely the result of J&J's ambidexterity which allows for internally inconsistent architectures and (sub-) cultures to be present within the one family of companies. By granting autonomy to different units, they encourage the creativity of employees and introduce flexibility. However, by still keeping the company centralised in some ways, that is making each unit respond to those higher up in the hierarchy, they ensure high results. Their extraordinary ability to innovate allowed J&J to be successful both short- and long-term. For Apple innovation is one of the key elements in their core values. Apple has to innovate in order to survive in their competitive environment. The company strives to have incremental as well as discontinuous innovation by yearly renewing and developing new products. Apple is known for their ground-breaking products that changed technology, such as the iPod and the iPad. Innovation is one of the core values of the business and culture of Apple, but this also has its downside. Apple keeps information inside the organisation in order to protect their products. Secrecy can be seen as one of the critical elements of their organisational culture, and the employees follow these values. However, the secrecy also plays a significant role inside the organisation itself. Employees often don't know which product they are working on and are not allowed to talk about projects. This creates a lack of horizontal communication which causes that there is no open communication in the company, and this results in an imbalance of power between employees, which causes uncertainty.

#### **4 Conclusion**

In this report, a case study on three different organisations is performed. The organisations are analysed concerning the extent of freedom in decision making, the types of innovation they pursue and the flow of both the power and information within the companies. More specifically, try to understand how these cultures affect the company's ability to innovate. All of the companies used in the case studies fit into the hierarchical culture of the competing values framework of Quinn (1998). The comparison between the companies showed that the broad definition of hierarchical culture leaves room for interpretation. J&J and Apple show a strong ability to innovate despite their top-level control while McDonald's is not nearly as adaptive. By dividing their company into several business units, subcultures within these business units can

exist. The flow of power within these subunits makes it able for these subunits to make their own business decisions, without the need for higher management. In this way, it enables J&J and Apple to encourage an entrepreneurial culture, within these subunits which enhances the flexibility of the company and the creativity of employees. Therefore, increasing the ability of these companies to innovate, both in an incremental and discontinuous manner. In conclusion, based on the three case studies, a hierarchical culture does not need to limit the company's innovation capabilities as long as the company distributes power in a manner that leaves room for bottom-up innovation.

The competing values framework addresses four types of cultures, which are widely seen as the standard cultures within companies. However, the case studies have shown that corporate culture is much more complicated than the competing values framework suggests. The competing values framework might be a starting point on the topic of corporate culture but should not stand on its own.

No company fits perfectly in the competing values framework, and innovation is partly affected by culture. However, it is possible to establish subcultures within departments of a company, and this enables top-level management to be flexible and creative while still maintaining on to the top-down control.

A suggestion for future research would be to perform multiple case studies on more than three companies from, multiple companies within the same branch and multiple regions in the world. Doing this would increase the generalizability of the research.

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