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**THE RELATIONSHIP BETWEEN MANAGEMENT CONTROL  
SYSTEMS AND ORGANISATIONAL AGILITY: THE CASE OF A  
CANADIAN COMMERCIAL BANK**

Master's thesis

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I have written this master's thesis independently. All attitudes of other authors, literary sources, and data from elsewhere used for writing this paper have been referenced.

## Kokkuvõte

Uuringud näitavad, et organisatsioonid on optimeerimas erinevaid tööprotsesse ja juurutamas uusi tehnoloogiaid, et kiiremini ja paindlikumalt kohaneda muutuvate turutingimustega, konkurentsikeskkonna ja kliendieelistustega. Samas on vähe teada, kuidas organisatsioonid võiksid suurendada oma üldist agiilsust juhtimiskontrolli süsteemide (*management control systems – MCS*) ning mehhanismide kujundamise ja kasutamise kaudu. Käesoleva uurimistöö eesmärk on selgitada, kuidas juhtimiskontrolli süsteemi kujudamine ja kasutamine võib mõjutada organisatsiooni agiilsust (*organizational agility*) pangandussektoris. Töö empiiriliseks osaks olev kvalitatiivne juhtumiuuring põhineb metoodiliselt Ferreira ja Otley (2009) ning Pfister jt (2009) analüütilistel tulemuslikkuse juhtimise uurimise raamistikel. Seal toodud uurimisküsimusi kohandati uuritud Kanada kommertspanga kontekstile sobivaks ning lisati täiendavaid küsimusi intervjuu küsimustikku. Käesoleva magistritöö tulemused täiendavad varasemaid juhtimiskontrolli valdkonna uuringuid, pakkudes välja raamistiku, mis aitab selgitada organisatsiooni agiilsuse mõjutamise võimalusi juhtimiskontrolli süsteemide kavandamise ja kasutamise kaudu. Läbiviidud intervjuudest selgub, et kaasusettevõtte ComBank erinevates struktuuriüksustes oli erinev agiilsuse tase. Ettevõtte hierarhiline organisatsioonistruktuur oli üks olulisemaid kontrollimehhanismie, mis vähendas organisatsiooni agiilsust. Uuritud kaasusettevõttel on palju parendamisruumi, et muutuda erinevatel tasanditel oluliselt agiilsemaks. Tulevased uuringud võiksid jätkuvalt keskenduda pankadele ja uurida uute tehnoloogiate, nagu masinõpe, tehisintellekt ja asjade internet mõju nende organisatsiooni agiilsusele.

## Abstract

Organizations are found to become more agile by optimizing processes and implementing new technology in response to changing market conditions, customer preferences, and competitive environments. However, there is little research on how organizations can design and use management control systems (MCSs) and mechanisms for increased agility. This research aims to explain how MCSs affect organizational agility in the banking sector. Methodologically, the qualitative case study forming the empirical part of this thesis builds on the analytical performance management frameworks by Ferreira and Otley (2009), and Pfister et al. (2009). The interview questions were derived from their research; however, they were modified and complemented with new ones considering the context of the case company, i.e., the Canadian commerce bank under study. The findings of this case study contribute to the previous management control research by providing a framework for explaining agility enhancement through the designing and use of management control systems. The findings show that in the case company ComBank, the level of agility differed between across its organisational units, while the hierarchical organisational structure served as a key control mechanism hindering organizational agility. There is a lot of room for improvement in the case company as regards to enhanced agility in many facets. Future research could continue analysing agility in banks by focussing on the effects of newly emerged technologies, such as machine learning, artificial intelligence, and the internet of things.

**Keywords:** *Organizational agility, management control system, digitalization, banks, agility*

## Introduction

Globalization, uncertainty, ambiguity, and volatility have made agility critical for organizations across various industries. As defined by a dictionary, agility refers to "the ability to move quickly; nimble, active, ready" (Simpson & Weiner, 1989; p. 255). Organizational agility is about "the capacity of an organization to efficiently and effectively redeploy/redirect its resources to value creating and value protecting (and capturing) higher-yield activities as internal and external circumstances warrant" (Teece et al., 2016). Hence, an agile organization can change the focus, magnitude, and rate of change purposefully without succumbing to chaotic or inertia processes (Adler, Goldoftas, & Levine, 1999; Sarker & Sarker, 2009; Grewal & Tansuhaj, 2001; Tallon & Pinsonneault, 2011). Banks, which play a relatively broader societal role than many any other institutions are relatively more vulnerable to environmental and social challenges today (Carnevale et al., 2012). The banking industry is well known for using large, monolithic, legacy systems. However, traditional financial services companies must transform and innovate to compete with startups, fintech, and challenger banks today. Barroso and Laborda (2022) highlights that the financial sector moving towards digital channels will be revolutionized by emerging technologies like AI, blockchain, and biometrics. The traditional banks must adapt to changing customer expectations. In many countries they have been shut down due to the COVID-19 pandemic, forcing them to change their operations (Wewege et al., 2020). In short, financial sector organizations need optimizing internal processes to improve operations, customer service, and competitiveness (ibid). However, there is only limited research on how organizations can design and use management control systems (MCS) and mechanisms for increased agility. Organizations are found to become more agile by optimizing processes and implementing new technology in response to changing market conditions, customer preferences, and competitive

environments. In this context, also digital agility, which is part of organizational agility and refers to the ability to respond rapidly to digital challenges and opportunities, is considered crucial to modern business success (Salmela et al., 2022). Therefore, in recent years, financial services companies have increased their use of information technology. It is estimated that 15% of financial institutions' non-interest expenditures go toward information technology (Munteanu & Dragos, 2021). According to Munteanu and Dragos (2021) banks require an agile software development framework, as the conventional methods cannot cope with today's rapid changes, and a high rate of systems development failures can be attributed to them. Leading management consultants emphasize that three dimensions need to be addressed when aiming to improve organizational agility: structure, process, and people (McKinsey, 2015). The organization must define its structure to address new challenges and allow flexibility to assemble teams quickly. It is possible to improve collaboration and eliminate silos when decisions are aligned across functions or units. It is also important to keep in mind that some aspects of human resources management can be dynamic, but others, such as culture and core competencies, need time to adapt and change (McKinsey, 2015). However, management control and accounting research on the design and use of MCS has largely overlooked the topic of organizational agility enhancement. An MCS helps an organization plan, monitor, and manage activities, resources, and performance to achieve its strategic objectives (Merchant & Van der Stede, 2007; 2012). Organizations use MCSs to make decisions, evaluate performance, and maintain accountability. Merchant and Van der Stede (2007, 2012) emphasize the behavioral perspective of MCSs; that is, they are designed and used by managers to align the goals of employees with their organizational goals. MCSs can include different types of mechanisms for efficient, effective, and aligned operations, including among others culture, budgeting, performance measurement, reporting, and feedback mechanisms. Prominent MCS

frameworks address how different MCSs/mechanisms should be designed and used by managers to achieve strategic goals of their organizations. According to Simons (1995), managers can simultaneously use four different types of formal control systems (levers of control) to balance organizational tensions and implement organizational strategy. The focus is on strategy implementation and how organizational members can be motivated to follow the organizational objectives. Merchant and Van der Stede (2007, 2012) provide the objects of control framework, where they distinguish between three different types of controls - action controls, results controls and people controls - which managers can use in different situations depending largely on the degree of (a) ability to measure results and (b) knowledge of which actions are desired. The framework developed by Malmi and Brown (2008) depicts MCS as a package highlighting the importance of achieving a proper fit between various types of MCSs designed and used in different parts of an organization. Alvesson and Kärreman (2004) emphasize the interface between different forms of control and stress a symbolic, meaning- focusing view on bureaucratic and output measurement control as technocratic control systems are identified as sources of socio-ideological control. Nevertheless, in the context of the banking crisis in Iceland and Denmark, Rikhardsson et al. (2021) advocate using interactive management controls. As a result of interactive MCS, organizations can assign clear objectives to each member, motivating them to initiate opportunities, and cultivating responsibility for achieving goals (Chenhall & Morris, 1995; Van de Ven, 1986; Sull, 2009). However, though the abovementioned prominent MCS frameworks address different options for MCS design and use in organizations, none of them explicitly outlines how managers could design and use them for enhanced organizational agility. No one-size-fits-all solution exists, instead a specific context will determine the most appropriate system.

Considering the abovementioned gaps in the literature, the aim of this research is to explain how the design and use of MCSs affect organizational agility in the banking sector. To achieve the aim, the following three research questions are addressed in this article:

1. What types of MCSs are mostly used in the bank?
2. How does the design and use of MCSs facilitate or hinder organizational agility in the bank?
3. How does the digital technologies as part of MCSs, influence organizational agility?

These questions are examined by conducting a qualitative case study in the context of ComBank (a pseudonym), one of North America's leading financial services companies. Methodologically this empirical case study builds on the MCS frameworks by Ferreira and Otley (2009) and Pfister et al. (2022). The findings of this case study research contribute to the previous research on MCS by providing a framework for explaining agility enhancement through the design and use of MCSs. For practitioners, the case study provides insights into how organizations can adapt to rapidly changing business environments.

The paper proceeds as follows. The next section reviews prior management and accounting research on agility and management control systems and introduces specific features and current trends in the banking sector. This is followed by introducing the case context, data, and the method of analysis. The subsequent section analyses the empirical data considering the theoretical frameworks. The final section discusses the findings in the light of prior research and contains the authors' conclusions and suggestions for future research.



## Literature review

### I. The nature and enablers of organizational agility

Agility is crucial to enabling organizations to respond to changes in a dynamic environment. Weber and Tarba (2014) refer to agility as the ability to sense and respond to environmental changes by making intentional decisions in strategic management. In a similar way Teece et al. (2016) define organizational agility “as the capacity of an organization to efficiently and effectively redeploy/redirect its resources to value-creating and value protecting (and capturing) higher-yield activities as internal and external circumstances warrant” (p. 17). Also, Yusuf et al. (1999) define organizational agility as the alignment of "competitive bases" - speed, flexibility, innovation proactivity, quality, and profitability - as well as reconfigurable resources and knowledge. Yet Goldman et al. (1995) describe agile enterprises as profitable in a constantly changing environment and capable of adapting quickly to changes in consumer behavior. However, according to Yusuf et al. (1999), organizational agility is different from organizational flexibility, the latter seen as a component of agility and speed. Organizational/enterprise agility is also considered different from workforce agility, which is necessary to achieve the former (Harsch & Festing, 2020).

Agility is the ability to adapt to environmental changes and thrive in uncertainty and unpredictability to gain a competitive advantage. Since the 1980s, cost, quality, and reliability have been the primary concerns for companies under competitive pressures. It has been found that an essentially decisive competitive advantage relates to the ability to manage time effectively during the development and introduction of products. In the 1990s, agility was introduced to companies as a way to operate effectively in an everchanging environment, and it has been used to reduce

waste and increase efficiency (Ravichandran, 2018). Yusuf et al. (1999) note that organizational agility enables speed, flexibility, innovation, proactivity, quality, and profitability.

In this context, researchers have also used the terms responsiveness, quickness, knowledge management, and learning (Charbonnier-Voirin, 2011; Dove, 1999; Sharifi & Zhang, 2001) as keywords. According to the results of the survey conducted by Deloitte in 2015, approximately 94% of the companies believe that agility is a critical success factor. An agile organization can adapt to change and gain a competitive advantage.

Agility is influenced by various factors, such as market volatility, competition, technological innovation, information accessibility, changes in customer expectations and demands, as well as social aspects, including legal, ecological, and workforce issues (Abdelilah et al., 2018; Tseng & Lin, 2011). Several authors have tried to develop “conceptual models” for agility. These aim to specify the circumstances which lead a firm to seek organizational agility, agility capabilities, and agility practices or agility attributes (Yusuf, et al., 1999) as well as agility providers or agility enablers at the level of the infrastructure of the agile firm (Sharifi & Zhang, 2000) Based on an extensive literature review, Tallon et al. (2019) distinguish four general types of agility enablers: technological enablers, behavioral enablers, organizational and structural enablers and environmental enablers.

**Technological enablers**, including information technology (IT) components, such as hardware, software, and networks, refer to their modular form, compatibility with, and connectivity to other IT components (Lu & Ramamurthy, 2011). A flexible IT infrastructure for storage, memory, microprocessor capacity, or network bandwidth can scale as demand grows. The quick and easy process of building, testing, and deploying new or revised applications in response

to user requirements supports developers and operations personnel. Also, the questions of data (architecture) or information (ownership) can play an important role as agility enablers or hinderers in organizations. According to Lu and Ramamurthy (2011), a firm's IT can enable or hinder agility, depending on its use. It is proposed and theorized that for organizations to be agile, superior information technology capabilities must be developed across the organization. The findings show that while more IT spending does not necessarily lead to greater agility, IT spending directed at enhancing and fostering IT capabilities will.

**Behavioral enablers** refer to management and IT practices affecting sense and response capabilities in organizations. Market threats and opportunities can be detected through environmental scanning. To ensure an appropriate response to changes in the business environment, strategic planners can determine what actions should be taken and what resources are needed. The decision-making process is complex since (IT) investments are fraught with considerable risk, requiring foresight from managers. Due to high levels of technical and market uncertainty, it is difficult for managers to foresee the future; however, managers need help to develop this insight to support IT-enabled agility (Richard et al., 2012). Tallon (2008) notes that for better sensing and responding to market demands, business and IT executives need to cooperate more closely with IT planning and post-implementation reviews of prior IT investments. Organizations can better sense threats and opportunities and decide how to respond to changes in their environments based on the benefit of hindsight. In this context, Charbonnier-Voirin (2011) highlights the importance of organizational learning as a capability. Here, the focus is on how to increase the alignment of employee skills with organizational objectives.

**Organizational and structural enablers** address high-level managerial questions related to strategic orientation, business model selection, centralized or decentralized decision-making, and environmental scanning and control locations in organizations. When organizations can act on real-time information, it can help create and maintain agility. However, before being presented to senior-level decision-makers, most organizations require information to be batched and aggregated. Therefore, depending on the organization's structure, information processing and sharing may take significant time before it gets to top executives, and the source information may lose its richness and immediacy. Nevertheless, platforms for data operations have revolutionized data streaming for (IT) decision-making. According to Dove (2005), a company's agility level is determined by balancing its four dimensions: cost, time, quality, and scope. To improve organizational agility, companies must combine and adapt these enablers. In the context of manufacturing, Gunasekaran (1999) notes that agile manufacturing relies on seven enablers: tools for forming virtual enterprises, physically distributed teams, creating rapid partnerships, concurrent engineering, integrating products, manufacturing, business information systems, and rapid prototyping.

**Environmental enablers** indicate that also environmental factors, as a broader context, affect agility. The literature reveals that socioeconomic factors shape agility. Relationships are played out within a context provided by the environment. In more turbulent settings, a positive moderation effect of IT infrastructure flexibility on the link between strategic alignment and process agility has been found in organizations (see Tallon and Pinsonneault, 2011). It is argued that aligning IT with business strategy does not necessarily cause IT rigidity, therefore causing a drop in agility, but rather enables agility, particularly when IT is flexible. Moreover, Lee and Lee (2017) find that environmental dynamism positively moderates the relationship between IT and

operational ambidexterity, which contradicts a finding by Chakravarty et al. (2013), who report that as the pace of change increases, IT competencies have a diminishing effect on organizational agility.

To sum up, organizations can enhance organizational agility by utilizing, developing, and inventing various enablers and capabilities. It is necessary to use agility enablers to achieve agile capabilities (Walter, 2021). However, it does not necessarily mean that organizations using these agility enablers gain a desired competitive advantage, adapt to a changing environment, and take advantage of market opportunities. For the purpose of this study article, it is important to point out that none of the abovementioned agility studies explicitly highlighted and specifically considered the design and use of MCS as a factor influencing organizational agility.

## **II. Management control systems design and use options.**

Management literature in the early 1970s viewed control as synonymous with financial control, one way of providing information for decisions in accounting and finance (Gigliani & Bedeian, 1974; Merchant, 1985). Anthony's prominent definition of control (1965, p. 5) refers to "guiding variables towards a predetermined goal.". Traditional MCS has been criticized due to its restrictive approach and lack of consideration for participant's social and behavioral needs (Berry et al., 1995; Macintosh, 1994; Otley, 1999; 1996; Simons, 1995; Whitley, 1999). The earlier accounting literature (Anthony, 1965; 1988; Eilon, 1979; Gigliani & Bedeian, 1974; Koontz, 1958) set the stage for a broader, often-used conceptualization of MCS, highlighting the behavioral focus management control. According to Merchant and Van der Stede (2007, 2012), MCSs are the mechanisms by which managers attempt to align individuals' (employees') behavior with organizational objectives. Hence, management control is about encouraging people to take

desirable actions, i.e., it guards against the possibility that employees will do something the organization does not want them to do or fail to do something they should do. Thus, significant effects on organizational behavior and performance in general are expected from the design and use of MCS.

To achieve tighter control, managers often use multiple forms of controls that can either reinforce each other or overlap (Merchant & Van der Stede, 2007; 2012). The aim is to achieve (tighter) control over all the factors critical to the entity’s success or to obtain a high degree of assurance that employees will behave as the organization wishes. For managers, it is also important to realize that there is no one best form of control. There is no perfect MCS - what works best in one company (or area within a company), may not work in another (e.g., accounting personnel vs. design engineers). Therefore, it is argued that it is important to keep the control focus on the employees involved because their responses will determine the success or failure of the control system. Merchant and Van der Stede (2007; 2012) stress that “good control” is said to take place.

**Table 1**

*An overview of previous studies on management control systems and agility features*

#	Author(s)	MCS design and use options	Implicit references to agility features
1.	Simons (1995)	<ol style="list-style-type: none"> <li>1. Diagnostic control systems</li> <li>2. Interactive control systems</li> <li>3. Beliefs systems</li> <li>4. Boundary systems</li> </ol>	<ul style="list-style-type: none"> <li>• Interactive control systems speed up actions by facilitating rapid information exchange.</li> <li>• Flexibility in systems is crucial for adapting to evolving conditions.</li> <li>• Organizations can respond swiftly to changes thanks to the effective use of interactive control systems.</li> <li>• Important to align control mechanisms with strategies.</li> </ul>
2.	Alvesson & Kärreman (2004)	<ol style="list-style-type: none"> <li>1. Technocratic control</li> <li>2. Socio-ideological control</li> </ol>	<ul style="list-style-type: none"> <li>• Cultural norms influence organizational decision-making and can enhance the ability to make quicker decisions.</li> </ul>

- Systematic and intensive communication is important for the efficiency of control systems.
    - Interfaces between different forms of control.
  
  - 3. Burns & Stalker (1961)
    1. Mechanistic management systems
    2. Organic management systems
    - Organic organizations are fluid and responsive, with fewer rules and standardized/centralized procedures.
    - Organizational success related to flexibility and intensive and free-flowing communication.
    - Organic organizations are considered more adaptive to external changes and perform better in rapidly changing environments.
  
  - 4. Merchant & van der Stede (2007, 2012)
    1. Action controls
    2. Results controls
    3. Personnel and cultural controls
    - The use of controls depends on the ability to measure results on critical performance dimensions and the knowledge of which specific actions are desirable.
    - If the ability and knowledge are low (due to high uncertainty), people-related controls are used.
  
  - 5. Malmi & Brown (2008)
 

MCS as package:

    1. Cultural controls
    2. Planning
    3. Cybernetic controls
    4. Reward and compensation
    5. Administrative controls
    - Cultural controls are assumed to be slow to change providing a contextual frame for other controls.
    - Different interest groups often introduce different control systems at different times.
    - Right fit between the elements in the MSC package is important as the environments change.
  
  - 6. Chenhall & Morris (1995)
    1. Organic processes
    2. Management accounting systems
    - Management accounting systems co-exist with organic processes.
    - Organic controls result in higher performance if used together with formal control structures.
  
  - 7. Adler & Borys (1996)
    - Enabling bureaucracy
    - Coercive bureaucracy
    - Coercive systems similar to traditional cybernetic controls.
-

- Enabling formalization enables employees to deal effectively with contingencies.
  - Flexibility as one integrated design principle of enabling bureaucracy.
- 

Source: author of the thesis

When there is a “high” probability that the firm’s objectives will be achieved and a “low” probability that major unpleasant surprises will occur. In short, the benefits of MCS are related to a higher probability that people will both work hard and direct their energies to serve the organization’s interests.

In literature, different MCS frameworks address how different control mechanisms could be designed and used by managers to achieve the strategic goals of their organizations. Table 1 above summarizes some prominent MCS frameworks, highlighting the MCS design options and their (implicit) links to features/aspects inherent to organizational agility. Based on the readings of the author, the right column of Table 1 indicates implicit references to agility related to aspects such as speed, change, flexibility, and adaptability.

What is common to all these frameworks presented in Table 1 is that while they inform us about how to guide employees and regulate organizational activities toward strategic goals, the frameworks do not explicitly mention organizational agility. Still, the MCS frameworks implicitly refer to agility-related aspects, such as flexibility, speed, change, or uncertainty in explaining different design and use options for management controls. For instance, in Simons' (1995) "Levers of Control" framework, agility is addressed implicitly by referring to the combined use of diagnostic and interactive control systems, which makes it possible for companies to adapt quickly



to external changes. While Alvesson and Kärreman's (2004) critical perspective on control systems does not explicitly address agility, they highlight how power dynamics and organizational culture can affect the speed of decision-making. Innovation and openness to change are expected to be part of agility-supporting cultures.

Agility aspiration is perhaps more directly addressed by Burns and Stalker (1961) when they address the importance of organic (organizational) structures. Organic structures adapt quickly to changing environmental conditions as they are flexible and adaptable. Organizational agility can be improved by also by combining the three types of control described by Merchant and van der Stede (2007) and relying more on people related controls in times of high uncertainty.

Adaptable and responsive control systems can enhance an organization's ability to adjust strategies and operations in uncertain environments. Malmi and Brown (2008) emphasize the importance of aligning different MCSs for executing organizational strategies. An agile environment certainly requires a good fit between MCSs and a good alignment with strategy. Adler and Borys (1996) emphasize the importance of flexibility and adaptability related to enabling bureaucracy in their study of networked relationships. However, neither of the studies addresses the term organizational agility directly.

To sum up, the functioning of traditional and rather mechanistic MCSs is important for stability and enhanced predictability. Such systems have been designed to establish order and maintain control, which, however, may not be compatible with agile – dynamic and rapidly changing - environments. To ensure integration and control, many of the MCSs are rigidly structured and efficiency is often prioritized there in traditional control systems. In contrast, organizational agility is about flexibility and adaptability in MCS and strategy. When the MCS of an organization is surrounded by organic processes (Chenhall & Morris, 1995), it may help to save

time and respond to external changes relatively promptly. Although efficiency is essential, agile organizations value their ability to adapt to changing market conditions and pivot quickly. As the mechanistic controls focusing only on efficiency may not sufficiently support innovation and experimentation, the personnel and cultural controls (Merchant & Van der Stede, 2007, 2012) become important in shaping the entire MCS for agility. Agility requires a multifaceted approach, including organizational culture, communication, leadership style, and employee empowerment. Agility cannot be directly incorporated into MCSs of organizations characterized directly by stability/rigidity and risk aversion culture. Here may lay a real challenge for the banking industry. However, today's dynamic business environments require organizations to become agile and design their MCS for delicate balancing between control and flexibility for successful strategy execution.

### **III. Management control and agility in the banking sector**

In recent years, using digital platforms and advanced technology, fintech firms combining finance with technological innovation have perceptibly matured beyond their early stages and have started to disrupt the financial industry and banking markets (Wang, 2021). During the 2008 financial crisis, they emerged as an alternative to traditional banking, experiencing an annual growth of 46.5% (Wang, 2020). Since 2014, fintech financing has increased worldwide, primarily in the U.S. and Europe. Accenture (2015), however, reports that only 15.5% of respondents in Australia, Canada, Hong Kong, Singapore, the UK, and the US use nonbanking products. About 25% of the respondents use non-banking services very often, and in everyday practice, they use 2-3 non-banking products. There is an expectation that this number will rapidly increase in the future as essentially the entire adult population of the world serves as the potential market for fintech

services.

There are two main reasons for the emergence of fintech companies. Firstly, during the global financial crisis in 2008, traditional banking systems demonstrated their limitations. Secondly, digital technologies enable mobility, ease of use (visualization of information), speed, and lower costs for financial services (Anikina et al., 2016). Among other effects, these new fintech players are found to facilitate access to the digital financial world, provide more specialized services based on client needs, are flexible and agile, and enhance innovation and competition. Several distinctive fintech companies are emerging within the fintech banking and financial industry, such as cybersecurity and cloud-based banking platforms automating regulatory and compliance processes. Personalized banking experiences and security are provided through cloud and mobile banking. In addition to improving security and customer satisfaction, digital banking continues to develop. In short, disruptions by fintech companies threaten traditional banks, and often, the traditional banks and fintech collaborate to counter threats in their environments. The dawn of fintech start-up companies has been credited with improving the efficiency of the financial system (Vovchenko et al, 2017). Due to technological advancements, financial services provision is expected to become more efficient and accessible.

Recently, banks have been motivated to examine various MCS options. Generally, highly formalized control systems are found to be suitable for conservative organizations and environments with high levels of certainty (Chenhall & Morris, 1995). According to Gooneratne and Hoque (2013), the service sector may encounter challenges in the application of MCS due to the (intangible) nature of its operations and production processes. The banking industry, on the other hand, is not particularly entrepreneurial. Instead, it is preoccupied with counting and

quantifying (Collier, 2005; Mikes, 2011). A decrease in profitability for the banking industry has been attributed to the deregulation of the banking industry in the 1980s (Power et al., 2009). With such changes, banks began to pay greater attention to cost and efficiency. Accordingly, various MCSs were implemented, including activity-based costing, total quality management, and other budgetary practices (Malmi & Brown, 2008). Banks have shifted their focus from capital budgeting of costs to control of enterprise risk (Power et al., 2009).

The evolution of MCS in banks has been closely associated with profound changes and new opportunities manifested by a complex, interrelated set of macro and micro drivers (Gooneratne, 2013). According to Seal and Croft (1997, p. 60), "the advent of a more competitive and less paternalistic business environment has posed new management control challenges for banks".

Increasing globalization and deregulation of markets contributed to increased competition and eroding margins at the macro level of banks' economic, political, and regulatory environment. Decentralized organizational structure, innovative products and practices, and technological advances were the micro-level responses (Putri et al., 2023). The emergence of semiautonomous lines of business and a diversity of products, customers, distribution channels, and geographical mandates created novel challenges for performance measurement, risk management, and resource allocation (Kimball, 2000). In the banking industry, a growing need for robust control systems has been felt as banks consolidate, share services, and connect their networks. Several factors became the main financial ethos of banks, including profitability, cost awareness, and shareholder value.

On a conceptual basis, several scholars develop and discuss comprehensive frameworks to foster banks' risk culture. Risk culture highlights the importance of learning from failure,

organizational resilience, and corporate governance as more general aspects, but also individual responsibility and supervision (which are related to action controls), remuneration systems (which constitute results controls) as well as training, recruitment and knowledgeable leaders (which are components of personnel controls) (Kaplan & Mikes, 2012). Fritz-Morgenthal (2016) discusses high-reliability organizations, where high resilience, responsiveness, and customer-centricity are found to allow for the establishment of more stable banks. According to Fritz-Morgenthal et al. (2016) and Yusuf et al. (1999), a proper risk culture affects risk management positively. In this context, Stulz (2008, p. 47) importantly notes that "if risk is everyone's business, major risks cannot go undetected and unmanaged." This view underpins the importance of individual management controls in the context of risk culture, especially in embedding risk culture as an overarching concept for entire management control systems. The author shows how incentive systems can motivate dealers to circumvent established control systems. While banks can enforce codes of conduct signed by employees, the employees also need to be trained for an effective implementation of it.

Similarly, Zitkiene et al. (2018), analyzing the case of the National Australian Bank, indicate that incentive systems have detrimental effects on employee behavior. The organization operated bureaucratically as top management concentrated on processes, documentation, and procedure manuals instead of focusing on problems stemming from their profit-oriented management approach while neglecting ethical aspects. This case points to problems regarding dysfunctional communication structures. Additionally, managers did not take responsibility in their case, traders attacked internal audit staff's personal and professional interests, and traders were chosen based on their ability to make money, regardless of how they did it.

However, Kunz (2011) suggests that despite the potential differences in risk culture across and within banks, four core elements support creating a sound risk culture in banks: tone from the top, accountability of employees, adequate incentives, and effective communication. According to Guo et al. (2023), ethical principles could be included in that list as an additional aspect. For internal management structures, these aspects form part of banks' overarching control and coordination approach. The authors point out that these psychological and social processes are influenced by formalized systems. For effective functioning, a banking organization must continuously assess the adequacy of its risk culture. Nevertheless, though banks are expected to adopt a prudent risk culture, this does not mean they should be risk averse. Instead, for a bank to thrive sustainably, it must only take acceptable risks (UKEssays, 2018).

Finally, Kunz (2021) argues that banks must conceptualize the active management of risk culture to fit the general thinking within the industry. Quantitative and qualitative regulations affecting the banking industry direct managers' focus and emphasis on measurables. Banks must have clear benchmarks in place to evaluate whether they are developing an adequate risk culture; that is, a risk culture that fits their business model. Yet, risk culture can be assessed in several ways.

To sum up, as new tools, processes, and roles have been introduced over the past two decades to improve internal control, reporting, and disclosure, risk management, and management controls in banks have evolved considerably. Various prescriptions and frameworks exist on how risk can be linked with performance and strategy (Kaplan & Mikes, 2012) and how organizational structures can be adapted for enhanced risk management in banks (see Giovannoni et al., 2016). Furthermore, it is found that the relationship between risk management and management control systems is strengthening (Giovannoni et al., 2016); however, there is yet a need for deeper knowledge about the implications of this tendency on agility in practice.

## **Data and Methods**

The financial institution chosen for this empirical case study research offers a wide range of financial services. It is one of the world's largest and most influential commercial banks. This case company, for the purpose of anonymity hereinafter called as ComBank in this study, has a strong international presence and leads the Canadian banking market. It has around 94,000 employees all over the country. The exploration of this bank provides insights into market trends, competitive dynamics, and strategic decisions. As a result of studying this bank, it was possible to gain an in-depth understanding of industry benchmarks, management control practices, and emerging challenges regarding organizational agility. In addition to offering updated products and services, the company has enhanced the customer experience and streamlined operations through technology.

### **Participants**

Data collection for this qualitative case study research (Flick, 2010) included ten semi-structured interviews (Silverman, 2006) with employees of ComBank (see Appendix A). The interviewees were carefully selected based on their different perspectives and work experiences relevant to the study. The selection of interviewees involved different departments (functions) and teams of the case organization. I was considering a range of people with different roles and levels of seniority; however, all of them have years of work experience in the bank to be able to provide deep insights and analyze the operations in a holistic manner. I was looking for in-depth insights into how management controls were designed and used, how innovation was implemented within the teams, how newly emerged technologies helped daily tasks, and whether it all really made the

bank agile. This information helped me to clarify the relationship between management control systems and organization agility in the case bank. Most interviewees were not familiar with the term “agile”; hence, I had to explain the meaning and research focus at the beginning of the interview, also give specific examples, and provide other definitions for them to gather more specific information.

Social networks and professional networks were among the channels used to access the participants of this study. As mentioned before, a predetermined set of criteria (e.g., work experience, functions, etc.) was used to select participants for the study. Before each interview, every interviewee was informed about the study's procedures, research objectives, and confidentiality measures. Informed consent was orally obtained from all participants, ensuring they understood the implications. All participant data, including names, roles, emails, and departments, is confidential.

## **Materials**

Methodologically this empirical case study builds on the analytical MCS frameworks by Ferreira and Otley(2009) and Pfister et al. (2022). The interview guide was developed based on the questions, and the objectives of these frameworks were adjusted to guide the discussion with interviewees. This allowed spontaneity and exploration of emerging themes. Participants provided rich, detailed responses to open-ended questions.

## **Procedures**

Interviews were conducted in an open environment and free atmosphere, such as a coffee shop or meeting room. Pre-arranged arrangements minimized disruptions and distractions during the interview. Each interview session lasted about two and a half hours without audio recordings



to protect interviewees' privacy and identity. However, the author took notes during the interviews, which were organized after each interview. No specific coding software was used for that purpose. The interview data was complemented with publicly available secondary data (e.g., information on the banks' homepage and in media) on the case organization. The semi-structured face-to-face interviews provided valuable perspectives, helped to get answers to "how" (research) questions, and contributed to a comprehensive understanding of the topic.

### **Empirical findings**

**The design and use of MCS in ComBank.** ComBanks' vision and mission is to be their clients' most trusted financial partner, deliver sustainable, profitable growth, and maximize total shareholder returns through all channels, formal and informal. ComBanks' corporate values emphasize diversity, equity, and inclusion (DEI), which play a crucial role in attracting individuals from varying backgrounds as part of their recruiting strategy. The bank advertises diversity, equity, and inclusion openly and implements these in practice. "Ambitions made real" is the bank's purpose statement, reflecting internal and external performance aspiration perspectives.

A key success factor for the bank is building meaningful relationships with its clients. The bank's vision is to be the client's most trusted financial partner, to deliver sustainable profitable growth and maximize the shareholders return. To play a role in client's lives, ComBank tries to meet client's expectations in today's digital world, leading to stay connected with the customers and maintain relevance. It is undeniable that agility is considered a crucial component of any bank's success today. As a result, they can respond quickly to changes and seize opportunities in the market, which explains why they are still thriving in this market. Also, the interviewees highlighted

that organizational agility is important for ComBank's long-term success.

ComBank's organizational structure is quite rigid, top-down, strict, and hierarchical. Structurally the bank is divided into different divisions, each of them operating independently with its own technology and decision-making processes. Most interviewees noted that almost every plan or action requires the approval of top managers, and all the data and actions are documented.

The KPIs of the bank are primarily financial; however, each team, depending on their function has also different KPIs. So, there is no one-size-fits-all solution regarding the KPI system in ComBank. For instance, one of the KPI metrics in HR is leadership and turnover, which relates to turnover and employee retention in the bank. In the operations team, customer experience feedback (net promoter score), operational efficiencies, and accuracy are the major areas of KPIs. The majority of each department's set goals are annual and/or quarterly based. There are also promotional short-term goals, where the financial value of rewards is not very high but it is rather seen as a way to thank the employees. The sales team's goals are again different, and they are commission-related. The more sales, deals, and partnerships they create, the more commission they create for the team members. There have been relatively more financial rewards depending on KPIs in the sales department compared to other departments in the bank. As changes occur in the banking environment, KPIs should help ComBank to maintain performance and ensure that agility is there.

Communication and meetings have been improved tremendously along with digitalization. The use of new communication technologies made it easier for employees to connect faster and

create small groups for teams to share ideas and hobbies or join small communities within the bank. However, the virtual meetings have also become more frequent and longer. Because employees do not need to travel to other countries or locations for work meetings, they often attend many more meetings than before. This could be viewed negatively since they cannot travel to other countries and meet colleagues in person. Interestingly, ComBank's employees feel uncomfortable sharing personal information on banks' communication hubs/applications since their conversations are monitored, making them feel uneasy about sharing information about themselves.

ComBank's organizational culture focuses on working together and acting as a team. Managers promote this culture through communication, and employees are expected to help each other. To foster a culture of collaboration and inclusion, they organize team-building activities, workshops, and town hall meetings. ComBank organizes social events to promote culture like the "Race for the Kids," or training and town halls to ensure team members behave appropriately. Through its sponsorship of different cultural events, ComBank supports its diversity and inclusivity groups.

Rewards and bonuses are determined yearly based on performance targets (i.e., yearly goals) and an annual bonus system. The bank's general success determines the bonuses for divisions and individuals. When an employee is recognized for good work, he or she earns small non-financial rewards throughout the year. "Star Points" are allocated to employees for small rewards that can be spent on gift cards and other goods.

Regarding hiring new employees in ComBank, the bank hires through a third party like Workday or Greenhouse, and therefore, respondents did not have much information about recruitment aspects. Interviewees expressed that ComBank mostly hires people who are easy to work with and get along with others. The whole team must be able to work together. Getting a promotion would be difficult if the team is unsatisfied with one's work ethic. However, the interviewees agreed that getting fired from the bank is nearly impossible unless the job is restructured or the employee has stolen or committed any other crime.

An external factor affecting ComBank's performance and agility is the fintech sector, which could use better technologies or operate more efficiently. Nevertheless, the bank partners with fintech companies until a necessary technology is acquired from them or their acquisition is completed. Additionally, ComBank incorporates a lot of client feedback directly into their future changes, which can be gathered by interacting with clients, doing CX surveys, holding focus groups, etc. Furthermore, the bank aims to maintain its competitive edge by investing in innovation and technology advancements to enhance its service and customer experience, forming strategic partnerships to leverage complementary strengths, and expanding its market reach. Nevertheless, based on the interview data, it should be outlined that each department in ComBank, has its own specifically designed set or package of management control mechanisms in use.

**Factors affecting organizational agility of ComBank.** Most interviewees, except one from the IT/Engineering department, did not perceive their departments as agile. In their opinion, using the word "agile" as a slogan was more like an effective marketing strategy. According to the person interviewed from the IT/engineering department, the planning processes could be characterized by

speed, frequent regularity, and flexibility to adapt quickly to market changes. Other interviewees from different roles and departments stated that the management control systems are not flexible as decisions take a longtime, and deadlines are not defined. In their view, agility is not addressed and prioritized.

For the interviewees, it seemed that banks in Canada were still operating the same way they did before the digital age, despite advanced technology. Several departments, such as HR, Sales, Corporate Wealth, and many others, stated that their decision-making processes take too long, there are too many bureaucratic procedures, and the CEO makes the final decisions. The COVID-19 outbreak caused more flexibility temporarily, but when isolation rules were eased, working from the office/branch was resumed. Currently, only the IT department can still do work from home. The recruiting process still takes a lot of time, even with an applicant tracking system. A new hire could take as long as two months to set up a work desk and an appropriate IT system for their work operations. In this context, there is a risk for ComBank that the best talents in the market will be recruited by competitive fintech companies, which have a faster hiring process and better compensation in place.

Advances in technology have improved digital communication, making it easier and faster between the different organizational units of ComBank. Digital communication applications such as Zoom, Teams, Slack, and Salesforce are mainly used in this bank and have facilitated communication between teams and departments. Interestingly, rather than actively engaging in digital chat conversations and sharing their own ideas in virtual space, the employees seem to use the bank's digital communication platforms primarily to stay informed as the conversations are

monitored. Since meetings have become primarily virtual, and the number of meetings held during a week has risen, respondents felt this leads to more burnouts in ComBank.

Since ComBank is, by nature, a complex organization, it will take a considerable amount of time before any changes take effect, as the lengthy decision-making process means that changes to the management (control) system or function will not take place immediately. On the other hand, to make informed decisions, it is also vital that risks are managed and that rigorous policies are adhered to throughout the organization. However, organizational agility in the bank appears to be a priority only in the IT department, with other departments not addressing agility much. Most interviewees believed that their departments and teams are not as agile as they should be to stay competitive in the long run.

### **Discussion and conclusions**

The gist of organizational agility relates to companies' need to adapt to changes in their business environments and thrive in uncertain conditions while gaining or maintaining a competitive advantage. In this process, several factors called enablers play a part, including technological and behavioral, environmental, and structural factors (Tallon et al., 2019). As far as technological, behavioral, and environmental enablers are concerned, ComBanks appears to be rather successful. The company heavily invests in IT infrastructure to provide superior customer service and be ahead of its competitors in the market. In addition to staying up-to-date on current and market trends for mitigating risk and fraud in all possible ways, they are flexible enough to

adapt to external threads and environmental changes. However, the structural enablers are still far from agile as ComBank follows a hierarchical and top-down organizational structure in many departments, hindering (slowing down the speed of) decision-making and risk management. The bank could become more agile by decentralizing its decision-making processes and acting more on real-time data. In other words, within ComBank, technological, behavioral, and environmental enablers support organizational agility. Furthermore, they allow the bank to gain technological capability and be more flexible and sensitive to uncertainty threats.

In answering to research question one, it could be noted based on the conducted interviews, that the key management control systems used in ComBank were mechanistic. In the light of the theoretical frameworks provided in Table 1, it can be argued that ComBank uses a combination of action, results, and cultural controls (Merchant & van der Stede, 2007; 2012) to direct the behavior of its employees. Hence, we can see a package of controls or MCS package (Malmi & Brown, 2008) in place in the bank. In the context of Burns and Stalker's (1961) distinction of MCSs, mechanistic vs organic management systems, the ComBank's control system could be interpreted as a mechanistic one, characterized by a rather bureaucratic and hierarchical organizational structure. The organic part of the management control system is not very evident, at least based on the conducted interviews. However, ComBank also built on cultural control (Merchant & van der Stede, 2007; 2012) to motivate and direct the behavior of their employees towards desired outcomes. To balance between the need to adapt quickly to external changes, while being heavily regulated and conservative in terms of taking risks, the bank seems to balance effectively between the four levers of control (Simons, 1995), especially using boundary systems to balance belief and interactive control systems in pursuit of new opportunities.

In response to the second research question, management control systems can facilitate or hinder agility (Tallon et al., 2019) in ComBank; however, they are likely to hinder agility rather than facilitate it. Agility is highly hindered by mechanical control systems (Burns & Stalker, 1961), such a hierarchical organizational structure, lots of rules and authorization requirements, imposing burdens on the bank to act swiftly in many aspects. The bank lacks agility due to top-down management, limitations in risk management, lengthy decision-making processes, and long hiring processes. Banks are complex institutions, and the federal government imposes restrictions on them, which hinders ComBank's agility. It is this difference that separates fintech companies from commercial banks. In other words, banks are a highly structured financial institutes, slow to change while the competition within the banking sector remains fierce. In ComBank, organizational agility was facilitated by clear values and mission (Malmi & Brown, 2008), by flexible working conditions in some departments and virtual meetings on different platforms.

Finally, in answering research question three about the role of digital technologies, it should be outlined that these technologies have revolutionized the banking sector by introducing phone, online, and mobile banking. This has enabled customers to check their account balances, pay bills, and conduct financial transactions without physically visiting their local branches. Importantly, for enhanced organizational agility (Yussuf et al., 1999), digital technology has revolutionized accessibility and the speed of communication, recruitment, strategy development, and making plans in the banking sector. Through real-time virtual meetings and communication apps, different teams and employees can communicate and solve work tasks more easily than ever. The negative side of digitalization is that the employees, however, feel burnt out and constantly controlled (monitored) by their supervisors, which is not supportive for gaining long-term



organizational agility and performance in the organization. Yet, thanks to the digitalization of management control processes (e.g., meetings), data arrival, data sharing and information flows have improved significantly. As a result, the bank can potentially adapt quickly to changes in its environment resulting from improved data interpretation possibilities. All in all, due to the mechanistic design of management control mechanism in ComBank, the bank has been unable to use the full potential in pursuit of enhanced organizational agility.

Though this study has certain limitation, it can pave the way for future research. One limitation is related to the single case study approach, which focused only on one Canadian commercial bank. Future research could study the relationship between MCS and agility in other countries and apply quantitative research methods to generalize the results in the banking sector. Another limitation is related to the fact that many applicants were did not feel comfortable when answering questions about the bank's management controls due to the sensitive nature of several questions.

A limited amount of research has been done on MCS in the banking industry within the agility context. It would be helpful to study other banks to bridge the gap. Artificial intelligence (AI), industrial internet of things (IIOT) and machine learning (ML), will alter how businesses operate and banks will undergo a drastic change as well. Studying the actual effect of these technologies on the banking sector would be necessary and constructive. As a point for practitioners, this study suggests that policy makers, regulators and bank managers should pay more attention to how the banks design their MCSs to balance between changing market competition/customer demands and requirements for stability.

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**Appendix 1. List of interviews**

<b>No.</b>	<b>Date</b>	<b>Function at ComBank</b>	<b>Duration (min)</b>
1	16/2/2024	HR manager	142
2	24/2/2024	Operations Manager	130
3	27/2/2024	Machine Learning Engineer	145
4	1/3/2024	Sales team	119
5	8/3/2024	Financial advisor	115
6	14/3/2024	Solutions Engineer	144
7	18/3/2024	Cash Management Services	130
8	03/04/2024	Global Change Specialist, Corporate Real Estate	123
9	6/4/2024	Branch Manager	134
10	12/4/2024	Operations specialist	124

## Appendix 2. Interview guide

### Questions

1. What is the vision and mission of the organization and how is this brought to the attention/communicated employees?
  - *How is agility manifested in the banks' vision and mission statements?*
  - *What are the key values and how are they communicated within your organization?*
  - *How is agility important to the bank?*
2. What are the key success factors central to the overall future success of your organization (bank, department, team)?
  - *Is agility one of the success factors?*
3. What is the organization structure like and what impact does it have on the design and use of MCS? How does it influence the speed and flexibility of decision-making processes in the bank?

- *Would you describe your bank's organizational structure as mechanistic, formalized, and hierarchical?*
  - *How does the use of different digital technologies/platforms affect the organizational structure of your bank? Or vice versa? Do not affect*
  - *Could you describe the standardization level in your bank's processes and procedures? Does this support innovation and agility or hinder it?*
4. What are the key strategies and plans adopted in your bank? How are strategies and plans adapted, generated and communicated to employees?
- *How would you describe the time-related aspects – speed, frequency, tempo, and flexibility -related to your bank's planning processes?*
  - *How do the plans and strategies address agility?*
  - *What digital technologies and how help to speed up and coordinate planning processes in the bank?*
5. What are your banks's /department's/team's key performance measures (KPIs)?
- *How are these KPIs specified and communicated and what role do they play in employee performance evaluation?*
  - *How do these KPI's relate to organizational/team agility? Do they help to enhance or do they hinder agility?*
  - *What is impact of digital technologies in performance measurement?*
6. What rewards — financial and/or non-financial — and how often will managers and other employees gain by achieving set performance targets?

- *In your opinion, how does the rewards structure of your organizations drive performance improvement, innovations and motivate employees?*
  - *Could you please describe the relationship between the rewarding system and agility(speed & flexibility) aspirations of your bank/department/team?*
7. What specific information flows — feedback and feedforward —, systems and networks has the bank in place to support the operation of its MCS?
- *How do these IT systems, platforms and networks contribute to agility?*
8. What are the main recruitment criteria in your bank/department/team? Is usually hiring a fast process?
- *For what reasons and how fast get people usually fired in your organization?*
  - *What digital technologies/platforms do you use for faster and better recruitment?*
9. How would you describe the organizational culture in the bank? How much does the bank /do the managers rely on organizational culture when directing and guiding the behavior of your employees towards organizational goals?
- *What methods (e.g., social events, etc.) does the bank use to promote the culture?*
  - *What digital platforms, and how, does the bank use to support its organizational culture and team spirit?*

10. What are your bank's strategies for monitoring external environment/factors such as customer behavior, regulatory changes, and technological advances?

- *As the banking industry has recently changed, what mechanisms does your organization have to adapt quickly? How effective have these mechanisms been in the past?*
- *In what ways does your bank promote flexibility and adaptability among its employees?*
- *What measures help your organization to remain competitive in the banking industry when faced with various uncertainties?*

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Amirali Ahzan

5/20/2024