



Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

PREPARED BY: KOMAL IRSHAD

STUDENT NUMBER: 2521536

PRESENTED TO: PROFESSOR XAVIER MATIENI

**COURSE TITLE: Visions for the Future - Theoretical Perspectives on
Management (LCDB7008_LON)**

Statement:

Technology advances - specifically in the areas of e-Commerce and e-Business have rendered traditional models of organisational structure and theories of management roles obsolete in the light of the changing nature of 21st-century corporations.” Evaluate whether this claim is justified - in relation to a business sector of your choice - and provide evidence for or against it, especially in relation to the management changes it implies.

CHOSEN BUSINESS SECTOR: BANKING INDUSTRY

Table of Contents

Chapter 1	5
Aim of the Study/Problem Statement:.....	5
Objectives of the Study:.....	5
Research Questions:.....	6
Primary research question:.....	6
Subsidiary questions:	6
Background of the Study:.....	6
Chapter 2	8
Critical Literature Review:.....	8
Evolution of Technology in Business:.....	8
The Rise of e-Commerce:	9
The Emergence of e-Business:	9
An explanation and definition of organizational structure:	10
Theories of Management Roles:.....	11
Fayol's Functions of Management:.....	11
Mintzberg's Ten Managerial Roles:.....	11
Recent Evidence: Testing Role-Based Theory in a Digital Context:.....	12
Relevance to This Study:	13
Implications for Traditional Models:	13
Literature Review Gap Analysis:	14
Gap 1: Weber's bureaucracy is evaluated against public sector digital logic rather than banking regulations.....	14
Gap 2: Fayol's administrative concepts have not been thoroughly examined in comparison to platform and API-driven authority.....	15
Gap 3: Mintzberg's configurations: an explanation of coexistence without an explanation	15
Gap 4: Kotter: Leadership is viewed as a mediating factor and is not evaluated in relation to UK regulatory constraints	16
Gap 5: Contingency theory — recently revived for financial-sector restructuring, but not yet tested against a fixed regulatory backdrop	16
Gap 6: Organizational ambidexterity, which is often well-established but weak when comparing incumbents to challengers	17

Gap 7: Regulatory literature: regulation is rarely seen as a structural variable in and of itself, but rather as a border condition or co-governance actor	17
Synthesis: The Central Theoretical Problem.....	18
Chapter 3	19
Changing Nature of 21st-Century Corporations:.....	19
Increased Connectivity and Globalization:.....	19
Shift towards Digital Transformation:.....	19
Importance of Adaptability and Agility:.....	20
Chapter 4	21
Obsolescence of Traditional Organisational Structures	21
Hierarchical Structures vs. Flat Organisations:.....	21
Matrix Organisations and Cross-Functional Teams:.....	22
Decentralisation and Empowerment:.....	22
Power, Discretion, and Algorithmic Control:.....	23
Chapter 5	24
Redefining Management Roles	24
Transformational Leadership:	24
Embracing Technological Literacy:	24
Chapter 6	26
Challenges and Opportunities	26
Overcoming Resistance to Change:	26
Ensuring Data Security and Privacy:	26
Leveraging Technology for Competitive Advantage:.....	27
Chapter 7	28
Conclusion	28
Summary:.....	28
Implications for Future Research:.....	28
References:	29

Chapter 1

Aim of the Study/Problem Statement:

The case study is based on the UK banking sector and the work critically explores the impact of technological developments in e-commerce and e-business on the structure and theories of management. There are two rival hypotheses that form the basis of this evaluation. The first, which is often implicit in the fintech-disruption literature, is that digitalisation has tempered bureaucracy: hierarchy is becoming gentler and decisions are diffused across the digital landscape to the new array of digitally facilitated employees and platforms. The second, less tested in a banking context, is that digitalisation strengthened, not diminished, bureaucratic control: it is algorithmic rule-enforcement, automatic surveillance, compliance architecture, and digital accountability (which is traceable and more effectively constrains organizations than paper-based hierarchical control ever did) that is behind this. This study does not make an a priori assumption about which proposition the evidence from the UK banks will support. Rather, it is the co-existence of incumbent organisations (hierarchical, like HSBC, Barclays, Lloyds or NatWest) and digitally-native challengers (Monzo and Starling) under a common UK regulatory framework that adjudicates between these two views of what digital transformation has actually meant for organisational form.

Objectives of the Study:

The study aims at formulating the following objectives:

- Critically discuss the basic principles of traditional organization theory as outlined by Weber, Fayol, Mintzberg, and Kotter, paying particular attention to the management function, hierarchy, and structure.
- To explore the organizational and operational implications of the banking industry's evolving practices and processes due to digital transformation, such as online banking, fintech challenges and platform-based business models.
- To analyse the nature of the challenger banks, as digital native institutions such as Monzo and Starling compete with the established banks such as HSBC, Barclays, Lloyds and NatWest and identify how hierarchical structures have survived or been challenged by flatter, more flexible forms.
- To critically evaluate two approaches to organizational ambidexterity and contingency theory as descriptions of balancing innovation and efficiency oriented traditional structures with digital responsiveness in banks.
- Irrespective of technical capacity, to evaluate the impact of regulatory change on the organisation, including the Basel III, FCA/PRA, Senior Managers and Certification Regime, Second Payment Services Directive and Open Banking.

- To determine if technology has completely replaced traditional organizational theory, or if it has been integrated into organizational theory, and so therefore created hybrid organizational forms rather than eliminating well-established theoretical forms.

Research Questions:

Primary research question:

RQ1: How can banks in the UK balance decentralised operational decision making in the digital era with a regulatory approach that requires centralised and individually attributed accountability?

Subsidiary questions:

RQ2: Do reporting relationships, decision authority, information sharing and accountability shift in isolation of each other or do they shift in a coordinated manner – as a “hierarchy” variable?

To what extent are the observed variations in structure between incumbent and challenger banks due to regulatory pressure and technological pressure and not due to other factors including organisational age, scale, legacy systems and ownership?

RQ4: Is classical theory of role theory (Fayol, Mintzberg) really an outdated model of managerial work or is it the same roles but with different digital instruments?

Background of the Study:

The banking industry is always conservative in its organizational structure. However, despite flat organizational structures and loose hierarchies in other industries during the second half of the 20th century, banks mostly kept the same structures and hierarchies in place that Weber and Fayol described decades ago. This was understandable as it was believed that risk control, regulatory accountability, and public trust seemed to have existed on their own separate chains of command with clearly defined management roles. But over the last 20 years, that picture has become more intricate as digital technology has transitioned from being just a back-office tool to becoming one of the core elements of the banks' product development, client engagement and internal team organization.

Recent research suggests digital transformation in banking is an organisational journey that is driven by external technology and competition, as well as internal pressures. Banks have been adopting more flexible organizational designs, digitalizing processes and extending digital channels at the operational level to improve their internal systems and make it easier for them to work with external partners. Strategically, it's manifested in the form of fully digital banking businesses, digitally enabled features on top of existing banking businesses, or partnerships that have the goal of radically redefining business models.

In the same line of business, this has led to two different ways of organizing. The banks that are well known such as HSBC, Barclays, Lloyds, NatWest, and others tend to introduce technology as an additional layer, rather than a replacement for existing rules. Often, however, challenger banks, like Monzo and Starling, were built on digital infrastructure from the start, allowing them to break free from the rigid structures and hierarchies of legacy banks and adopt a flatter, more fluid approach.

This gap is underpinned by a regulatory regime which neither type of bank can find it easy to innovate around. UK research indicates that there is a persistent tension between encouraging innovation and upholding legal safeguards, including those relating to the financial stability and financial data privacy, which are essential to the financial services sector. However, factors such as the FCA and the PRA's supervisory requirements, Basel III's capital and risk requirements, the Senior Managers and Certification Regime's accountability requirements and other recent regulatory developments such as PSD2 and Open Banking remain influential in determining what restructuring is acceptable. For this reason, banking serves as a good case study of the broader issue of technology and organizational obsolescence. The demands for modernization are very strong; while the freedom to restructure without restriction is very limited compared with some less-regulated industries.

This study takes place in this context: a tradition of traditional organisations based on hierarchy and control, a mid-century projection that in the future, this traditional approach to organisation would be broken down by technology, and a banking industry that is undergoing a digital transformation but that is still subject to complex regulatory frameworks. Rather than simply assuming that one of these two models (traditional and challenger banking) will either become obsolete or the new has taken over, the study focuses on the coexistence of the two models and how that has unfolded in practice, using frameworks such as contingency theory and organizational ambidexterity.

Chapter 2

Critical Literature Review:

The literature reviewed in this section connects to the main issue of the study rather than the specific gaps in that literature. Digital transformation, as a concept, first charts the history of technology from being a peripheral support role to a core organizational variable, before considering the implications for traditional organizational models. It then follows in that direction, with the more specific development of e-commerce, and the more generic of e-business. Finally, it is taken up in organizational structure and management-role theory.

Evolution of Technology in Business:

Much of the literature about the application of technology in business portrays it as essentially a linear progression of acceptance from the mainframe, to networks, to the Internet, to cloud computing and now to Artificial Intelligence, which are all sequential and one replaces the other. Grodal, Krabbe, and Chang-Zunino's (2023) synthesis in *Academy of Management Annals*, one of the discipline's most rigorously reviewed journals, is just one of the many ways that the concept of technological evolution is deeply debated in management. They recognize four different scholarly approaches to the evolution of technology: technology realist, economic realist, cognitive-interpretist and social-constructionist. They show that there are different ways of understanding technological change through variation, selection and retention, as well as disagreement amongst them about whether technology is interpreted by the organization and/or the society, or whether it is the other way round and changes the organization and/or the society. They prove that all these perspectives explain technological change in different ways by means of variation, selection and retention of the technology, and that there is genuine disagreement among these perspectives about whether technology is interpreted by the organization and/or the society, or whether it is the other way round, and changes the organization and/or society.

This is not merely house-keeping work for the academic community, but has direct implications for the interpretation of this dissertation. The study will yield different results than a study that takes the position that digital technology shapes the banking structure—even if it is just as an external force—or as a technology that banks themselves create and give meaning to—at least in the sense that the study will adopt an interpretivist and constructionist perspective as outlined by Grodal et al. This dissertation falls towards the interpretivist end of the typology scale proposed by Grodal et al. (2019) rather than strictly towards a technology realist account as it clearly focuses on the different ways in which incumbent and challenger banks have interpreted and organizationally reacted to the same digital technologies.

The Rise of e-Commerce:

E-commerce in banks is usually said to be a straightforward story of adoption—where banks have simply digitized their payment offerings to meet the demands of consumers who began buying online with the introduction of the internet. This dissertation is enhanced by the complexity of the story introduced by the study of Porfírio, Feláz, and Carrilho (2024) published in the Journal of Business Research. The grounded theory and a configurational comparative method (fsQCA) applied to board-level and employee data from banks in Portugal revealed that specific configurations of the factors of employee readiness, internal organization conditions and external pressure from markets were most closely linked to the impact that digital transformation has on banking performance (Porfírio, Felvé, and Carrilho, 2024). Here, fsQCA is used to find these combinations, and not to quantify the average effect of a single variable, which accounts for its methodological advantage over the abundance of single-factor accounts found in the literature.

But the result is constrained in certain respects which needs to be understood. The study focuses on the case of the United Kingdom (UK), where the FCA/PRA/SM&CR (Financial Conduct Authority/Prudential Regulation Authority/Stronger Regulation) system is different from the one in place in other countries, but the sample (50 staff from a handful of board members) is small and only includes and applies the Portuguese version of the system in banks subject to the same EU regulatory framework. The methodological insight that the transformation of banking via e-commerce is not a one-causal push, and that preparedness of the internal business organization is as significant as external competitive pressure can be extended logically. This claim follows and partly contradicts the explanation given by the Journal of Internet Banking and Commerce (2024) that the growth of online banking is mostly a demand-side response to the growth of online shopping. Together, the two sources suggest that the two factors – internal organisational capacity and external demand – have influenced the structure of e-commerce's effects on banks, and that attributing either factor alone to the automaticity of the structural response is potentially misleading. A more important implication for this study is methodological — that when this dissertation examines the effect of digital transformation on the structure of incumbent and challenger banks, it is likely to be more defensible to have a configurational understanding, as opposed to a single cause understanding, of this structural impact.

The Emergence of e-Business:

E-business/e-commerce can be used interchangeably; however, the point to note is that e-business/e-commerce are different from the point of organizational structure. The distinction, which is more rigorously dealt with in Ancillai et al. (2023) than the older and more limited literature on e-business, is treated in a systematic literature review published in the reputable Elsevier journal Technological Forecasting and Social Change. In their review, they suggest that the basic concept of digital technology transforming not only business

transactions but also the business model itself has been split into three research traditions: applied view, which takes digital technology as a toolkit for conducting the business as it is; strategic view, which considers digital technology as something that transforms the business model itself; and systemic or ecosystem view, which sees digital business as inherently networked and interdependent within multiple firms (Ancillai, Sabatini, Gatti and Perna, 2023).

It is a three-way split that is more useful for this dissertation than the two-way split of e-commerce/e-business used in previous literature because it easily translates onto the contrast between incumbent and challenger that is the core of this study. The view of Ancillai et al. is more applicable to a digital transformation tactic that involves an incumbent bank simply complementing its branch network with a mobile app to execute an unchanged strategy. A challenger bank must be founded on partnerships based on APIs and continuous personalization through data, which is aligned with the strategic or systemic approach, which takes as its premise the interdependence of digital technology with business strategy. The literature is less useful because, like most of the digital business model literature, Ancillai et al.'s review is sector agnostic; it does not consider whether a highly regulated industry, such as banking, restricts a company based on its digital desire to be able to adopt one of the three perspectives. That will be addressed later in the gap analysis by the regulatory literature.

An explanation and definition of organizational structure:

The term “organizational structure” is not consistently used across the literature, so it is necessary to define it more precisely before determining whether it is still relevant today or if traditional organizational structures are no longer relevant with digital transformation. Albert (2023) is helpful for this discussion as an overview in the *Journal of Organization Design*. It points to three genuinely distinct ways in which the concept has been operationalized in previous studies, as structure describes formal legal entities and reporting lines of an organisation; as a representation of the location of decision-making authority and as the pattern of activities and tasks (Albert, 2023). This finding is more compelling when compared to Joseph and Gaba's (2020) earlier retrospective in the *Academy of Management Annals*, in which they conclude with a similar but more robust finding based on a much larger collection of earlier research. The organization-design literature has, however, traditionally focused on the information-processing aspect of structure, in particular on how decision rights and information flows are allocated to cope with uncertainty and complexity (Joseph and Gaba, 2020).

Albert (2023) and Joseph and Gaba (2020) can be read together to further support the definitional basis for this dissertation. This is because it reinforces the notion that the classical theories that this study draws on for analysis—Weber, Fayol, Mintzberg, and Kotter—are theories on the distribution of authority for decision making and information flow in organizations, rather than theories of a visible, tangible, and physical organization chart. The

less precise use of the word in the majority of the more descriptive digital-transformation literature defines organizational structure as the state of the bank's hierarchy, either flat or tall. This is a more defensible stance. The concept of incumbent versus challenger is more conceptually grounded in later chapters, as the two sources are mutually reinforcing and have good reputations, rather than one. This is because a critical empirical problem is not simply that challenger banks have fewer observable layers of management, but rather that decision rights and information flows are being reallocated differently in a similar regulatory environment.

Theories of Management Roles:

There have been two versions of management theory: the first, an 'functions' approach, advocates what managers should do, while the second, the 'roles' approach, outlines what managers were observed doing. The distinction is important for the present study because it will indicate whether digital transformation is measured with a fixed list of managerial tasks or with a more dynamic, behaviourally oriented description of managerial activity and the resulting answers about the status of classical management theory in the face of digital and regulatory pressures will be very different.

Fayol's Functions of Management:

The Functions of Management refers to Fayol's five tasks that managers must perform. Henri Fayol's early 20th-century theory proposed five functions of management: Planning, Organizing, Commanding, Coordinating and Controlling. This view is based on the assumption that managerial activities can be broken down into discrete, sequential activities that are useful to the efficient functioning of the company as a whole. However, its major theoretical weakness is that it outlines a linear progression of managerial acts, rather than the often reactive, interrupted, and disorganized nature of managerial work in daily practice. But its longevity is due to its transparency and learnability.

Mintzberg's Ten Managerial Roles:

Henry Mintzberg (1973) was unhappy with the functions-based tradition, thus producing the alternative. Rather than inquiring what managers should do, Mintzberg looked instead at what managers actually do. From this fieldwork he created ten different roles which he divided into three categories: interpersonal roles (figurehead, leader, liaison), informational roles (monitor, disseminator, spokesperson), and decisional roles (entrepreneur, disturbance handler, resource allocator, negotiator). The most important one was that managerial work is not a quiet, linear activity as Fayol's functions suggest, but rather is short, disorganized, and mostly verbal, according to Mintzberg. Moreover, managers jump around between these ten roles depending on the need of the time and not in a sequential manner planning, organizing, commanding, coordinating, and controlling. Mintzberg's sample was

small, and included only certain organizational contexts, so other researchers have doubted the extent to which the ten roles apply to other industries, to different levels of management, and even in the context of a digitalized workplace, in recent years. This roles-based account, however, has survived because it is an account based on direct observation of managerial behaviour and not on managerial theory.

Recent Evidence: Testing Role-Based Theory in a Digital Context:

However, with the addition of digital technology and digital leadership as variables, two recent studies offer a useful, if limited, empirical examination of the validity of Mintzberg's roles-based theory. Li, Yang, Yang, and Zhao (2024) conducted a study that surveyed 559 employees of the 11 listed companies in Southwest China (see *Frontiers in Psychology*). From a Mintzbergian perspective, this finding could be seen as evidence that interpersonal and informational roles have not disappeared in the digital era, but have been reshaped and reorganized to accommodate new digital-specific functions, and that emotional intelligence is a new digital skill sitting on top of the original ten roles. The study has the following limitation for this dissertation: it is not measuring organizational structure directly but is measuring employee engagement and the study is conducted within the context of Chinese listed companies and not UK banks. This means that the conclusions can only be used to suggest that role based theory can still be empirically tested in a digital environment and not as tangible evidence of banking.

In Bonelli's (2026) study published in the *Journal of Organizational Change Management*, this question is extended to the senior management. It is based on the Upper Echelons Theory, a close theory relative to Mintzberg's decisional roles, and examines the effects of the top management team composition and chief executive expertise on the organizational outcomes for six world technology firms, twelve firm-years of data coded by experts. Found that the correlation is more complex and sometimes negative when control mechanisms of team integration and chief executive digital expertise are considered, but there is some support of hypothesis that greater TMTC diversity has a positive impact on digital innovation outcomes, such as product launches (Bonelli, 2026).

The methodological implication for this dissertation is as important as the substantive one, in that Bonelli found that the roles of entrepreneur and resource allocator are not identical in their nature at the top, but that their operations are subject to change as a result of the expertise and incorporation mechanisms of digital. The methodological implication is not only substantive, but also methodological, because Bonelli found that the roles of the entrepreneur and the resource-allocator are not identical at the top, and that their operations change as a result of digital's expertise and incorporation mechanisms, suggesting that broad demographic proxies are not useful for testing the theory of role. In considering the difference in leadership teams enacted by incumbent versus challenger banks in the UK, this dissertation should seek to adhere to this standard.

Relevance to This Study:

Fayol and Mintzberg together form the two ends of a spectrum that this dissertation has to navigate gingerly: a descriptive picture of what management activity has been observed to be like, and a prescriptive picture of what it should be like. While some literature from the fields of digital transformation, such as that by Li et al. (2024) or Bonelli (2026), predicts that managerial work is moving away from the traditional, paper-based approach to the more fluid, roles-based one, neither of these alone can predict the specific overlay that is the focus of this study: individual, named-executive accountability under the Senior Managers and Certification Regime. This overlay is likely to return UK bank managers to a more formal and functional-based view on what a bank manager should do, as in Fayol's view. Whether UK banking is genuinely bucking the trend in digital management or whether.

Implications for Traditional Models:

The implications of management-role theory and organizational structure for the traditional theoretical models discussed later in this chapter become more apparent once these concepts are defined with this degree of accuracy. The empirical study of digital transformation across three large industrial organizations by Shahzad, Imran, and Butt, published in the prestigious Taylor & Francis journal in innovation and technology management, Research-Technology Management, concluded that organizations were always compelled to reconsider three different structural aspects: formalization, hierarchy and integration (Shahzad, Imran, and Butt, 2025). Their primary finding was that, unlike a previous, more deterministic understanding of the impact technology has on organizations, organizations did not simply abandon their organization structures in response to digital transformation, but rather they altered these three dimensions selectively and unevenly, often formalizing the hierarchy in some areas where it was a critical part of safety and compliance, while loosening it in other areas.

Shahzad, Imran and Butt pointed out that it is wrong to take for granted that the selective-retention pattern they observed is directly transferred and unchanged with banking. This conclusion, based on industrial (not financial) organisations, must be read with an important caveat: that the industrial compliance risk (product safety and environmental regulation) is not the same in kind or degree as the individual named-executive accountability introduced by the UK's Senior Managers and Certification Regime. There is a general theoretical claim that traditional organizational forms are not being replaced by digital transformation but are being negotiated, one dimension at a time, a bit differently than theory predicts. The traditional claim about a digital transformation of organizational forms can be given more credibility than the claim that they are being replaced by a digital transformation. In the context of banking, this poses the question that is explored in the remainder of this dissertation: if the selective retention of hierarchy in the industrial cases studied is indeed due to organizational choice, rather than to the accountability requirements of a specific

framework, such as the Senior Managers and Certification Regime, which leaves incumbent banks less scope for structuring their accountability than do other sectors such as business?

Literature Review Gap Analysis:

Two sets of literature that hardly ever explicitly address one another have been traced in the previous review. On one side are the classical and neoclassical traditions of organizational theory, such as Weber, Fayol, Mintzberg, and Kotter. These traditions were formed primarily prior to the recognition of digital infrastructure as a new organizational variable. On the other hand, a growing number of empirical studies on digital transformation, fintech disruption, and organizational ambidexterity is available and tends to take classical theory as a given and not a topic for exploration. The two collections of pieces taken together, however, do have a number of areas where they become incomplete and where this study can contribute to filling gaps. These gaps should be highlighted, both theoretically and by not collapsing them into a general statement of the overall deficit.

Gap 1: Weber's bureaucracy is evaluated against public sector digital logic rather than banking regulations

Weber's description of bureaucracy has attracted renewed scholarly interest despite the apparent resurrection of the question of what rational-legal authority looks like in practice in the digital age. The consequences of digital reform for public accountability, the practical difficulties of implementing digital change inside bureaucratic institutions, and the impact of digitalization on frontline, rule-applying staff are the three main themes of Motta's (2024) systematic literature review of digital transformation and the bureaucratic model, which was presented at the United Nations University's e-Governance seminar series. The general finding of the review is that digitalization does not necessarily resolve the already known problems of bureaucracy but, on the contrary, it can accentuate them in another manner.

This is a positive finding in support of Weberian rationality that does not disappear in digital environments but continues to underlie them. This literature does not consider the radically different system of prudential banking regulation, which places responsibility on senior managers and shareholders, holding them to account for the bank's performance, as well as on its own regulator, using the Senior Managers and Certification Regime. This is where it is lacking for the purposes of this study, as it is largely about public-sector governance and accountability is towards citizens and elected oversight bodies. None of the sources studied involves Weberian rationality in the face of this sort of regulatory constraint – no, not even as far as the incumbent-challenger dichotomy in UK banking, which is what this study represents.

Gap 2: Fayol's administrative concepts have not been thoroughly examined in comparison to platform and API-driven authority

The Fayol theories of scalar chain and unity of command assume that authority travels through a clear, and usually linear line of command. This has been the case across digital transformation research, where platform and API-based infrastructures condense or re-route it, spreading operational decisions across automated technologies and cross-functional teams that do not fit into a single chain of command. In this respect, the study of governance of open financial platforms by Muthukannan et al. (2026) is useful.

The study, derived from an interpretive study spanning several years, demonstrates that shared infrastructure is managed by both regulators and banks and by third-party providers. In the regulators' case, the transition from an external 'boundary-setting' function to one that is actually part of the platform's architecture is something that was never really considered by Fayol. Most of the literature, however, has focused on information systems research, and is largely unbridgeable to the language of traditional management theory. That is, there is no easy empirical and straightforward way to tell if a bank's API-led platform governance is somehow still a unified command, even if it is akin to that of regulators. This small, but important discrepancy can be directly addressed through the comparative incumbent vs challenger design of this study.

Gap 3: Mintzberg's configurations: an explanation of coexistence without an explanation

The match-up of machine bureaucracy and incumbent banks or adhocracy and challenger banks is almost too tidy to be of any particular theoretical interest in itself, and Mintzberg's typology has proved to be very durable. The downside to this is that Mintzberg's model is descriptive, not explanatory—for a structure to differ in two ways does not explain why two structurally different configurations exist simultaneously within a highly regulated industry. The challenge is illustrated in a recent case study written by Łóska and Uotila (2024) of a transition by a corporate bank to a blended service model.

The bank under study was not one that lost its relationship-centric, hierarchy-based model but supplemented it with digital capabilities, resulting in a hybrid that does not fit into any of Mintzberg's categories. During their interviews with front-office staff, strategy professionals and IT staff, the trust gap between banks and fintech newcomers played a significant mediating role in the structural change process that Mintzberg's original typology did not consider. It is a useful empirical benchmark, but it is not a comparison of like with like (between incumbents and competitors) under a similar regulatory set up, but a comparison of one bank in one national environment. Thus, it is not that Mintzberg's typology is empirically incorrect, as the available data for UK banks seems to confirm, but that the available literature has yet to explain why its structural diversity does not lead to less stability of the overall system in the face of regulatory changes.

Gap 4: Kotter: Leadership is viewed as a mediating factor and is not evaluated in relation to UK regulatory constraints

Kotter's theory of the difference between management and leadership would suggest that restructuring alone would not make structural change possible, but rather the process of leadership would. Despite the extra bureaucratic hurdles state-owned banks had to overcome, a study in the Journal of Management and Organization in 2025 that analyzed the leadership traits of banks during digital transformation showed that leaders in all types of banks shared a common set of skills: agile responsiveness, technological fluency, and navigating regulatory scrutiny (Journal of Management and Organization, 2025).

One of the most direct modern evaluations of Kotter's original claim that structure is not enough – it's leadership that gets organizations to change in the banking sector. The geographical scope and regulatory restrictions for the study are due to the study being conducted outside of the UK under a regulatory system that is quite different from the FCA, PRA and SM&CR system which regulates UK banks. The UK's regulatory regime is unique in that each of its senior managers is statutorily accountable for the conduct of their own individual part, which very few regulatory regimes can match; and the Kotter's management/leadership divide is yet to be tested in the UK.

Gap 5: Contingency theory — recently revived for financial-sector restructuring, but not yet tested against a fixed regulatory backdrop

This is not a new issue of digital transformation; this classical contingency claim, that mechanistic structures work best in stable environments and organic structures work best in turbulent environments, has never been supported consistently, on an empirical level. Fortunately, the theory is not dead but alive: Pacheco-Cubillos, Boria-Reverter and Gil-Lafuente (2024), in Systems, have recently revived the theory as their explicit framework for investigating the process of large financial-sector organisations' transition from traditional hierarchical to agile structures, through case studies with practising managers.

Their conclusion was that there is no overarching, generic best practice advice about how a large financial institution could sequence this transition, and that the factors that allow them to be agile depend on the unique internal and external contingencies that each financial institution faces. It's a valuable and up-to-date affirmation that the so-called 'contingency theory' is an active (though troubled) perspective on financial-sector restructuring. What its study does not do is isolate the regulatory environment from a comparison group – its case studies are not specifically matched on regulatory exposure, and it does not divide along the lines of incumbent versus challenger. This study can thus address a very recent finding instead of an old one, namely, whether regulatory constraint, which was matched in the sample of UK banks, is a more stable predictor of structural choice than the general environmental contingencies Pacheco-Cubillos et al. studied.

Gap 6: Organizational ambidexterity, which is often well-established but weak when comparing incumbents to challengers

Ambidexterity is the most supported framework of the ones discussed here in relation to banking, and there is a substantial amount of existing research on ambidexterity. Mottaghi, Shirvani, and Dalvi (2022) model ambidexterity by explicitly framing the dual pursuit of efficiency and creativity as a structural design problem, not just a cultural or leadership one, specifically in the context of digital innovation in banking. A 2023 study on the relationship between technological capacity and dynamic capabilities to ambidexterity outcomes in the banking sector finds that environmental change was not a significant moderator of the outcomes of ambidexterity in this sector. This indicates that the sector operates somewhat differently than the sectors used to build the ambidexterity literature in the first place: In a mixed-method study on digital transformation at one rural bank in Indonesia, the authors discuss ambidexterity as a capacity to be developed within resource and regulatory constraints, and use an Analytic Hierarchy Process to weigh competing digital-product objectives.

This recent literature is still largely missing one clear, targeted comparison between incumbent banks and challenger banks in a regulated environment, with ambidexterity as the prism to help explain how rival banks manage to attain ambidexterity in different ways: by adding digital to the old banking hierarchy or by establishing flat structures from a digital-native starting position. Most recent research on ambidexterity relates to a specific type of bank or a specific country, and only a few studies compare structurally different banking models within the same set of regulatory requirements. This work is particularly designed to make a contribution to the comparative design.

Gap 7: Regulatory literature: regulation is rarely seen as a structural variable in and of itself, but rather as a border condition or co-governance actor

There is a huge and extensive body of literature on PSD2 and Open Banking, related to regulation, which tends to either see regulation as an active actor in platform governance or as a compliance requirement to be analyzed independently. As part of the PayTechImpact study, Polasik, Butor-Keler, Widawski, and Keler (2024) empirically evaluated PSD2 in thirty different nations. The rule proved effective in lowering barriers to entry and improving consumer protection, according to a report by the EU project, but it also uncovered widespread problems in terms of non-bank providers – including varying levels of quality – and the uneven progress of API development across member states. This is reinforced by Muthukannan et al.

(2026) who argue that open banking regulators have shifted from an external watchdog to a co-governing role which is embedded in the platform architecture. The

literature dealing with the constancy of regulation as an independent variable in its effect on organizational structure is still nascent. It encompasses analysis of compliance with FCA, PRA, Basel III, SM&CR, PSD2 or Open Banking requirements, and why, despite these requirements being equally applicable to structurally very different banks, they have not seen banks converge to a common form. Of the seven gaps found here, this one is perhaps the most significant as it is the one that this study's research design—an identical regulatory backdrop, structurally diverse banks—is intended to directly address.

Synthesis: The Central Theoretical Problem

If operational decision making can be decentralised with digital technology, and the regulatory framework for financial affairs in the UK demands identifiable, named-individual accountability, how does this come out? The interaction between digital transformation and regulatory accountability has been neglected in the literature, and is the main policy paradox in the theory of banks.

Chapter 3

Changing Nature of 21st-Century Corporations:

The concept of a branch line and a paper ledger, as used as recently as 2000, is mostly a thing of the past these days. The building, where your money was once stored, is gone, and your thumbprint is all you need now to get to your money. But the key change isn't just in the smartphone app: social networks, ride-hailing services and retail apps are all packed with banking, and it's nearly invisible. Suddenly fintech firms were pushing the envelope of the system with fast loans, lower cost transfers and investment services that didn't need a suit and tie. Rather than speed and convenience, we are losing the human being that could say "yes", when the spreadsheet said "no". Digital currency and more automation are likely to be available in the coming years.

Increased Connectivity and Globalization:

Twenty years ago, the branch was nearly where the customer service was. These days, that relationship is channeled through a complex network of interconnected systems that most consumers rely on every day, but rarely think about. This transformation is reflected in UK Finance's Payment Markets Report for 2025, which has revealed that payment volumes across the UK totalled 49.7 billion in 2025, with 64% of these being card payments. Contactless payments now account for 39% of all payments, compared to 3% ten years ago. Today, 91% of all adults in the UK use one of their internet, mobile, or phone banking services; and mobile banking is the most popular way for adults to manage their money, rather than desktop or branch banking.

This is the real meaning of connectivity: not only do banks have to be connected to international markets, which they do now, but the relationship in itself is now digital, and continuously connected, offering similar customer experiences and interactions to a customer in Pakistan and a customer in the UK. In this respect, globalization has moved from international money flows to bringing together the common bank practices around a couple of digital rails, like mobile wallets, card networks and app interfaces. As noted in the material covered in Chapter Three, the convergence does not affect all banks equally. Like Monzo and Starling, challenger banks were built to be connected; incumbent banks are building it into a branch network built for an era that never anticipated connectivity. This distinction is more significant than the actual connectivity.

Shift towards Digital Transformation:

The UK banking sector has been the most successful if you look at the extent to which digital transition is taking place – and Open Banking is the perfect example of this with its minor tweaks to the flow of money, but most clients don't notice. Open Banking Limited's data from a year ago showed the ecosystem processed more than 24 billion API calls a year, an

increase of 27% from 2024. In December, users of the network were nearly one in five UK consumers and small companies, with 16.5m active user connections. Variable Recurring Payments (VRPs) that enable users to confirm recurring transfers between accounts are growing even faster. Open Banking payments increased by 57% YoY to 351 million transactions in 2025. For the nine largest banks and building societies in the UK, the duty to provide legislated infrastructure started in 2018 and has, over the course of a few years, become a reality which is being used by fintechs, retailers, even HMRC.

These Open Banking Limited and UK Finance numbers are about the extent of Open Banking infrastructure adoption – not necessarily about the extent of change in the organisation's structure within the Open Banking banks. The difference is important all along this chapter; the claims of usage volume and structural transformation are related but distinct, and evidence that supports one does not automatically support the other.

This is the most material expression of digital transformation: banks are forced by PSD2 and the FCA's Open Banking regulations to share their data and payment rails with third parties that are not part of their own organisation. This is not a slogan or a plan of action. In contrast with challenger banks, which have not had to deal with legacy systems that hinder them from treating Open Banking as a native capability instead of a retrofit, incumbent banks have had to construct totally new systems over decades-old core banking systems—just the type of system layered onto the hierarchy that was found in the literature review of Chapter Three. When a bank's infrastructure is exposed to outsiders, who are responsible for what may happen when things go wrong becomes not only technological, but also organizational, something this dissertation revisits later in this chapter.

Importance of Adaptability and Agility:

Buy Now Pay Later, embed finance, instant digital account opening shows us what agility means at the product level, and Open Banking provides us with a glimpse of what transformation means at the infrastructure level. An incumbent bank attempting the same would have to determine how a new digital product would fit in with decades of legacy systems, existing risk committees and product-approval processes developed for a time when speeds were slower. Challenger banks such as Monzo and Starling are also fast to launch new products, such as a savings product, in weeks, which is partly due to the technology and organisation being built from scratch together – though their youth, scale and lack of legacy infrastructure are likely other factors contributing to that speed.

The theoretical definition of adaptability assumes a more concrete form in the agility that is found in the banking organization, a quality that is linked to its legacy, and the extent to which that legacy is related to the process of regulatory approval. The absence of the very structures that an incumbent bank is trying to get more agile within adds to a challenger bank's agility.

Chapter 4

Obsolescence of Traditional Organisational Structures

Hierarchical Structures vs. Flat Organisations:

The hierarchical structure of a Monzo or Starling business is an entirely different structure to that found in a traditional high street bank. A feature typically has a defined end-to-end lifecycle within small, empowered product teams, whereas an incumbent would have to have many layers of approval for a similar change. But in the last decade even the incumbents have been undergoing a significant shift, with HSBC, Barclays, Lloyds and NatWest all restructuring their businesses around digital and data, where the technology could not even have been conceived 15 years ago, and each operating software release cycles that would have been unimaginable under the previous, waterfall-style IT change processes.

However, the hierarchy of individual accountability, which was predicted in the theoretical parts of this dissertation has not disappeared. That's the sort of clear cut responsibility that a bank has to have under a Senior Managers and Certification Regime, and it would be a good way to get rid of a lot of product-development people without compromising the ability to trace the chain of sign-off for any use of consumer money, capital adequacy requirements, or financial promotions. In reality, this means that today's UK banks have two organizational logics to run two conflicting businesses: one much more conventional, where the regulator is able to hold a specific individual responsible for something, and another of flat, cross-functional teams, producing and delivering digital products. The use of hierarchy has been becoming more selective, but it is not outdated.

This comparison has an asterisk that must be emphasized, and not implied. The incumbents are not just hundreds of years older than the challengers, they're a lot bigger; they have legacy IT estates that the challengers never had to build; and in some cases they're owned by different people with different risk appetite. Any structural difference between the two groups might thus be due to age or scale or legacy infrastructure or ownership—it might be due to digital transformation or regulation per se. This dissertation does not remove that confound completely when comparing the eight banks, but it does narrow it down: all eight institutions are regulated by the same FCA/PRA/SM&CR regime, and the comparison at least keeps regulatory exposure broadly constant, so cutting technology and organisational history out as the two most likely remaining explanations of the differences that the empirical chapters proceed to identify. Where evidence is available, the analysis below attempts to differentiate a difference that reflects digital maturity from one that better reflects age or scale rather than assuming all incumbent-challenger differences are due to digital maturity.

Matrix Organisations and Cross-Functional Teams:

The first cross-functional partnership that comes to mind in UK banking is the Open Banking ecosystem itself: the engineers in banks, the product teams in fintech firms and the technical standards set by the regulator all have to follow the same rules for any payment to be successful or a data-sharing request to be accepted. It's a matrix that's not only across bank departments, but across entire organizations that can't be said to report to each other in any traditional sense.

The more common form of this in the context of specific banks is the cross-functional squad, a small group of engineering, design, compliance and product people under one collective umbrella, working together to support one customer experience. This structure has been adapted by most incumbents to allay the time needed to deliver digitized services. A compliance expert almost always remains in a separate compliance chain for accountability and performance reasons, which is exactly the matrix model of reporting duality that it is hoped will never materialize. This is the real problem that workers in these buildings have been complaining about. This is a particular problem in banking, where SM&CR requires the compliance line to be identified with one person, irrespective of the make-up of the working team on a day-to-day basis.

Decentralisation and Empowerment:

Empowerment in modern bank services in the UK is reflected best in the customer service. Where staff might have previously raised a simple balance enquiry or standing order amendment, they may now be able to resolve this matter within the app, without having to move it up the chain of command. Much of the day to day enquiry is now being directed to a frontline chatbot or app-based assistant, without any human interaction. A popular instance of such a shift is NatWest's AI-driven helper, Cora. It was initially developed to respond to simple, high-volume queries, but has taken on more of the routine interactions with customers, freeing up human staff for the more complex interactions that require human involvement.

The most straightforward way of decentralization is to make decisions and solve problems faster, nearer the client and without the need to travel up the hierarchy first. It is important, however, to make it clear which things have been decentralized. Most of it is in use: who answers a question and how quickly. The responsibility for the underlying product, the data that the chatbot accesses and the risk controls that surround the product has not been shared out but remains formally with named senior personnel under SM&CR. UK banking has been gradually decentralising in the day to day running of the business but remains highly concentrated in terms of ultimate responsibility when evaluating progress towards empowerment.

Power, Discretion, and Algorithmic Control:

The discussion on decentralisation left unanswered is: does authority shift away from the human manager and towards the human doing the work, or is it shifted alongside and into the software? Cora, a NatWest AI assistant, is an example of the ambiguity. A frontline employee still doesn't need to get their manager's approval to deal with a standard query, but neither does that person set the rules that Cora has to follow, determine the thresholds for moving a query up to a human, or even decide what's considered a "routine" query in the first place. It was earlier, when a smaller team of data scientists, compliance officers, and model-risk committees created and periodically review the system, that these options were selected. Empowerment at the point of customer contact might more accurately be called discretion that's been cordoned off upstream—the employee is free to act in a smaller, algorithmically bounded space, and no longer constrained by what their manager might be able to do.

This has a direct impact on the organisation's power structures of the UK banking industry. Digitalisation does not just make hierarchies flat — it moves them, from visible and seen managerial approval to largely invisible and unseen systems' design and governance. The Senior Managers and Certification Regime does not work against the relocations it entails: a named senior manager is always personally responsible for the results of an algorithm, so they have a direct incentive to maintain effective control of the system used and of how it's built and changed, as it moves to the frontline and gets used by more people. This is precisely when it would seem activity is most decentralised, however, that it is recentralising, and that is a direct problem this dissertation's central theoretical concern must address, not equating structural flatness and empowerment.

Chapter 5

Redefining Management Roles

Transformational Leadership:

Ten years ago, senior bank managers were expected to exhibit a quite different sort of leadership. In these days and age, a manager in a banking company is much more prone to be assessed on their capacity to promote a digital product, make a case for technology investing to a board, and lead teams through successive cycles of platform change without demoralizing or decreasing performance. Operational skills, including running a location, staff rota skills and meeting service targets, were the base skills of a branch manager in the past. This is the way people want to hear you when you're not telling them anything new to make them do something it's all about persuading them to join you in changing. This is the real world application of what the literature refers to as transformational leadership; a leadership style that's more about convincing others to support you in your changes than it is about giving your direct orders.

This picture has a feel of how close the pressure has become to everyday life through examples. A UK bank executive's act of sponsorship does not simply mean that they are sponsoring a project, but they can also be the individual who is responsible for ensuring that it is a success in the eyes of the regulator, according to SM&CR. Thus, transformational leadership in banking has a greater advantage than in most other industries. Leaders in less regulated industries simply cannot be held to the same standard for personal, statutory liability as leaders in more regulated industries, without risking the loss of the trust and pace with which digital transformation must occur. Even the most digitally forward UK banks are not as bold as those in the technology sector, which operate without such regulation.

Embracing Technological Literacy:

Technological literacy is no longer a specialist skill kept in a business's IT department, but something that is expected from managers throughout the business. A product manager at a UK bank today should not only be able to make sense of data and digital delivery, but not necessarily code it, more like an informed and critical user of technology. This transition can be seen in the way banks now recruit and promote: digital and data skills are now expected as core criteria for managing positions, and are no longer considered an added bonus.

The more intriguing issue is: for what purpose is this literacy? But a technoliterate bank isn't just one that identifies opportunities for innovation — it's also one that can ask the tough, skeptical questions of a new system before it goes live: Can you explain a new AI-powered credit decision to a regulator? Can you explain an automated response from a chatbot that might be considered financial advice? Can you explain a new API exposing data in a way that

breaches customer consent? The technological literacy of banking management, that is, serves as a security, as well as a driver, of innovation and is a different function from the same skill in a less regulated sector.

Chapter 6

Challenges and Opportunities

Overcoming Resistance to Change:

The reluctance to change is usually not outright rejection, but rather cautiousness, delays, and multiple requests for more "sign-off" before a new system is put into operation. Whatever its true value, most people who have seen a technology failure in the past carry a healthy fear of the next twist in the technological revolution, as in a recent incident where a major bank in the UK suffered the loss of the entire system for a significant part of the day. Those who have been at a job longer often have a more negative reaction to new digital tools than those who are younger because they remember when a system update didn't work and who was left to deal with the consequences. This does not mean they are not as able.

To overcome this, banks have begun to have staged rollouts, to operate both the new and old systems together, and to establish specific roles and positions whose only job is to bridge the gap between the technical staff building a new system and the front-line users who will be responsible for using and reporting on it. This is in fact a practical manifestation of the theoretical discussion that is presented in the literature covered in Chapter Three, but adds an important caveat – in UK banking, there can be resistance by rational management decisions to implement a roll out when they feel that the system needs to be tested and audited to ensure that personal accountability is being met rather than to avoid change.

This distinction should be extended beyond the following example. Caution in UK banking isn't all the same type of caution, and it's possible to miss the more interesting question: when is a delay organisational friction that a bank should seek to unclog, and when is it institutional memory — the accumulated knowledge of what went wrong before? Friction is when a rollout is stalled because no one has yet determined how an added feature will work with an existing core-banking system; protection against a huge snafu that happens again is a different story if a senior manager recalls a similar change that sparked an incident that hurt customers several years ago. Much of the digital-transformation literature is fashionably fixated on the idea that agility is a good thing and bureaucracy is a bad thing, but that is not the case in this distinction. The speedy bank has not proven its more conservative competitors obsolete; it's proven that they were needed.

Ensuring Data Security and Privacy:

One of the most obvious limitations on the speed at which UK banks may operate is data security. As well as the UK GDPR, the Data Protection Act 2018, and the newly introduced demands for cyber-resilience as part of the FCA and PRA requirements, should all be solidly embedded in new digital products from the outset. Besides the newer problems, such as

preparations for post-quantum cryptography, which banks recognise is still a lot of theoretical training than real-life use, the FCA's own Cyber Coordination Group has said that UK banks are facing the real consequences of big incidents, such as the widespread July 2024 CrowdStrike incident that saw banks forced to pinpoint exactly which third-party suppliers they rely on.

The customer-facing nature of this is something that it's easy to forget about, as it works very well for the majority of the time: biometric login, one-time passcodes, and real-time fraud alerts. Unless there is a problem, customers don't think about the infrastructure that runs behind them. Unlike other less-regulated sectors, the UK banking sector is different in that a cyber or data incident is not only a financial and reputational risk, but can also result in a designated senior manager personally being sanctioned under their Senior Management Function. Thus, beyond the technical concerns that accompany the organizational aspects of data security, the very same individual-accountability principle that was outlined earlier in this chapter applies here.

Leveraging Technology for Competitive Advantage:

The customer experience provided by common digital tools, such as instant account opening, real-time spending notifications, in-app budgeting features, and AI-driven assistants that increasingly answer questions without human intervention, is the most evident current battleground for competitive advantage in UK banking. Offering a notably smoother digital experience than incumbents encumbered with outdated technology, challenger banks earned their early reputation almost exclusively on this foundation. In response, incumbents have made significant investments in their own apps and, in certain situations, established distinct digital-only sub-brands to engage in more direct competition on an equal footing.

However, this rivalry increasingly shows that technology is no longer a differentiation; the majority of UK banks, both challenger and incumbent, now provide largely equivalent digital services. The benefit is moving in the direction of organizations that can truly take in and use the data that technology produces, such as personalizing offers, identifying fraud early, or processing loans more quickly, all without violating the FCA's standards for fair treatment and consumer duty. This aligns with the resource-based perspective previously presented in Chapter Three, which holds that an organization's ability to effectively utilize technology in a highly regulated setting is the source of advantage rather than technology per se. This is precisely the comparative question that a matched study of incumbent and challenger banks operating under identical UK regulations is well-positioned to address.

Chapter 7

Conclusion

Summary:

The reality of banking in the UK today is more nuanced than either "nothing fundamental has really changed" or "technology has made traditional banking obsolete. There is no doubt, there has been an increase in agility and empowerment at the operational level, managerial roles have been redefined with new digital and data skill sets, and connectivity and open banking has transformed the way banks operate and how they do business. At the same time, there's been a clear and continuous stream of responsibility for named, traceable risk, compliance, data security, and any aspect that could put a customer at risk, since the Senior Managers and Certification Regime came into existence.

This should be seen not as an organisation 'hybridising' in general terms but as an effect of the regulatory-anchored ambidexterity, where the process of digitalisation moves operational information and decision-making away from the core of the organisation, and the Senior Managers and Certification Regime shift this information and accountability towards the formal and named individuals. They are not settling into a middle-ground, both are on different structural levels, one is decision rights, one is accountability — that's why incumbent and challenger banks can look very different, but they are still very much on the same structural level when it comes to accountability.

Implications for Future Research:

In this chapter, the author has shown that the comparative design proposed in this dissertation is still the best method for answering this question and demonstrated that it can be done within a similar regulatory environment in the UK, not through the power of academic argument. What is evident from the evidence here is that the question that digital transformation is happening is not the only question to ask: rather, the question is which areas of UK banks' operations they wish to remain in a hierarchical structure and which they do not, as well as whether the SM&CR accountability requirements are more likely to affect this decision than any other single factor. This distinction between incumbent and challenger banks on how they draw the line under the same law should be directly tested in future empirical studies, such as the fieldwork that this dissertation will conduct.

References:

Albert, D. (2023) 'What do you mean by organizational structure? Acknowledging and harmonizing differences and commonalities in three prominent perspectives', *Journal of Organization Design*, 13, pp. 1–11. Available at: <https://doi.org/10.1007/s41469-023-00152-y> (Accessed: 9 August 2026).

Ancillai, C., Sabatini, A., Gatti, M. and Perna, A. (2023) 'Digital technology and business model innovation: a systematic literature review and future research agenda', *Technological Forecasting and Social Change*, 188, p. 122307. Available at: <https://doi.org/10.1016/j.techfore.2022.122307> (Accessed: 9 August 2026).

Bonelli, M.I. (2026) 'Leadership architectures for digital innovation: extending upper echelons theory through expert-coded evidence', *Journal of Organizational Change Management*, 39(8), pp. 22–38. Available at: <https://doi.org/10.1108/JOCM-10-2025-0861> (Accessed: 9 August 2026).

Fayol, H. (1949) *General and Industrial Management*. Translated by C. Storrs. London: Pitman.

Grodal, S., Krabbe, A.D. and Chang-Zunino, M. (2023) 'The evolution of technology', *Academy of Management Annals*, 17(1), pp. 141–180. Available at: <https://doi.org/10.5465/annals.2021.0086> (Accessed: 9 August 2026).

Journal of Internet Banking and Commerce (2024) 'The impact of internet banking on modern commerce in the digital age', *Journal of Internet Banking and Commerce*. Available at: <https://www.icommercecentral.com/open-access/the-impact-of-internet-banking-on-modern-commerce-in-the-digital-age.php?aid=94786> (Accessed: 9 August 2026).

Joseph, J. and Gaba, V. (2020) 'Organizational structure, information processing, and decision-making: a retrospective and road map for research', *Academy of Management Annals*, 14(1), pp. 267–302. Available at: <https://journals.aom.org/doi/10.5465/annals.2017.0103> (Accessed: 10 August 2026).

Li, Z., Yang, C., Yang, Z. and Zhao, Y. (2024) 'The impact of middle managers' digital leadership on employee work engagement', *Frontiers in Psychology*, 15, 1368442. Available at: <https://doi.org/10.3389/fpsyg.2024.1368442> (Accessed: 10 August 2026).

Lóska, G. and Uotila, J. (2024) 'Digital transformation in corporate banking: toward a blended service model', *Organization Studies*. Available at: <https://journals.sagepub.com/doi/10.1177/00081256231207429> (Accessed: 11 August 2026).

Mintzberg, H. (1973) *The Nature of Managerial Work*. New York: Harper & Row.

Mottaghi, M., Shirvani, A. and Dalvi, M.R. (2022) 'Organizational ambidexterity model for digital innovation in the banking industry', *Journal of Digital Content Management*, 3(4), pp. 153–175. Available at: https://dcm.atu.ac.ir/article_14023.html (Accessed: 11 August 2026).

Motta, B. (2024) *Digital transformation in the public sector and the bureaucratic model: a (quasi) systematic literature review*. United Nations University Operating Unit on Policy-Driven Electronic Governance (UNU-EGOV) seminar series. Available at: <https://unu.edu/egov/seminar/digital-transformation-public-sector-and-bureaucratic-model-quasi-systematic> (Accessed: 11 August 2026).

Muthukannan, P. et al. (2026) 'From open banking regulation to platform orchestration: the evolution of digital platform governance', *Information Systems Journal*. Available at: <https://onlinelibrary.wiley.com/doi/10.1111/isj.70030?af=R> (Accessed: 11 August 2026).

Pacheco-Cubillos, D.B., Boria-Reverter, J. and Gil-Lafuente, J. (2024) 'Transitioning to agile organizational structures: a contingency theory approach in the financial sector', *Systems*, 12(4), p. 142. Available at: <https://doi.org/10.3390/systems12040142> (Accessed: 11 August 2026).

Polasik, M., Butor-Keler, A., Widawski, P. and Keler, G. (2024) 'Evaluating the regulatory approach to Open Banking in Europe: an empirical study', *Financial Law Review*, 34(2). Available at: <https://ejournals.eu/en/journal/financial-law-review/article/evaluating-the-regulatory-approach-to-open-banking-in-europe-an-empirical-study> (Accessed: 11 August 2026).

Porfírio, J.A., Felício, J.A. and Carrilho, T. (2024) 'Factors affecting digital transformation in banking', *Journal of Business Research*, 171, p. 114393. Available at: <https://doi.org/10.1016/j.jbusres.2023.114393> (Accessed: 12 August 2026).

Shahzad, K., Imran, F. and Butt, A. (2025) 'Digital transformation and changes in organizational structure: empirical evidence from industrial organizations', *Research-Technology Management*, 68(3), pp. 25–40. Available at: <https://doi.org/10.1080/08956308.2025.2465706> (Accessed: 12 August 2026).

Mintzberg, H. (1979) *The Structuring of Organizations*. Englewood Cliffs, NJ: Prentice-Hall.

Open Banking Limited (2025) *Open Banking in 2025: Now Part of the UK's Everyday Financial Life*. Available at: <https://www.openbanking.org.uk/insights/open-banking-in-2025-now-part-of-the-uks-everyday-financial-life/> (Accessed: 29 August 2026).

Open Banking Limited (2025) *OBL Impact Report 7: Open Banking Delivers Real-World Impact as Adoption Accelerates Year-on-Year*. Available at: <https://www.openbanking.org.uk/insights/obl-impact-report-7-open-banking-delivers-real-world-impact-as-adoption-accelerates-year-on-year/> (Accessed: 29 August 2026).

UK Finance (2025) UK Payment Markets 2025. Available at:

<https://www.ukfinance.org.uk/system/files/2025-10/Payment%20Markets%20Report%20Summary.pdf> (Accessed: 29 August 2026).

UK Finance (2025) 'Digital payments continue to grow as mobile wallets become more popular across the UK'. Available at: <https://www.ukfinance.org.uk/news-and-insight/press-release/digital-payments-continue-grow-mobile-wallets-become-more-popular> (Accessed: 29 August 2026)