Data-driven strategic communication for brand identity building: the case study of Capital One

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Abstract

Framing of the research: Digitalisation has transformed strategic communication and branding. However, the current literature has not revised traditional brand-building models to reflect the opportunities presented by data and emerging technologies. Furthermore, it remains unclear how data-driven strategic communication can facilitate brand identity building.

Purpose of the paper: This study aims to investigate the role of strategic communication, supported by the data-driven approach, in the process of building brand identity. The advent of the internet and industry 4.0 technologies, and the consequent consumer empowerment, calls for a re-evaluation of the traditional view of brand identity.

Methodology: The study draws on Jaakkola's 'theory synthesis design'. Through the lens of the resource-based view, the data-driven approach in strategic communication and branding studies are integrated to re-examine Urde's corporate brand identity matrix. Despite its recent development, this model still suffers from a control-centric company view. Through theoretical reconceptualisation, a new framework is proposed, supported by an illustrative case study using secondary data.

Findings: The theoretical framework shows that big data, as strategic resources, improve organised listening and reflective communication, impacting the building of brand identity. Data-driven strategic communication influences mission and vision (innovation orientation), culture (data-driven decision-making), competencies (data science skills), value propositions (personalised products and experiences), relationships (data-driven corporate communication) and positioning (strategic stakeholder listening). The Capital One case study, as best practice, illustrates the application of the novel theoretical framework.

Research limits: The study presents the limitations of a conceptual paper built from a literature review and on a single illustrative case study that uses secondary data.

Practical implications: The proposed theoretical framework could orientate top management decisions and strengthen the strategic role of communication and brand managers in brand identity building in the digital age. Thanks to strategic communication according to a data-driven logic, managers could develop new value propositions for innovative business models, improve competitive positioning and build personalised relationships. Moreover, the inclusion of data in corporate culture, as well as the synergistic co-existence of various managerial skills, facilitates performance excellence.

Originality of the paper: *This study proposes a rethinking of brand identity building, emphasising the data-driven approach in strategic communication.*

Key words: *strategic communication; brand identity; data-driven approach; big data; illustrative case study*

1. Introduction

Industry 4.0 involves profound innovations, significantly affecting corporate communication (Ihator, 2001). In digital transformation, in which data flows are growing exponentially, communication increasingly becomes a strategic driver of business success. The use of data to inform decision-making has only recently entered the realm of strategic communication (Weiner and Kochhar, 2016; Wiesenberg *et al.*, 2017).

Using data results in strategic communication changes, influencing brand management (Kallinikos and Constantiou, 2015; Mikalef *et al.*, 2016). In the new era of branding, which is increasingly focused on co-creation in digital environments, data-driven organised listening provides crucial insights into stakeholders' brand perceptions and behaviours (Invernizzi, 2004; Cornelissen, 2008; Siano *et al.*, 2015). The indications deriving from organised listening can be transferred, through reflective communication, to top management to guarantee adequate information support for corporate decisions (van Ruler and Verčič, 2005). Reflective communication involves reflecting data and information derived from organised listening within the executive committee to guide corporate vision and culture and enable the adoption of corporate or business strategies aligned with stakeholders' expectations (Steyn, 2003). Data-driven organised listening and reflective communication contribute to orientating brand-building strategies and influencing brand identity development (Michel, 2017).

Despite the increasing attention paid to branding in the digital age, very few studies have explored how strategic communication through a data-driven approach can contribute to change processes involving brands (McGuire *et al.*, 2012; Aimé *et al.*, 2022; Conte *et al.*, 2022).

The existing body of knowledge on brand identity building is not current because of substantial changes affecting brands in digital environments, such as the active involvement of multiple stakeholders in branding practices, as well as the proliferation of data and industry 4.0 technologies (Veloutsou, 2023). Consequently, there is a gap in the literature concerning how the brand-building process can be influenced by datafication (McAfee *et al.*, 2012; Wiesenberg *et al.*, 2017).

Specifically, recent studies on brand identity have emphasised the need for scholars to embrace a participatory, multistakeholder approach to developing a brand identity. According to these studies, brand identity needs to be interpreted as a dynamic, social and polysemous construct, encompassing the expectations and perspectives of various actors who act as active co-creators in the development of brand identity (Kornum *et al.*, 2017; Wider *et al.*, 2018; Padela *et al.*, 2023).

Despite this call, the brand management literature remains rooted in traditional models of brand identity building and fails to provide further advancements. For instance, the most recent corporate brand identity matrix (CBIM) by Urde (2013), although it combines an internal and external perspective on brand identity building, does not emphasise the importance of co-creation and new technologies in shaping brand identity in the digital context. Therefore, it is necessary to intensify academic efforts to update the brand-building process to incorporate recent advances and re-evaluate traditional models for brand identity building (Aaker, 1996; de Chernatony, 2010; Urde, 2013) considering the opportunities that data and digital offer (Olsen, 2018). It can help companies adapt and evolve their branding practices to keep up with environmental changes (Veloutsou, 2023).

Francesca Conte
Paolo Piciocchi
Alfonso Siano
Alessandra Bertolini
Data-driven strategic communication for brand identity building: the case study of Capital One

In light of these considerations, this conceptual study aims to investigate the role of strategic communication, empowered by the data-driven approach, in building brand identity.

For this purpose, the study uses Jaakkola's (2020) 'theory synthesis design'. Through the lens of the resource-based view (RBV; Wernerfelt, 1984; Barney, 1991), the data-driven approaches in strategic communication and branding studies are integrated to reinterpret Urde's CBIM. In line with the RBV theory, several studies have indicated that big data expresses potential in terms of their function as a valuable resource for brand management (Tien, 2013; Wamba *et al.*, 2015), especially for brand building (Conte *et al.*, 2022).

This study proposes a novel theoretical framework for rethinking brand identity building, emphasising the data-driven approach in strategic communication. It provides an integration perspective to enhance the data-driven logic in branding practices (Aimé *et al.*, 2022). The framework is supported by an illustrative case study that uses secondary data (Brodie and Benson-Rea, 2016). Using Capital One, a financial holding company, the study explores the role of the data-driven approach in the internal (mission and vision, culture, competencies) and external (value propositions, relationships, positioning) components of brand identity, as proposed by Urde's CBIM.

The study highlights the strategic value of data (Grover *et al.*, 2018) for building brand identity in digital environments (Kristal *et al.*, 2020). From this perspective, the study supports processes aimed at rejuvenating brands in light of online consumer empowerment and offers new insights into strategic communication (Wiesenberg *et al.*, 2017).

From a managerial point of view, the proposed theoretical framework helps top management and communication managers shape brand identity in the digital age. Using strategic communication based on data-driven logic, they can develop innovative business models, enhance competitive positioning and build personalised relationships. This approach fosters a data-driven corporate culture and leverages diverse managerial skills for performance excellence.

2. Conceptual background

2.1 Data-driven approach in strategic communication

Corporate communication is changing profoundly in the technologies adopted and the strategies implemented (Ihator, 2001). Industry 4.0 tools generate an enormous amount of data, significantly influencing the strategic dynamics of corporate communication (Mandelli, 2017). Controlling and interpreting data means undertaking digital analytics (Power, 2014; Wheeler, 2016), namely, activities that allow data collection to develop forecasts for firm value creation (Phillips, 2014). Specifically, in the current competitive environment, big data are emerging as an essential prerequisite for companies' decisions (Gartner, 2019).

In line with the RBV of firms, several studies have pointed out that big data are considered valuable resources (Wamba *et al.*, 2015; Grover *et al.*, 2018; Dahiya *et al.*, 2022). The RBV is one of the most widely accepted theoretical perspectives in strategic management (Priem and Butler, 2001; Rouse and Daellenbach, 2002) and emphasises the importance of a firm's resources in achieving and sustaining competitive advantage.

From an RBV perspective, big data are strategic resources (Zhang *et al.*, 2020): they are valuable (data allows for the development of new business opportunities); rare (the integration of data is difficult to find by competitors); inimitable (competitors cannot imitate or purchase the information obtained from data); embedded in an organisation; and nonsubstitutable (data are integrated into business processes and cannot be replaced by alternative resources).

The adoption of data as a strategic resource configures a data-driven approach that strengthens strategic communication (Wiesenberg *et al.*, 2017). The development of data-driven logic, in fact, is revolutionising organised listening, facilitating the acquisition of information from stakeholders (Invernizzi, 2004; Cornelissen, 2008; Siano *et al.*, 2015). Through strategic-reflective activities, these inputs become fundamental to support top management decisions (van Ruler and Verčič, 2005).

Thus, data promote the creation of value inside and outside companies, developing more effective relations with stakeholders. Indeed, data analysis improves the strategic dynamics of corporate communication, strengthening relationships and bonds of trust between organisations and their public (Invernizzi and Romenti, 2013; Siano *et al.*, 2015). Moreover, using data analytics enables constant monitoring of communication performance (Wiencierz and Röttger, 2017). This allows organisations to understand whether and how they are pursuing their communication objectives, compare their performance over time and define possible improvement actions (Erevelles *et al.*, 2016).

Big data research has received increasing attention in recent years, and several studies have begun to analyse the strategic value of the data-driven approach (McGuire *et al.*, 2012; Aimé *et al.*, 2022). However, big data are still rarely explored in the strategic communication field and branding studies (Pantano *et al.*, 2019; Giglio *et al.*, 2020). The data-driven approach in strategic communication supports stakeholder listening that helps

companies to monitor brand health, and periodically examine customer mindset constantly measures to guide corporate decisions (Ailawadi *et al.*, 2003). Many aspects of branding processes can be predicted from data, including how consumers perceive brands' personalities (Dew *et al.*, 2022). Therefore, it becomes necessary to investigate the role of data in brand-building processes and, specifically, brand identity building.

Francesca Conte
Paolo Piciocchi
Alfonso Siano
Alessandra Bertolini
Data-driven strategic
communication for brand
identity building: the case
study of Capital One

2.2 Brand identity building

In accordance with the principles of the RBV, brand represents a highly valuable and firm-specific resource (Barney, 1991).

The process of brand building begins with the creation of a unique and strong brand identity. Brand identity has traditionally been defined in the literature as 'symbols and the set of brand associations that represent the core character of the brand that the team supporting the brand aspire to create or maintain as identifiers of the brand to other people' (Veloutsou and Delgado-Ballester, 2018, p. 257).

Brand identity has always aroused great interest among scholars, and various models have been proposed in the literature on brand management (Aaker, 1996; Urde, 2013). Aaker's (1996) brand identity planning model represents the 'North Star' for the development of other models (e.g. Collins and Porras, 1997; de Chernatony, 2010) and a break with earlier models mainly concerned with the development and control of a specific brand image (e.g. Park *et al.*, 1986).

These brand identity models share the idea that the processes of brand identity building are under the direct and exclusive control of companies (Michel, 2017). The elements of brand identity are determined internally by the organisation and then communicated externally to create a desired brand image and reputation and a consistent brand meaning among stakeholders (Chung and Byrom, 2021).

This inside-out and control perspective has been influential in the study of brand identity building but currently cannot cope with the rapid changes in the actual context (Veloutsou, 2023). The internet and the gradual loss of managerial control over brands are challenging the traditional perspective of brand identity as a stable entity that brand managers can develop and control (Siano *et al.*, 2022; Padela *et al.*, 2023).

Recent research, such as stakeholder-orientated brand management studies and the performative and multistakeholder approach to brand identity building, have identified a radical shift in the way brand identity is conceived (da Silveira *et al.*, 2013; Michel, 2017).

Stakeholders become active co-creators in brand identity building through their shared expectations, experiences and identities (Kornum *et al.*, 2017). Therefore, brand identity is revealed as a dynamic, unstable, social and polysemous construct subject to ongoing influence by the multiple interactions between organisations and stakeholders (Wider *et al.*, 2018; Padela *et al.*, 2023). According to this viewpoint, there is no final stage to brand identity; rather, it should be re-envisioned as 'a nested system of identities' (Kornum *et al.*, 2017, p. 432).

With the advent of the digital environment, the existing models of brand identity and the logic associated with brand building need to be re-

evaluated (Veloutsou, 2023). Specifically, industry 4.0 technologies (e.g. big data) that provide a deeper understanding of stakeholders may represent an opportunity for the development of a more relevant brand identity in line with audience expectations (Aimé *et al.*, 2022; Yan *et al.*, 2022).

However, the brand management literature remains locked into traditional models of brand identity building and does not provide advances in this direction. The most recent CBIM of Urde (2013), for instance, although it seems to combine an inside-in with an outside-in perspective of brand identity building, fails to emphasise the importance of co-creation and new technologies in shaping a brand identity in a digital context.

Urde's CBIM

Urde's CBIM considers external elements (value propositions, relationships, positioning), internal elements (mission and vision, culture, competencies) and the core (especially brand promise and value) for brand identity building.

Specifically, Urde defined the components as follows:
- *value proposition*: appealing argument directed at stakeholders
- *relationships*: the way an organisation with a brand works with stakeholders and relates to their needs
- *positioning*: a brand's position in the market and in the hearts and minds of stakeholders
- *mission and vision*: the reason the organisation exists and where it is heading
- *culture*: reflection of corporate attitudes, values and beliefs, and of the ways in which an organisation works and behaves
- *competencies*: the capabilities, processes and core competencies of an organisation.

From Urde's perspective, all components are considered in an integrated manner. The construction of each element relates to the others and to the core, placed at the centre of the brand identity structure.

The model, however, does not consider how new digital contexts influence the development of each component.

3. Method

The present study draws on Jaakkola's (2020) 'theory synthesis design'. Through the synthesis and integration of two streams of the literature pertaining to the data-driven approach in strategic communication and branding, the theoretical foundations of brand identity are explored and extended by adopting a single perspective (MacInnis, 2011), which is the RBV theory (Wernerfelt, 1984; Barney, 1991). Through this theoretical lens, it is possible to conceive not only the brand but also big data as strategic resources that can create value for firms and sustain competitive advantage (Mata *et al.*, 1995; Grover *et al.*, 2018).

The theory synthesis proposed in this study allows for a revision of Urde's (2013) CBIM. Several reasons led to the selection of the CBIM

as a starting point for this study: (1) this brand identity model is one of the most recent models developed following the advent of the digital age, (2) an inside-out and outside-in approach is provided for brand identity building and (3) it provides a clear distinction between the internal and external components of brand identity.

Francesca Conte
Paolo Piciocchi
Alfonso Siano
Alessandra Bertolini
Data-driven strategic communication for brand identity building: the case study of Capital One

Therefore, the present study proposes a novel theoretical framework that considers the role of strategic communication empowered by data-driven logic in defining the external (value proposition, relationships, position) and internal (mission and vision, culture, competencies) components of brand identity, reflecting on the core, a central element in Urde's CBIM (2013).

Capital One's case study supports the theoretical framework by illustrating how data-driven strategic communication can contribute to brand identity building. In this research study, the use of an illustrative case study is primarily intended to integrate theory and practice by identifying at least one relevant practical case as an example of theoretical arguments (Levy, 2008).

Illustrative case studies are commonly employed in management (Mariotto *et al.*, 2014) and in branding research (Brodie and Benson-Rea, 2016). These are appropriate for generating theoretical insights when relatively little is known about a phenomenon (Eisenhardt, 1989). By observing best practices, this methodology can help construct new theories concerning ongoing technological change, but it can also illustrate empirical examples of theories (Scapens, 2004).

In the present study, Capital One is selected as a best practice for generating business value from data. Capital One is a diversified financial services company, classified by Fortune among the top 10 of the United States' most innovative companies in 2023. This ranking recognises companies that transform industries from the inside out through innovative processes, such as research and development teams inventing new products, efficient processes that strengthen a company's bottom line, and inspiring leaders who promote brainstorming and collaboration that leads to original creations.

This illustrative case study uses the collection of secondary data, which is assumed to provide insights as valuable as those derived from interviews and direct observation (Merriam, 1988; Schiavone *et al.*, 2022). Therefore, online documents and resources are useful to researchers for discovering meaning and uncovering new insights. To increase the validity of the data collection, information is gathered from multiple sources (Yin, 2017). The secondary data, which is mostly textual, comes from Capital One's official documents and corporate website, and interviews in online magazines and newspapers. All these documents are freely available online.

The secondary data collected are analysed by considering the internal and external components of brand identity building of Urde's CBIM. Through this analysis, the case study illustrates the application of the theoretical framework in an empirical context.

4. Theoretical framework: data-driven strategic communication for brand identity building

The reinterpretation of Urde's matrix, in light of studies on the data-driven approach, brings out the impact role of big data, as a strategic resource according to the RBV, on the brand identity building.

Data-driven logic implies a strengthening of strategic communication as it facilitates the organised listening to stakeholders' expectations. Data and information derived from strategic listening orientate corporate and business strategy decisions (reflective communication). Consequently, data-driven strategic communication enables a rethink of the definition of the external and internal components of brand identity, in accordance with Urde's CBIM. In line with these considerations, a novel theoretical framework is proposed (see Figure 1).

Fig. 1: Framework of data-driven strategic communication for brand identity building
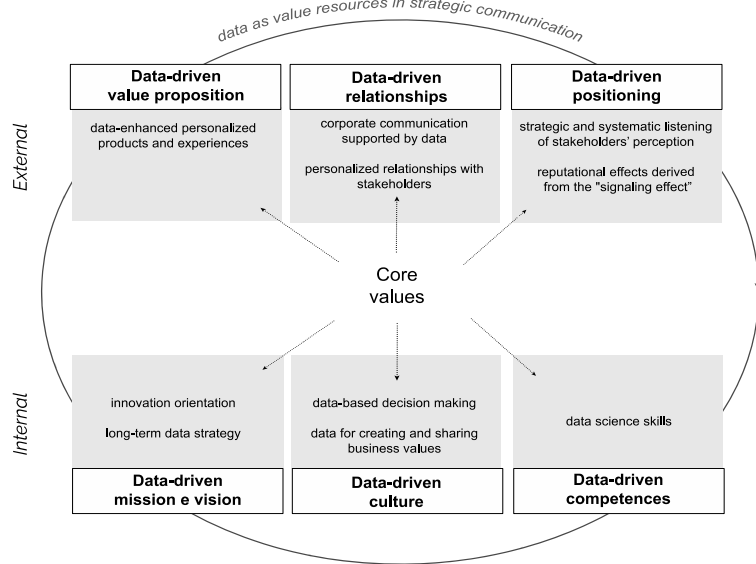
Source: our elaboration

Strategic communication, supported by data listening, affects the internal components (mission and vision, culture, competencies) of brand identity.

Big data are resources that can be integrated into long-term corporate strategies (Grover *et al.*, 2018), thus affecting mission and vision statements. Harnessing the power of big data to listen to and understand the evolving target market allows for the orientating of a company's strategy and vision (Jobs *et al.*, 2016). Moreover, by explaining the adoption of a data-driven approach to business strategies, organisations demonstrate their orientation to innovation, as well as a commitment to enhancing a customer-centric perspective through customised solutions.

The strategic integration of data into business dynamics allows the configuration of a data-driven corporate culture (Zhang *et al.*, 2020). According to Kiron and Shockley (2011), a data-driven culture is based on the following assumptions: data are seen as intangible resources that have value for the organisation, members of top management emphasise and support data analysis when making decisions, and the organisation uses the data-driven approach to facilitate the creation and sharing of corporate value among stakeholders.

Francesca Conte
Paolo Piciocchi
Alfonso Siano
Alessandra Bertolini
Data-driven strategic communication for brand identity building: the case study of Capital One

To develop a data-driven culture, an organisation's knowledge and skills must be expanded to analyse strategic information from organised listening (Prahalad and Hamel, 1990). New competencies in the data-driven approach (i.e. in the collection, management and interpretation of big data) constitute rare, firm-specific and unique resources that are useful in sustaining competitive advantage (Grover *et al.*, 2018). Therefore, the use of data is changing the job profiles sought in organisations, leading to an expansion of skills that include data science (Loebbecke and Picot, 2015).

The data-driven approach also affects the external components of CBMI.

Adopting the RBV lens, data listening insights represent a strategic resource that can create business value by improving organisational processes, customer experiences and firm performances (Grover *et al.*, 2018). Big data can support the business model innovation process, creating data-driven business models (Sorescu, 2017; Urbinati *et al.*, 2019) and providing guidance for the development of new value propositions (Teng and Lu, 2016), which is considered one of their key elements (Woerner and Wixom, 2015). Indeed, digital analytics allows for collecting customer feedback that, in addition to enabling profiling strategies, provides useful inputs for companies to promptly adjust product and service offerings according to current demand (Feng and Guo, 2018). With the support of data, new value propositions that are more in line with consumer needs can be created and communicated (Teng and Lu, 2016).

Thus, data may contribute to the creation of value inside and outside of an organisation, allowing for the development of more effective brand-stakeholder relationships. Specifically, analysing, interpreting and applying data more effectively can result in an improvement in corporate communication (Invernizzi and Romenti, 2013; Siano *et al.*, 2015), leading to the emergence of new approaches: data-driven supply chain communication (Yu *et al.*, 2018), data-driven human resource and talent management in internal communication and recruitment (Sparrow *et al.*, 2015), and data-driven marketing related to customer-communication flows. Data-driven marketing communication is the most mature and offers the most significant potential for growth in terms of personalising customer relationships (Wedel and Kannan, 2016).

Big data, as rare resources from the RBV perspective, also act on the positioning sought by organisations in two ways. First, data support the process of listening to stakeholders' opinions, thus improving brands' competitive positioning (Tirunillai and Tellis, 2014). Through systematic stakeholder listening, brands can gain a deeper understanding of how

stakeholders perceive the brand's values. Consequently, big data and strategic listening, including social listening, can help redefine or strengthen a brand's positioning by monitoring the external environment. In this way, the brand can be positioned dynamically and accurately (Feng and Guo, 2018). Second, adopting a data-driven approach and being recognised by corporate awards send a symbolic signal to stakeholders that communicates brand innovativeness, achieving reputational benefit from the 'signalling effect' (Grover *et al.*, 2018).

5. Illustrative case study of Capital One

5.1 Overview

To develop a potential empirical understanding of the proposed framework on data-driven strategic communication for brand identity building, the study uses Capital One, a financial holding company, as an illustrative case study.

Capital One is one of the largest retail banks in the United States, with $343.7 billion in deposits and $467.8 billion in total assets as of 30 June 2023. Headquartered in McLean, Virginia, Capital One offers a broad spectrum of financial products and services to consumers, small businesses and commercial clients through a variety of channels. Capital One has branches located primarily in New York, Louisiana, Texas, Maryland, Virginia, New Jersey and the District of Columbia. A Fortune 500 company, Capital One trades on the New York Stock Exchange under the symbol 'COF' and is included in the S&P 100 index.

Capital One's approach includes being grounded in data, which are a valuable resource embedded in the corporate culture; indeed, the organisation has revolutionised the credit card industry with data and technology. '*Our rallying cry back in 1987 was to build an information-based technology company that does banking, competing against banks that use information and technology, but it may not be who they are*' (Annual Report Capital One, 2022).

The case study highlights the strategic role of communication supported by data in brand identity building. Rich Fairbank, Capital One's CEO, has worked for many years on brand building supported by stakeholder listening and data analytics. For example, through data analysis, the Capital One Insights Center allows insights that support the creation and sharing of brand values, such as inclusion, equity, integrity, teamwork, openness and value diversity. Fairbank stated that '*at Capital One, we believe the power of technology can give customers greater protection, confidence and control of their finances. Among the most impactful ways for us to achieve these goals are the responsible, human-cantered use of real-time data and machine learning*'.

5.2 Data-driven strategic communication for brand identity building of Capital One

In accordance with the proposed theoretical framework, the case study illustrates how Capital One adopts a data-driven approach to listen to

stakeholders' needs and reflect these inputs in business decisions for the definition of the internal (mission and vision, culture, competencies) and external (value proposition, relationships, positioning) components of brand identity (see Figure 2).

Francesca Conte
Paolo Piciocchi
Alfonso Siano
Alessandra Bertolini
Data-driven strategic communication for brand identity building: the case study of Capital One

Fig. 2: Data-driven strategic communication for brand identity building of Capital One
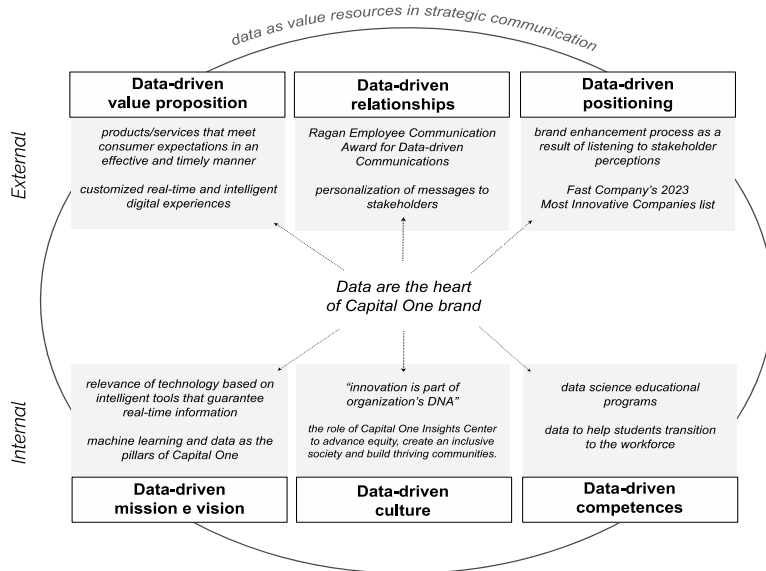
Source: our elaboration

Mission and vision

Capital One's mission and vision display a bank holding company that has grown and gained a deep understanding of the technology-driven business dynamics in its industry. The mission of Capital One is to *'change banking for good'*. This statement conveys the company's commitment to redefining how the financial industry works through customer-centric and innovative solutions. Capital One strives to enable a better banking experience by using technology, ensuring accessibility to financial services and delivering personalised customer service.

The mission underlines the pivotal role of technology that uses intelligent tools that guarantee real-time information: *'Thirty-five years ago, we were founded on the belief that the banking industry would be revolutionised by information and technology, beginning with credit cards. We believe that innovation is powered by perspective. Across the company, we're building customer experiences that are real-time and intelligent'*.

Since Capital One was founded, data have been at the heart of its business and communication dynamics. The company believes in the power of data to drive insights from stakeholder listening and to empower people to deliver real-time solutions to millions of customers, making banking simple and accessible.

Capital One's vision statement is *'we dare to dream, disrupt and deliver a better way'*. By daring to dream, Capital One illustrates how it embraces innovations and transformations. The company's goal is to build a leading American information technology company. To achieve this, the company relies on machine learning and data, which are two important pillars of the company's long-term strategy. The decisions that Capital One makes using machine learning have a large impact on customers and the community.

Culture

Innovation is part of Capital One's DNA. The company has undergone a decade-long technology transformation that has laid the foundation for innovations that benefit its customers. The company uses real-time data at scale, artificial intelligence and machine learning to build products, services and experiences.

A true digital transformation requires changing the culture of an organisation to uphold the adoption of new organisational structures or operational processes. During its 10-year data journey, Capital One found a change in the way viewed and used data across the organisation was a necessity. A significant cultural shift was in treating data as resources to orientate corporate culture.

Capital One's values include collaboration, innovation, excellence, integrity, inclusion and respect. The organisation aims to help customers succeed by bringing humanity and simplicity into their everyday banking experiences. Andy Navarrete, the executive vice president, head of external affairs at Capital One, said: *'Capital One is a mission-led company that was founded on the belief that no one should be locked out of the financial system'*. For the company, data are powerful tools for social change and are critically important for understanding complex problems, creating tailored solutions and fostering a world in which more people can achieve financial wellbeing. For this reason, the Capital One Insights Center was developed to produce, through data collection, insights that advance equity and create an inclusive society. The centre draws on deep analytical expertise to serve as a platform for data and dialogue, convening thought leaders and change makers to address gaps in opportunity.

Diversity and inclusion are values also shared in the Capital One workplace. The company is deeply committed to growing the diversity of its talent and building a culture of belonging in which everyone can thrive. Capital One strives to use its expertise and resources to build stronger, more inclusive teams.

The company also uses data to build better communities by investing in efforts to promote socioeconomic mobility and combat racial discrimination. The Capital One Insights Center builds on impact initiative to support growth in underserved communities. Shena Ashley, the company president, said: *'leveraging Capital One's analytical expertise, we aim to equip changemakers with real-time data, insights and solutions-oriented research essential for creating a more inclusive, thriving society'*.

Competencies

Among the skilled professionals sought by Capital One, in addition to brand managers and brand ambassadors, data analysts and data scientists

play an important role in supporting company decisions. For this reason, the company developed a Tech College, which is an internally created learning platform that helps all associates acquire new technological knowledge. The platform offers courses that provide technical skill development through machine learning and artificial intelligence.

Francesca Conte
Paolo Piciocchi
Alfonso Siano
Alessandra Bertolini
Data-driven strategic communication for brand identity building: the case study of Capital One

Moreover, Capital One aims to create equitable data science education in Virginia. Recognising the lack of data science curricula in Virginia, Capital One provided a $100,000 seed funding grant to CodeVA to develop a new curriculum aimed at helping high school students gain foundational understanding about this topic. This new curriculum is rooted in the practical application and execution of data science concepts to prepare students for college and entry into the workforce. Kurt Engleman, CFO of risk at Capital One and a member of the CodeVA board of directors, said: *'CodeVA is a strong advocate for ensuring equitable computer science education throughout the state of Virginia. Capital One has supported CodeVA's efforts and has been preparing students for careers in the technology industry since its inception 10 years ago. We are excited to see the impact this curriculum will have in training the next generation of data scientists'.*

Capital One also uses data to help students transition into the workforce. Specifically, Capital One supports Harvard's Project on Workforce to create a tool that examines local worker trends and graduate growth. Harvard's Project on Workforce seeks to provide better and more consistent information to jobseekers, employers, educational institutions, governments and policymakers for identifying career pathways that do not just lead to a good first job.

Value proposition

Capital One's value proposition focuses on offering a diverse range of financial products and services suitable for various customer segments. For more than 100 million customers, the company offers credit cards, checking and savings accounts, loans and investment products. In addition, the brand provides its clients with software solutions, application programming interfaces and open-source projects that can enhance their businesses. From cloud and data management to machine learning and analytics, Capital One builds and makes available to everyone an array of in-house technology platforms, tools and solutions.

Capital One places technology and data at the centre of its value proposition and business strategy and can be viewed as the expression of a data-driven business model. With the help of real-time data, artificial intelligence and machine learning, the brand builds products, services and experiences that can positively affect millions of lives.

Through extensive technological expertise and by using insights derived from data-driven strategic listening, the brand offers its customers 'products that are easy to build and easy to enjoy' and customised real-time and intelligent digital experiences. Competitive rates and flexible terms and conditions are provided, along with robust security and support measures tailored to the needs of individual customers.

Moreover, Capital One uses data to create business value not only in terms of product and service innovation and improved customer

experiences but also for symbolic value creation related to innovation and for enhanced brand performance. As stated in the brand's 'Annual Report 2022', the company's long-term economic and financial success depends, in large part, on its ability to assess customers' needs by using digital technology to provide products and services that meet their expectations in an effective and timely manner.

Relationships

A significant part of Capital One's success can be attributed to its extensive and strong stakeholder relationships, which it maintains and nurtures through data-driven communication.

Capital One invests in data-driven communication at various levels of the organisation by promoting an ongoing dialogue and feedback loop system. The brand uses this system to understand its stakeholders' needs and to incorporate their ideas into strategic decision-making processes in accordance with the data collected from internal and external stakeholder relationships.

Communication with employees of companies is primarily driven by data. The brand was awarded the 'Ragan Employee Communication Award for Data-driven Communications' for its financial services onboarding email campaign in 2023. The award recognises the most notable internal communications campaigns and initiatives. Through monthly monitoring of the email campaign, the Capital One team was able to define progressive improvements to content, timing and other key features. Capital One's campaign used technology to test and deliver key messages to new employees. In August 2022, the campaign's eight emails received an average open rate of 87%, beating the industry average of 70%. In addition, Capital One integrated chatbots into community forums to listen and to answer employee questions about internal tools and processes. Cosette Goldstein and Alison Chi, senior software engineer, said: *'Our bot responds to FAQs in over 150 internal Capital One Slack channels. This gives those asking questions immediate answers and lets the community members who are most likely to respond with the ability to focus on other aspects of their jobs'.*

Insights generated by data and analytics are used by the brand to build and nurture strong client relationships by providing a better understanding of its client base and responding promptly to its needs and goals.

Capital One declared in its 'Annual Report 2022' that *'it invested in new products, signed new partners and enhanced our digital experiences to deepen customer relationships and to help them succeed'.* Through data-driven marketing and consequent advancement in messaging personalisation, Capital One is *'quickly approaching an ability to target customers based on individual needs and preferences and also speak to them in a way that connects and feels personalised which will continue to be a differentiator for companies who are continuously looking for ways to break through in such a competitive marketplace',* according to Bill TenBusch, director of digital marketing and cross channel analytics at Capital One at Forbes.

Finally, Capital One offers data solutions to address the main problems of its target communities, demonstrating effective community relationship management. For instance, the brand partnered with Feed More, a

Richmond-based food bank that collects, prepares and distributes food to the needy throughout central Virginia. By exploring a large data set (e.g. postcode), the brand identified the areas that suffered the most from food insecurity during the pandemic COVID-19.

Francesca Conte
Paolo Piciocchi
Alfonso Siano
Alessandra Bertolini
Data-driven strategic communication for brand identity building: the case study of Capital One

In addition, the Capital One Foundation is collaborating with the Black Economic Alliance Foundation to create a predictive modelling tool to *'help leaders make data-rich choices about how and where to deploy their resources for maximum effect on combating the racial wealth gap',* according to Samantha Tweedy, CEO of the Black Economic Alliance.

Positioning

The brand is recognised in the market as highly innovative. It was named in Fast Company's 2023 Most Innovative Companies list for two consecutive years in both the business services and travel and hospitality categories for its innovations in these areas. Moreover, the company was classified by Fortune among the top 10 of America's most innovative companies in 2023.

Capital One has worked extensively to develop a strong brand identity over the years, thanks to the insight of its CEO, Rich Fairbank. In 2011, a brand equity study on how consumers viewed the Capital One brand revealed that consumers overwhelmingly associated one attribute with the brand: 'They send me lots of mail' (Horst and Duboff, 2015).

In response to this brand equity research, Capital One redesigned many aspects of its brand, resulting in a higher level of visibility in its target market. To improve its reputational capital, it invested more in brand-building campaigns to emphasise corporate branding in its communication. Thus, Capital One illustrates how it uses data and systematic listening tools to assess how its key stakeholders view its brand to stay relevant and competitive.

6. Discussion and implications

Through the development of a novel theoretical framework, illustrated through the case study of Capital One, the study provides an integration perspective aimed at enhancing data-driven strategic communication in brand management.

The study proposes a first review of brand identity building in the context of digital transformation. A rereading of Urde's matrix, in light of studies on the data-driven approach in strategic communication, highlights the role of big data on brand identity building.

Therefore, this study provides several theoretical contributions. First, it seeks to integrate data-driven and brand-building perspectives through the lens of the RBV, which helps to explain the importance of data use in the context of a brand of a data-driven organisation. In line with emerging research adopting the RBV in big data analytics, this study highlights the strategic value of data (Grover *et al.*, 2018). Based on the RBV perspective, the proposed theoretical framework recognises that big data are valuable, rare, inimitable, embedded in organisations and non-substitutable strategic

resources, which facilitate performance excellence (Zhang *et al.*, 2020). The study supports others that have emphasised how knowledge generated from big data can emerge as a key differentiator among competing firms (Dahiya *et al.*, 2022).

Second, it enriches the limited studies that have delved into the role of data in strategic communication decisions and activities (Wiesenberg *et al.*, 2017). The study highlights how data-driven logic has a positive impact on organised listening and reflective communication activities. It supports the idea that data represent resources of strategic value that are able to improve strategic communication. Indeed, data provide adequate information support to orientate corporate visions and cultures and to enable the adoption of business strategies in line with stakeholder expectations (van Ruler and Verčič, 2005).

Third, the work contributes to providing new insights into the use of data in strategic communication for brand identity building in the digital environment (da Silveira *et al.*, 2013). The literature remains very silent regarding the impact of the data-driven approach on building brand identity. Specifically, the framework points out the role of data-driven strategic communication in rethinking the definition of the external and internal components of brand identity, in accordance with Urde's CBIM. It aims to actualise the traditional models of brand identity building considering the opportunities that data and digital offer (Olsen, 2018). Thus, in line with studies that have reconceptualised brand identity as a new dynamic and participatory construct, this study considers the new perspectives of brand co-creation (Michel, 2017). Such processes are pivotal for the construction of an organic brand, which integrates input (ideas, suggestions, needs) from stakeholders into brand building (Aimé *et al.*, 2022).

In terms of managerial implications, the study could offer a valuable tool to orientate top management decisions and strengthen the strategic role of communication or brand managers in brand identity building in the digital context. Capital One's best practices highlight how data-driven strategic communication could contribute to brand identity building, enabling superior corporate performance. The proposed framework and the best practices of Capital One could increase awareness among brand and communication managers of organisations at national and international levels of the power of big data as strategic resources. Specifically, the insights offered could be particularly useful for communication managers of Italian organisations who, although aware of the value of a data-driven approach, do not yet systematically use big data for strategic communication activities (Conte *et al.*, 2022).

Thanks to strategic listening based on a data-driven approach, managers could develop new value propositions to encourage innovative business models and strengthen brands' competitive positioning (Sorescu, 2017).

By integrating big data into the organisational context, brand managers could lay the foundations of a data-driven culture that may help top management make forward-looking decisions that improve companies' competitiveness (Gupta *et al.*, 2018). The data-driven culture may allow

the brand to provide its stakeholders with personalised services and experiences, achieving higher levels of loyalty and developing effective long-term relationships (Iglesias and Saleem, 2015). Given that scholars have stressed the importance of 'brand as a relationship' (Aaker, 1997), the data-driven approach and the personalisation that it enables has, in fact, a positive impact on the construction of brand-stakeholders relationships and, consequently, the effectiveness of corporate communication.

Francesca Conte
Paolo Piciocchi
Alfonso Siano
Alessandra Bertolini
Data-driven strategic communication for brand identity building: the case study of Capital One

Specifically, by analysing all user interactions with the brand, a company could draw data in real time on customer behaviour for establishing personalised multichannel campaigns (Cheung *et al.*, 2003). In fact, many scholars have argued that big data support the microtargeting of customers and the co-creation of products and information, positively contributing to customer communication (Banasiewicz, 2013; Erevelles *et al.*, 2016).

The introduction of the data-driven strategic communication approach in brand identity building requires new skills in the data science domain (Wedel and Kannan, 2016). To facilitate the integration of data into brand processes, data sharing within an organisation and the formation of collaborative teams becomes necessary (Chen *et al.*, 2012; Horst and Duboff, 2015). Thus, top management and brand and communication managers need to be supported by data scientists and data analysts in brand identity building to rejuvenate brand management processes by integrating industry 4.0 tools (Yen and Valia, 2013; Taylor, 2017).

Finally, the inclusion of data in sets of strategic corporate resources and the synergistic co-existence of various managerial skills could allow companies to achieve potential advantages and, thus, superior performance (Chadwick *et al.*, 2015).

7. Limitations and future research

This study has the limitations of a conceptual paper, which is built on a literature review and a single illustrative case study based on secondary data. Although the single case delves into some aspects, it is not exhaustive to fully explore the research topic of the present study (Schiavone *et al.*, 2022). In addition, the secondary data are informative for the purpose of this study, but the analysis of them is subject to the limitations of a deductive approach (Bowen, 2009).

Despite these limitations, the proposed work is an attempt to stimulate academic and managerial interests in data-driven strategic communication for brand identity building by providing insights that can be used as a starting point for further research.

There are several possible directions for future research. First, future studies could explore the proposed theoretical framework in other empirical contexts. Research developments may focus on expanding the organisations involved as case studies and expanding the types of business activities examined. For example, recent studies have highlighted the impact of big data in the healthcare sector (Aceto *et al.*, 2020). Second, future research could integrate a qualitative-quantitative methodological approach by means of web surveys and in-depth interviews with top

management and brand or communication managers to gain a better understanding of the role of data in strategic communication.

Finally, using the inputs proposed in Urde's matrix reinterpretation, future research could focus on innovative brand identity models that are able to valorise the industry 4.0 toolkit. In developing such models, however, brand managers need to address crucial issues. Building brand identity models supported by data and industry 4.0 technologies requires considering the risks associated with data quality and interpretability and the tools and procedures available to mitigate these risks.

Future research may lead to the rejuvenation of brand-building strategies and the promotion of better synergy between competencies in a company, as well as the raising of awareness regarding the importance of big data in organisations' top management.

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Francesca Conte
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Data-driven strategic
communication for brand
identity building: the case
study of Capital One

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