

Power negotiation on the tango dancefloor: The adoption of AI in B2B marketing

Brendan James Keegan^a, Ana Isabel Canhoto^b, Dorothy Ai-wan Yen^{b,*}

^a School of Business, Maynooth University, Maynooth, Co. Kildare, Ireland

^b Brunel Business School, Brunel University London, Uxbridge, Middlesex UB8 3PH, United Kingdom

ARTICLE INFO

Keywords:

Artificial intelligence
Third-party suppliers
Power
Service network
Power dependence
Network dynamics

ABSTRACT

Acknowledging the lack of empirical research on the adoption of AI in B2B marketing and the research gap in studying power from a network perspective, this paper explores how the drivers of AI adoption as marketing solutions affect network actors' power dynamics. Using data collected through 20 semi-structured interviews with business managers and engineers involved in AI adoption for B2B marketing activities, as well as academic experts in the field of AI, this paper discusses how AI adoption priorities and motives shape the power dynamics amongst the various network actors, including focal firms, AI suppliers and tech giant companies. The findings show that, in the context of AI adoption in B2B, both technology and expertise are key sources of power, and that data creates and perpetuates power negotiations and renegotiations in the network. We envisage this process as the movements on a busy dancefloor where groups of actors are engaged in what we refer to as the Power Tango. This paper contributes to the power dependence theory by showing that, through the adoption process, network actors' power is exchanged, exercised, counter-balanced and perpetuated, creating fluid network dynamics.

1. Introduction

The tango is a direct expression of something that poets have often tried to state in words: the belief that a fight may be a celebration. (Jorge Luis Borges).

This article uses the metaphor of a bustling tango dancefloor to represent the power exchanges between focal firms and different types of suppliers when adopting Artificial Intelligence (AI) marketing solutions. AI has advanced many aspects of B2B marketing activities, with scholars predicting that this technology will disrupt marketing theory and practice (Davenport, Guha, Grewal, & Bressgott, 2020; Han et al., 2021). Nevertheless, the adoption of AI does not go without its challenges, as it requires knowledge and expertise to perform to its full potential (Dwivedi et al., 2021; Dwivedi et al., 2021). B2B firms that have not developed the required knowledge or expertise in-house need to rely on AI suppliers to help them deliver better customer service. They also need to increase competitive advantage (Dwivedi, Hughes, et al., 2021; Dwivedi, Ismagilova, et al., 2021; Weigel & Hadwisch, 2018), thereby creating a new power dynamic.

A power dynamic refers to the way actors interact with each other in business relationships and networks (Hingley, 2005). Existing literature

tends to study network dynamics from either the focal firm's perspective or the dyadic perspective between buyers and suppliers (Hadjikhani & LaPlaca, 2013), which cannot explain the power dynamics experienced by actors within the complex AI service network (Henneberg, Gruber, & Naude, 2013). This lack of research regarding network power dynamics highlights a gap in the understanding of power and its implications from the network perspective (Hingley, Lindgreen, & Grant, 2015). To address this research void, this paper explores how the adoption of AI marketing solutions affects the power dynamics between focal firms, AI suppliers (small to medium-sized), AI tech giants (e.g., Google Cloud, Amazon Web Services), and customers within the service network.

Semi-structured interviews were conducted with twenty key informants currently involved in the AI service network. These include business managers and engineers working on AI adoption for B2B marketing activities, as well as academic experts in the field of AI. The findings reveal the actors' different motivations and strategies for power gains. Buyers and suppliers are learning what we refer to as The Power Tango with multiple partners, as each actor vies for leading the dance to their benefit. Power flows between partners from the steps they take, while new moves taken are pivotal to learning the dance, as is the case with B2B marketers who are trying to learn how AI fits with their ability

* Corresponding author.

E-mail addresses: Brendan.Keegan@mu.ie (B.J. Keegan), Ana.Canhoto@brunel.ac.uk (A.I. Canhoto), Dorothy.Yen@brunel.ac.uk (D.A.-w. Yen).

<https://doi.org/10.1016/j.indmarman.2021.11.001>

Received 13 February 2021; Received in revised form 3 November 2021; Accepted 6 November 2021

Available online 14 November 2021

0019-8501/© 2021 The Authors. Published by Elsevier Inc. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

to do their jobs. Over time, the dancefloor becomes increasingly crowded as more and more partners enter the dancefloor to try it out. As with partners in a tango, it is necessary to navigate a series of complex steps which ultimately leads to a powerful performance if both buyers and suppliers coordinate their actions. Nevertheless, the partnership may not last forever. There are multiple dancers sharing the dance floor, and partners may be discarded or swapped for not dancing competently or for overstepping the mark, illustrating its fluidity and multi-dimensionality.

This paper has four theoretical contributions. It contributes to B2B marketing literature by showing how expertise reputation drives AI adoption amongst B2B firms, despite their lack of in-house AI technology and knowledge. It also contributes to the power literature by showing that power gains and losses amongst network actors are negotiated and renegotiated through exchanges of different power sources, and the creation and employment of new ones. By illustrating its fluidity and multi-dimensionality, the paper sheds new light on the understanding of complex network power dynamics. Next, a contribution to the understanding of AI use in marketing is provided by identifying how data is employed by network actors as a power source to negotiate competitive advantages. Finally, this paper contributes to the service networks literature by identifying the role of mutual dependence and power negotiations between the various parties on the composition and evolution of the resulting network.

2. Literature review

2.1. AI in B2B marketing

The role and function of AI in business is of increasing interest amongst marketing scholars (Han et al., 2021), given the prediction that this technology will disrupt marketing theory and practice (Davenport et al., 2020). Firms are attracted to AI by two primary drivers: technological capabilities and cost reduction. However, recent studies point towards the challenges faced by such adoption (De Bruyn, Viswanathan, Beh, Brock, & von Wangenheim, 2020; Huang & Rust, 2020). By considering these two dimensions of AI adoption in B2B marketing, a solid foundation for examining power dynamics in AI-powered marketing solutions can be found. Despite the importance of AI for B2B (Bag, Gupta, Kumar, & Sivarajah, 2021), extant literature has focused on the B2C sector (Liu, 2020) or examined its potential (e.g., Paschen, Kietzmann, & Kietzmann, 2019), rather than the actual experiences of deploying AI applications in B2B.

2.1.1. Drivers of AI adoption

The literature identifies two primary drivers for the adoption of AI that are relevant for the B2B marketing industry. The first is the ability of AI to process very large datasets and to discover new patterns in data, which can be used to generate new insights (Cortez & Johnston, 2017), increase efficiencies (Bag et al., 2021) and support decision making (Borges, Laurindo, Spínola, Gonçalves, & Mattos, 2021; Duan, Edwards, & Dwivedi, 2019). This explains why AI technology helps enhance the efficacy of marketing strategies and, consequently, the firm's performance (Liu, 2020). Examples of the functional superiority of B2B AI applications include advertising purchasing (Gonzalez-Cabañas & Mochón, 2016), targeted advertising delivery (Jabbar, Akhtar, & Dani, 2019), sales force support (Sleep, Dixon, DeCarlo, & Lam, 2020), a selection of international marketing strategies (Katsikeas, Leonidou, & Zeriti, 2019), knowledge creation and knowledge management (Bag et al., 2021), and creativity enhancement (Paschen et al., 2019).

The second driver is the perceived cost savings arising from the adoption of AI solutions. AI technology is deemed cheaper, faster and less prone to mistakes than the humans that it replaces via automation (Davenport et al., 2020). However, even the simplest AI solution may require heavy initial investment and requires processing power, access to various databases and regular updating, all of which are costly

(Canhoto & Clear, 2020). Examples of AI automation of marketing processes include segmentation and profiling research (Dwivedi, Hughes, et al., 2021; Dwivedi, Ismagilova, et al., 2021), lead identification and scoring (De Bruyn et al., 2020), and customer service (Canhoto & Clear, 2020).

Regardless of the driver, it is clear that B2B marketing is increasingly embracing AI, resulting in a significant upheaval of practice. This calls for rigorous investigation and theorisation (Duan et al., 2019; Upadhyay, Upadhyay, & Dwivedi, 2021) of the state of play of AI in the B2B landscape.

2.1.2. Challenges in AI use

While Pettey (2018) defends the idea that the challenges associated with AI are the same as other novel and unproven technologies, Dwivedi, Hughes, et al. (2021); Dwivedi, Ismagilova, et al. (2021) suggest that firms face challenges that are specific to AI technology, and call for empirical research that explores its deployment in marketing. One challenge relates to the technical requirements for AI to perform to its potential (Han et al., 2021). Namely, without access to large and high quality datasets, or the technological infrastructure to process them, firms will not be able to benefit from the AI promise (Dimitrieska, Stankovska, & Efreanova, 2018).

Another challenge is the suitability of AI for certain types of marketing tasks. It is generally agreed that AI is better suited for repetitive tasks than intuitive ones (Huang & Rust, 2020), whereas many marketing problems require the latter type of skills (De Bruyn et al., 2020). It is also possible that customers will resist using AI and opt for human interaction (Longoni, Bonezzi, & Morewedge, 2019).

Yet another challenge is the long-term consequences for the firm itself. Since AI technology usually operates with limited or no human intervention, the definition and careful specification of goals for the AI algorithms assumes critical importance (De Bruyn et al., 2020). However, this could be a challenge in marketing, where objectives may be implicitly understood and difficult to translate into precise quantitative terms (Natter, Reutterer, Mild, & Taudes, 2007). Moreover, the lack of supervision by domain experts, the inability to query the resulting algorithms, or even understand how the AI solution reached a particular result (Burrell, 2016) generates a paradox. This means outsourcing decisions to AI may "ultimately deplete marketing stakeholders of the knowledge and expertise they need to perform complex tasks" (De Bruyn et al., 2020, p. 101). Moreover, firms may unwittingly engage in biased behaviour (Akter et al., 2021; Lambrecht & Tucker, 2019) and damage the firm's reputation (Canhoto & Clear, 2020).

In summary, although AI can potentially benefit B2B firms, whether they can tap into the promises of AI very much depends on their capability to access key technological and knowledge resources, such as data, task-fit models or their capability to query algorithms. Firms may struggle to develop these digital assets internally and may have to outsource them, becoming dependent on their service suppliers (Quinn, Dibb, Simkin, Canhoto, & Analogbei, 2016), which highlights the need to study the whole ecosystem surrounding the implementation of AI solutions (Dwivedi, Hughes, et al., 2021; Dwivedi, Ismagilova, et al., 2021; Han et al., 2021).

2.2. Service networks

Service networks are inter-organisational structures whereby an organisation (the focal firm) contracts another (the supplier) to deliver part of its value proposition to the customer (Wynstra, Spring, & Schoenherr, 2015). The explosion of big data created not only opportunities, but also demand for increased personalisation and deeper customer relationships (Rust & Huang, 2014). This resulted in the creation of complex service networks (Ostrom et al., 2010), driving many B2B firms to employ AI suppliers to produce complete solutions that are valued by customers, and for which they lack in-house capability (Weigel & Hadwich, 2018). Service networks are distinct from

directional supply chain networks, because the multitude of connections between several actors, and their interdependence, present specific challenges for service design and delivery (Wynstra et al., 2015). Theoretical perspectives of service networks offer our study a lens for examining the fluctuation of power between buyers and suppliers of AI solutions in B2B marketing.

2.2.1. Network composition and structure

In a service network, focal firms typically act as a bridge between the customers' needs and the suppliers' specialised services (Li & Choi, 2009). Triadic cooperation between suppliers, focal firms and customers improves value to the customer, but requires alignment between the interests and capabilities of the focal firm and the supplier (Finne & Holmström, 2012).

A challenge faced by firms is monitoring the quality of the service delivered by the supplier (Wynstra et al., 2015). Tensions may emerge because the parties have different and, at times, conflicting goals (Meyers, Riccucci, & Lurie, 2001). These tensions could result in one network member taking advantage of its position (Sampson & Spring, 2012), and may even lead to market failure (Brown & Potoski, 2004). Another challenge is the choice of supplier. Focal firms need to choose between a firm that provides generic services, and one that provides customised solutions. The former may reduce risk and create opportunities for cost savings (Wynstra et al., 2015), however, the latter may deliver superior customer satisfaction (Morgan, Deeter-Schmelz, & Moberg, 2007). Research is limited regarding the impact of supplier service failures on other service network actors (Henneberg et al., 2013).

Choi and Wu (2009) note that network actors often exist within a broad ecosystem where they interact with each other beyond specific service triads. Actors may perform different roles in the overall network, such as being a supplier in relation to one actor, but a customer to another (Bastil, Johnson, & Choi, 2013). This means that it is important to look beyond static network roles and to consider the impact of fluctuating roles on network relationships. In the context of our study, the adoption of AI technology by B2B marketing offers a tumultuous dancefloor whereby multiple actors are jostling for power. Hence the composition and evolution of the B2B AI network are worthy of examination.

2.2.2. Relationships in the network

Studies on service network relationships fall into two camps. The first focuses on stable networks, with high commitment and trust between the various parties engaged in frequent exchanges. Such relationships develop gradually, through continual cooperation and adaptation (Hadjikhani, Lindh, & Thilenius, 2012), with no major conflict between the actors (Hadjikhani & LaPlaca, 2013). In contrast, the second camp (e.g., Grewal, Johnson, & Sarker, 2007) focuses on troublesome networks, where interruptions have been experienced as a result of crisis, changes in market conditions, conflicting goals, or rapid changes in technology (Nijssen, Van Reekum, & Hulshoff, 2001).

These streams of work do not always reflect the business reality faced by many organisations (Lundin & Steinhórnsson, 2003), which may vary during the life cycle of the service network (Eisingerich & Bell, 2008). Companies need to continuously adapt, revisiting their strategic alliances and reevaluating their network positioning in order to develop new capabilities (Spring & Araujo, 2014), gain better access to the resources that allow them to innovate, and to adapt to the changing business environment (Ostrom et al., 2010). Therefore, Hadjikhani et al. (2012) call for research to understand the network dynamics within a service network and how they are shaped dynamically. It is clear that a complex technological relationship exists between buyers and suppliers of AI B2B marketing services. This tends to be short-lived due to the fractious and evolving technology, and this offers a unique area for investigation for the present study.

2.3. Power dependence theory

Power is often discussed as the dichotomy of dependence (Hingley, 2005); however, power and dependence are not mutually exclusive (Molm, 2007). Emerson (1962) explains that power and dependence co-exist in relationships amongst actors. Namely, A's dependence on B increases if B controls resources that are of value to A, while A's dependence on B decreases if A manages to obtain those valuable resources from sources other than B. Whether exercised or not, when one party holds resources that are valued by the other, that party is considered as having power (Emerson, 1962). Dwyer, Schurr, and Oh (1987) explain that when dyadic business relationships are being initiated, developed and maintained, both parties are likely to become more dependent upon each other, thus creating an interdependence between the business partners. Similarly, when a network is being formed and developed over time through exchanging resources, coordinating activities, interactions and communications, the network actors' mutual dependence upon each other creates the structural basis for their relative power (Molm, 2007).

In B2B marketing literature, power is often regarded as a negative construct in business relationships, due to its association with the dark side of business in the form of coercion and punitive consequence (Abosag, Yen, & Barnes, 2016). Nevertheless, more recent studies have embraced power as one of the central concepts in business networks, regarding it as always present when value is being exchanged, even if its presence is not observable or manifested (Hingley, 2005).

2.3.1. Power sources

Extant literature suggests five distinct but not mutually exclusive sources of power (Table 1). These sources manifest an actor's competitive advantages and positioning, reflecting the type of resources that are regarded as valuable and, therefore, can be exchanged with other network actors (Siemieniako & Mitrega, 2018; Yen, Yang, & Cappellini, 2012). Legitimacy, reward, referent, expert and information are soft powers that could be exercised in a non-coercive way to help achieve the desired outcomes without detriment to the business relationship (Siemieniako & Mitrega, 2018; Yen et al., 2012). In contrast, exercising coercive power, including promise, threat and legalistic pleas (Leonidou, Talias, & Leonidou, 2008), can lead to conflict and dissatisfaction in relationships and may reduce relationship longevity (Abosag et al., 2016). These sources of power are often exercised in an attempt to counter-balance the power asymmetry between dyadic business partners (Siemieniako & Mitrega, 2018).

2.3.2. Power dynamics

Power dynamics refers to the way business actors interact with each other, whether power is exercised or not (Hingley, 2005). In business

Table 1
Power sources and their indicators.

Power source	Indicator examples
Economic power	Market share; company size; relative importance to other network members (e.g. % of sales or supply); high switching cost; limited substitution/alternatives; cost leadership in production.
Technology power	Product and process innovation; high quality maintenance; flexibility; reliable logistics management; spare parts availability; high customisation ability; unique product characteristics.
Expertise power	Capabilities in R&D; applications engineering; pre- and post-sales service; marketing information and know-how; knowledge and intelligence; excellent customer and end-user relationships; superior customer services; exclusive knowledge about the general market structure; competition and network dynamics.
Trust power	Credibility; benevolence; confidence; strong past performance; customer satisfaction, respectful reputation; industry ranking, strong personal relationship ties (guanxi).
Legitimacy power	Long-term contracts; part ownership of another network member; interlocking directorates; joint-venture arrangements; patent rights or other legally defined privileges conferred by governments or institutions.

relationships, power asymmetries naturally exist, whereby one party holds resources that are valued or in demand by another (Siemieniako & Mitrega, 2018); however, this asymmetry is not absolute and firms can countervail power through other sources. For example, they can engage in product development, proprietary technology, process innovation or capability-boosting practices, enhancing their technology and expertise (Siemieniako & Mitrega, 2018). In addition, firms can reduce their dependence on others by identifying and collaborating with alternative parties, expanding the power negotiation beyond the dyadic business relationships (Yen et al., 2012). This move from relationship asymmetry to symmetry, through activating different power sources, resembles the tango dance moves used to negotiate position and space on the dancefloor.

Existing power dependence literature tends to discuss power dynamic from a static, cross-sectional perspective, with empirical evidence collected from either the suppliers or the customers in dyadic business relationships (Munksgaard, Johnsen, & Patterson, 2015; Siemieniako & Mitrega, 2018). However, service networks present a temporary structure, where relationships between different actors are continuously being initiated, negotiated, facilitated and redeveloped, concurrently and over time (Hadjikhani et al., 2012). This fluidity creates a boundaryless environment, where a network actor's position is never static. Therefore, research attention is needed to understand and unpick the complexity of power dynamics within complex and fluid network structures (Hingley et al., 2015). This relates to this paper's research question on how power and dependence are negotiated and renegotiated by network actors within the broad ecosystem, through the observation of the adoption process of AI as a new technology.

3. Method

This study adopted an interpretive approach, whereby organisations are deemed socially constructed artefacts, with research participants invited to articulate their actions and intentions (Gioia, Corley, & Hamilton, 2012). As such, the goal of data collection and analysis was to capture the research participants' experiences of AI adoption in B2B marketing from a network perspective. Semi-structured interviews provided in-depth insight about actual experiences, which was missing from the extant literature (Liu, 2020).

3.1. Data collection

Echoing previous AI adoption research (e.g., Bag et al., 2021), this study's sampling approach focused on key informants who could provide a broad range of perspectives on AI adoption in B2B marketing (Table 2). Participants were recruited from B2B firms deploying AI solutions, from firms selling such solutions, and scholars who were actively engaging with industry partners as experts and advisors on matters of AI in B2B (Dwivedi, Hughes, et al., 2021; Dwivedi, Ismagilova, et al., 2021). Suppliers were recruited on the basis of specialising in marketing solutions (e.g., for customer profiling purposes) who are contracted to develop complex algorithms hosted on large-scale platforms such as Google Cloud and Amazon Web Services.

We conducted semi-structured interviews to obtain both retrospective and contemporary accounts of the phenomena of interest, as per Gioia et al. (2012). In line with the themes identified in the literature review section, the interview protocol included questions about the motivations to adopt AI B2B marketing solutions, experiences of deploying and using those solutions, the impact of AI adoption on network relationships, and future development (Table 3). Given that the rate of and approach to AI adoption varies by country (Dwivedi, Hughes, et al., 2021; Dwivedi, Ismagilova, et al., 2021), the focus was on the UK (North of England). A purposive sampling approach was used, focusing on firms operating in a B2B role for over five years where there was evidence of AI adoption.

Invitations to contribute to the study were issued via a digital trade

Table 2
Characteristics of interview participants.

Participant	Participant Group	Years of Experience with AI	Sector and Role Descriptor
01	Focal firm	15	Financial Services Accounting – Head of Cloud Engineering
02	Focal firm	10	Telecommunications – Director of Customer Analytics and Insights
03	Focal firm	15	Information Communications Technology – Information Architect
04	Focal firm	10	Telecommunications – Director of Research
05	Focal firm	15	Healthcare – Research and Development Director
06	Focal firm	10	eCommerce Retail – Head of Marketing
07	Focal firm	15	Pharmaceutical – Research and Development Project Manager
08	Focal Firm	8	Financial Services Corporate Finance – Head of Technological Procurement
09	AI supplier	5	AI Marketing Solutions Provider – Development of algorithmic customer Various Industries
10	AI supplier	4	AI Marketing Solutions Provider – Utilisation of AI for practical application in Healthcare
11	AI supplier	4	AI Marketing Solutions Provider – Offering bespoke customer segmentation
12	AI supplier	8	AI Marketing Solutions Provider – Developing AI-derived customer insights in Retail
13	AI supplier	3	AI Marketing Solutions Provider – Providing AI innovations on eCommerce platforms
14	Researcher	25	Academic – Researching the role and development of AI in Computer Science
15	Researcher	10	Academic – Researching the role of AI in Marketing Analytics
16	Researcher	8	Academic – Researching the role and development of AI in Computer Science
17	Researcher	10	Academic – Researching the role of AI in Retail Marketing
18	Researcher	15	Academic and Industry Policy Development – Researching AI in Business Strategy
19	Researcher	5	Academic – Researching the role of AI in Marketing
20	Researcher	8	Academic – Researching the role of AI in Marketing

association newsletter which generated eight participants, who, in turn, recruited additional participants. Academic researchers with a track record of researching the impact of AI in B2B marketing were also contacted, as they are knowledge leaders and policy influencers in terms of AI in the B2B marketing domain. As active researchers in this field, their knowledge was commensurate in allowing us to understand the role of power when AI is used in B2B marketing.

The interviews were conducted by one member of the research team via video conferencing software. These were recorded and later transcribed. The transcripts were anonymised to protect the privacy of the research participants and the strategic interests of the organisations they represented. On average, each interview lasted around 45 min, leading to over 200,000 transcribed words.

3.2. Data analysis

The transcripts were analysed following Krippendorff's (2004) systematic approach to thematic analysis. Following an initial classification

Table 3
Interview protocol.

Warm up	<p>Tell me about your current role? How many years industry experience do you have? - Probe for past examples of managing service networks How many years have you worked at your current organisation? - Probe for level of decision-making What is your understanding of AI and machine learning? - Probe for motivations and anticipated outcomes from adoption of AI</p>
AI adoption	<p>How does (your) organisation use AI? What benefits has (your) organisation realised from AI? - Probe for range of power sources and how they increase others dependence (economic, tech, expertise, etc.) What challenges have you encountered using AI? - Probe for examples of clashes with suppliers and resolutions How has AI changed the organisational structure (roles, reporting), processes, and culture? - Probe for examples of strategic changes to culture as a result of automation of processes - Probe for positive and negative outcomes in terms of power control</p>
Network dynamics	<p>What is your opinion of AI solutions from third party suppliers? - Probe for reliance and dependencies and how their solutions strengthen their competitive positioning in the market. - Probe for power balances in network relationships</p>
Development over time	<p>How has AI changed the way the organisation operates compared to 5/10 years ago? - Probe for examples of prior instances of control over marketing processes How do you see AI playing a role in your organisation in the next 5/10 years? - Probe for anticipated issues due to AI-automation of marketing processes</p>

of the transcripts by participant type (Table 2), two researchers separately coded the transcripts into a) motivations and priorities in AI adoption, b) experiences of AI use, and c) outcomes for the organisations involved. Subsequently, these researchers interrogated the data to identify emerging themes. A third researcher then sampled the combined coding to check consistency and saturation of pattern matching, and to ensure internal validity (Fereday & Muir-Cochrane, 2008).

Following this stage, the researchers went through various hermeneutical cycles of analysis, writing memos on the phenomena observed, noting repetitions in the data, and identifying potential relationships between patterns of use and subsequent power states. This process led to second order themes and higher level aggregations (Fig. 1). At this stage, the notions of power began to manifest in terms of its importance. The initial coding was revisited and the themes were revised accordingly to examine power exchanges, fluctuations and losses, amongst the findings. These themes indicated a complex interface which led to the development of the Power Tango motif (Fig. 1).

4. Findings and discussion

This section elaborates on the role of power fluctuations and exchanges by beginning with the motivations for firms to use AI within B2B marketing, before analysing how these drivers shape their interactions and deliver solutions. Power trade-offs that the actors make in pursuing their goals are identified, with some becoming dependent on others and, at times, fighting to regain some of the power previously relinquished. The analysis leads to the generation of the Power Tango embodying the fluidity of power dependencies in the delivery of AI B2B marketing solutions (Table 4).

4.1. Entering the dancefloor

4.1.1. Focal firms motivations for power

Consistent with the existing literature (e.g., Davenport et al., 2020),

our interviewees reported that focal firms adopt AI solutions that automate marketing processes with a view to standardising processes, improving efficiencies, and reducing staff costs: “We hope to automate everything, switch on the AI marketing machine and, then we won’t need any marketers” (P10). The belief in the potential of AI for generating substantial cost savings is hardly surprising given AI suppliers’ claims, such as this one: “The largest kind of sums of money being saved through use of AI is around 70-80 million a year in cost reductions” (P02). Some focal firms were also keen to tap into AI’s ability to generate novel insights. However, while the literature identifies a broad range of potential applications (e.g., Bag et al., 2021), the interviewees reported a narrow range of actual uses. Focal firms mostly used AI for creativity enhancement (e.g., new product development) and for targeted interactions (e.g., personalised recommendations at different stages of the customer journey), as illustrated by this quote:

If you see somebody interacting on our manufacturer page, this means there’s a higher propensity to buy. Understanding those sorts of nuggets of information, and how they could potentially benefit us as a business is very useful. Especially working with the digital product development team, helping to prioritise a roadmap and areas for future development. And, then, getting the right marketing touchpoints, as well, to be able to get the right message across at the right time. (P06).

AI is regarded as an innovative technology power source (Hingley, 2005) by focal firms because it enables the required insights to strengthen their marketing offering and costs savings. In addition, the findings reveal a motivating factor not mentioned in the literature: perception management. Namely, a firm that is not using AI may be deemed by its customers and competitors to be lacking in innovation:

AI is a marketing opportunity for positioning that allows a brand to be perceived to be at the forefront of technology and development. That’s not always the same as (actual innovation). I think there are quite a lot of brands who are professing to have AI in their solutions, to position themselves in the marketplace. (P08).

The findings show that focal firms have a strong desire to enhance their competitive stance by adopting AI solutions simply for the sake of it, even applying AI solutions to business scenarios where there is no problem to solve. This is because AI resembles the power of expertise (Yen et al., 2012), and having such expertise enhances focal firms’ capability offering and strengthens their competitive position. Being able to employ AI qualifies the focal firms as serious and competent dancers, who are ready to engage in an intimate tango with customers, utilising the fancy AI moves they have acquired. One participant surmised this driver through the guise of Elvis Presley’s popular song (Mercer, 1972), suggesting that when it comes to AI adoption: “Fools rush in [where wise men fear to tread]”.

4.1.2. AI suppliers quest for power

As with previous waves of marketing digitalisation (Quinn et al., 2016), the popularisation of AI has seen the arrival of a multitude of suppliers, partly driven by the promise of big financial gains. The drive to remain commercially viable may limit their ability to produce truly great innovations in AI, resulting in many AI solution suppliers producing generic innovations in a cluttered marketplace:

AI is quite an attractive target for investment, meaning that there are too many players in the market and not enough genuine innovation. Everybody’s desperate to come up with the algorithm itself, as the algorithm is the value. It’s attractive, as it’s a very low overhead business model really. (P06).

Because algorithms represent expertise, and expertise brings power (Yen et al., 2012), AI suppliers go to great lengths to keep their algorithms secret, to develop technological power through competitive

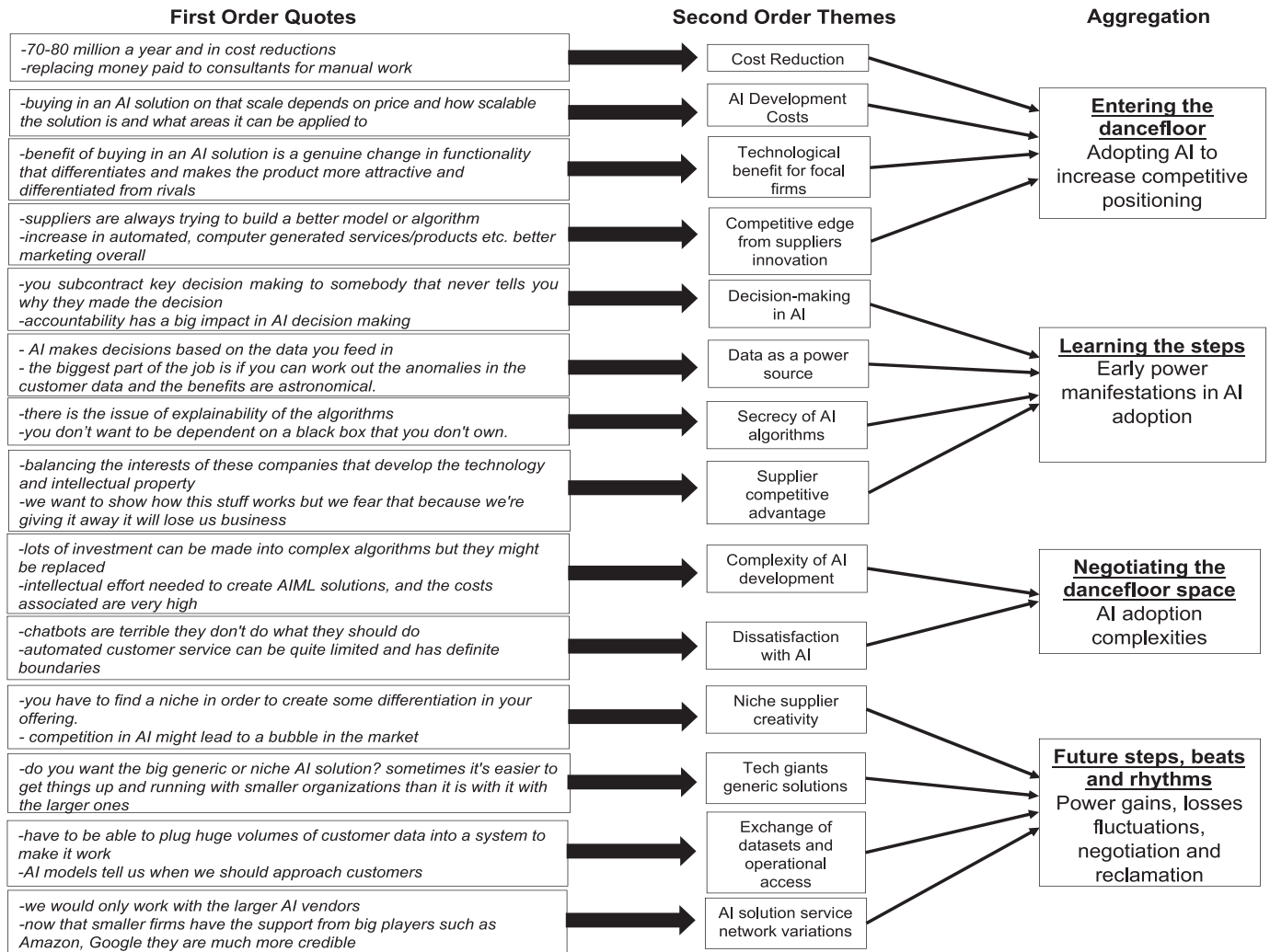


Fig. 1. Data coding structure.

advantage, and to sustain their clients' dependency (Burrell, 2016). That is, by becoming gatekeepers to the algorithm, suppliers also limit others' access to the technology and associated expertise, even if opening up the algorithm via open source might improve its functionality. The emphasis on algorithm secrecy thus creates a possible conflict of interest, for instance:

People are not opening up the algorithm for public scrutiny. They hide it for a very simple purpose, because it's a business advantage. It makes them money. Then, there is potentially a conflict of interest. When there's someone who controls an algorithm, making money off of it is their primary function. It is not serving the client, or the customer, or making our lives easier. (P17).

Aware of this dichotomy, one supplier stated that they published their algorithms as a way of fostering further innovation and creating trust with its clients:

We are very much nerds that want to be known for technology and we want to attract more nerds (clients). We publish our code so that it is all out there for anyone to look at. We want to show how all this stuff works, and make it more accessible. We don't fear that because we're giving it away that it will lose us business. We think we will gain a reputation that we're good at what we do, and other people [clients] will want to come to us. (P09).

As captured by the quote above, by sharing and making their algorithms public, this AI supplier negotiates its competitive positioning through the creation of more trustful relationships with their customers and other network actors. Thus, trust is being used as an alternative power source (Yen et al., 2012) to compensate for sharing their algorithms. However, the level of innovation and the extent to which both focal firms and suppliers tap into AI's technical capabilities in order to identify new opportunities are, for the time being, well below this technology's potential. By leading and making their algorithms public, some AI suppliers attempt to demonstrate their competency and significance as willing dancers, who are regarded as more trustworthy than the others who kept their fancy dance moves to themselves.

4.2. Learning the steps

4.2.1. The promise of the dance

Developing AI solutions is a complex and expensive venture, requiring sophisticated technical skills and extensive trial and error (De Bruyn et al., 2020). The findings reveal that focal firms venturing into this space quickly realise that there are multiple and significant costs to developing an AI solution (as per Canhoto & Clear, 2020). The costs reported by our interviewees include hardware, training datasets and models, as well as recruiting data scientists and engineers. It may also be the case that, as with previous waves of marketing digitalisation (Quinn et al., 2016), firms are unable to recruit AI experts. In the short term, it

Table 4
The power tango.

	Focal Firm (FF)	Small Supplier	Tech giants	Customer
<i>Entering the dancefloor</i>	<ul style="list-style-type: none"> + Quest for competitive advantages through use of AI tech. + Benefiting from tech giant power requires expertise power (which FF doesn't have) 	<ul style="list-style-type: none"> + Has expertise power necessary to explore AI's tech power. - Lacks trust power of tech giant; and tech/expertise of big supplier 	<ul style="list-style-type: none"> + Has expertise power necessary to tap into promise of econ power via exploring AI's tech power + Size of brand delivers trust power vis a vis FF; and tech/expertise to small suppliers 	<ul style="list-style-type: none"> + Customers appreciation for innovation in tech and expertise, increasing their dependence AI-powered marketing - Loss of trust and data concerns in use of AI
<i>Learning the steps</i>	<ul style="list-style-type: none"> + expertise/tech power through contractual agreement. - Privileges trust power of tech giant over expertise power of small supplier - Required to share data for the AI to work efficiently 	<ul style="list-style-type: none"> + Provide niche solutions through tech/expertise gatekeeping - Needs to pay tech giant in exchange for tech/expertise 	<ul style="list-style-type: none"> + Gains legitimacy and econ power from FF. - Econ power given to from supplier small, in exchange for tech/expertise 	<ul style="list-style-type: none"> - Risks for customers not adapting to the new technology affecting trust and legitimacy and expertise of suppliers. - Customers data is exchanged with/without their consent.
<i>negotiating the dancefloor</i>	<ul style="list-style-type: none"> + Starts to see some econ reward - Focal firms are required to cede control of data. Becomes dependent on expertise/tech power from suppliers and tech giants 	<ul style="list-style-type: none"> + Supplier gains control over FF data which is then exchanged to tech giant platform - Risk of poor task fit of tech solution, leading to reduction of econ power. - Suppliers take advantage of FF dependency via renegotiated contract terms (legitimacy) 	<ul style="list-style-type: none"> + Data from FF and suppliers further increases tech/expert power and, thus, its trust power and potential for econ power. + Tech giant gains in terms of econ through market share and tech 	<ul style="list-style-type: none"> + Customers benefit from the use of AI solutions. + Customers may resist contributing their data - Lack of customer data impacts the tech/expertise power of suppliers solutions
<i>Future Steps, Beats and rhythms</i>	<ul style="list-style-type: none"> + Firms develop in-house tech/expertise, capable of retaining data + Firms continue to use AI suppliers and gain power over tech/expertise through curation of network relationships 	<ul style="list-style-type: none"> - Firms lose FF contract, data and ability to provide AI solution + Benefit from developing tech/expertise to attract new FFs + Suppliers benefit from long term contracts establishing their econ/legitimacy 	<ul style="list-style-type: none"> + Tech giant control the platforms where AI solutions are hosted, hence benefit in terms of econ/tech/expertise from both movements. + Gains legitimacy positioning themselves as an AI expertise knowledge-hub, increasing legitimacy. 	<ul style="list-style-type: none"> - Customer data is further protected by ethical protocols which have significant impact on tech/expertise/trust + Customers gain power and control over their data and more generally over the future of the AI solutions industry

may not make sense for focal firms to develop bespoke AI solutions when the marketplace offers alternatives which they can easily purchase or license and plug into their existing IT infrastructure. In other words, focal firms that lack the technical expertise, or who want to deploy something quickly, may opt for a third-party solution, even if it does not address all of their needs:

You could try and build an AI solution backed by IBM Watson. But, it would take you maybe a year to get anything that was even adequate and the cost is enormous. The intellectual effort that goes into it, to curate the algorithms, is incredible. People don't realise just how extensive it is. So, if you buy what's available as a service, you integrate proven components that do part of what you want, and evolve it. But it's also easy to go down a black hole on a major project. When you're buying something as a service, you have to check it very carefully, and see how it works in practice. It's easy to make mistakes. (P11).

Faced with the prospect of escalating costs, and daunted by the technical challenges of developing their own AI solutions, the availability of cheaper and quicker-to-implement solutions from third parties becomes an attractive proposition. However, not being fully equipped with AI technology or expertise as power sources, makes focal firms increasingly dependent on their AI suppliers, which weakens their competitive positioning (Molm, 2007). Some argue that the software as a service (SaaS) route may be the ideal scenario for focal firms:

At enterprise level, I see organisations embracing AI, as it has been encapsulated in the SaaS solution. Bigger enterprises will go off and do their own thing, because they have huge depth with thousands of engineers. I'm never going to go out to a client and say, 'I'm going to hire you twenty machine learning experts', I will go into client and develop a really nice specific solution and 99% of the time, it's going to be a great SaaS solution. (P01).

Nevertheless, other focal firms expressed concern over a supplier's ability to actually add value to their business and to produce the complete solutions that are valued by B2B customers:

There's a risk that AI is being sold as a magic bullet to fix a problem that somebody may not necessarily have. Or they might have a slightly different problem. Or it's targeting a very niche issue. (P06).

Moreover, some participants expressed concern over the practices of some suppliers and the extent to which they were truly delivering the sophisticated AI product that they had advertised:

There are some cowboys out there, saying that they're selling artificial intelligence, when it's actually very simple machine learning. One of them was contacting me via LinkedIn saying we can offer you this, and it's the best thing since sliced bread. It is even better than the product that you currently use. And, after looking at it more closely, it is very basic software. (P08).

A firm's difficulty in monitoring the service quality provided by suppliers is a common problem in service networks (Wynstra et al., 2015). However, this problem is particularly significant in the context of AI because of a lack of expertise, and because of suppliers' emphasis on algorithm secrecy, as previously highlighted. Whilst AI expertise and technology are regarded as the most significant power sources in determining network actors' competitiveness, not being able to employ AI effectively has made some firms resemble vulnerable dancers that others can dominate or take advantage of.

Conversely, smaller and new suppliers attempt to raise the visibility of their technological power to earn the trust – and the business – of focal firms:

It's such a growing industry and it's tough to get noticed. Our business only launched three months ago but we are into the really niche side of AI. Our main competitor has over a hundred employees,

millions of pounds worth of investment with huge clients operating in the retail space. Their solutions are very expensive but provide great outcomes. (P09).

In what is rapidly emerging as a cluttered marketplace, the interviewees distinguished between two types of AI suppliers: tech giants and small players. Tech giants such as Amazon Web Services, Google Cloud and Microsoft Azure offer significant computing capabilities through cloud services and standardised solutions, and smaller players offering customised solutions, as encapsulated in this quote:

Amazon, Microsoft with Azure labs. They are the black box, turnkey thing, which may or may not work for you. There may be a limited opportunity to customise for your business model, build a better model, or to have a better algorithm. The value of their business comes from their algorithm being superior to others. In order to achieve that, they'll tend to focus on a very specific use case, and get as much data on a very specific problem as possible and then try and build the best algorithm possible. (P07).

The different suppliers form their own eco-system and interact with each other in a way that is reminiscent of what [Bastl et al. \(2013\)](#) call three-tier triads. Namely, the niche suppliers use the services of the tech giants, through cloud services, to gain technological power from the latter's significant computing capabilities, and the credibility that may come from using leading AI solutions. This arrangement represents a revenue stream for the big suppliers, and a form of keeping abreast of developments in the industry:

When you have a small AI startup that's aligned with a cloud provider, that absolutely gives them credibility. Especially because the cloud providers themselves are putting in huge efforts to kind of bring those start-ups up to the forefront of what they're offering the market. Maybe because they can see the agility of those smaller start-ups. (P01).

To summarise, underlying the adoption of AI-powered B2B marketing solutions is the promise that AI technology can deliver substantial economic power to focal firms, especially if they tap into the technical expertise and technological power of AI suppliers, via SaaS. Larger suppliers may present less risk than smaller ones, but the generic services of the former may deliver less customer satisfaction than the customised solutions of the latter ([Morgan et al., 2007](#)). Amidst a crowded marketplace, suppliers need to communicate their expertise. Just like a busy tango dance floor, some parties are dancing centre-stage whilst others are waiting to join in. There are experienced dancers who are comfortable dancing with different partners, dominating as well as supporting their moves, creating a growing dependence. There are also less experienced dancers who are happy to hold on to their partners, practising and adjusting their tango moves together to improve their performance.

4.2.2. The reality – Complicated dance steps

Whether caused by supplier hype, or as a by-product of the technical challenges presented by marketing problems ([De Bruyn et al., 2020](#)), there was significant frustration regarding the range and quality of AI solutions on the market. AI products in the area of automated programmatic advertising systems were deemed to be operating efficiently and to be improving. However, solutions for contact centres, primarily for the generation of automated customer service systems (e.g., chatbots), were deemed ineffective and underperforming vis a vis staff. This confirms the prediction that AI may underperform in tasks that required intuitive and emotional skills ([Huang & Rust, 2020](#)), as is the case with customer service. One participant also questioned whether existing solutions are truly taking advantage of AI capabilities, noting that many were quite simplistic and offered little value:

A lot of the time when you strip it away, the AI model is actually really simple machine learning. One of the things I'm trying to avoid is buying ten versions of the same thing to solve ten problems, because you could have the ten different suppliers hoping to put a different label on each solution. (P02).

In addition, there was a growing awareness of the downside of relying on third-party solutions:

When you are trying to get the best model, you forget the risk with a subscription, or SaaS arrangement where you're essentially renting usage of their algorithm. But the next time, the rates double. It's a slightly weird dependency. You've subcontracted some key decision making to somebody that never tells you why or how they made the decision. It's dependency on a black box IP that you don't own, and that somebody else controls. If it stops working, you are not able to go in and fix it. (P05).

A power gain is evident where third-party suppliers may take advantage of a focal firm's dependency and increase prices, thus offsetting the initial savings. Tensions between network members are well documented in the literature ([Sampson & Spring, 2012](#)), which also advises the careful development of contracts and management of information flows ([Li & Choi, 2009](#)), as a means of avoiding market failure. In the case of AI solutions, however, this is difficult because focal firms become dependent on the proprietary and secretive algorithms developed by the AI suppliers. By algorithmic gatekeeping, suppliers retain control of the use of the AI solution, maintaining the firms' dependence and prolonging contracts:

Then you come across the challenge of people understanding technology. That's the challenge with third party providers. They don't explain it because of commercial interest, so you can't question them. (P13).

A common frustration in service networks is that focal firms cannot insulate their clients from supplier-related service failures ([Henneberg et al., 2013](#)). Likewise, when AI is deployed, mistakes start appearing, which could damage the focal firm's reputation ([Canhoto & Clear, 2020](#)). At times, this is simply a failure to optimise resources. However, at other times, it can have serious consequences for firms and customers. An example of the former is failing to detect credit fraud, an example of the latter is damage to human life by self-driving cars:

I've seen a lot of companies built off the back of predictive models that had enormously negative ROI. The model was fine. It was just that intervening with those customers didn't have the effect that people wanted. And the cost of the false positives that were in the model was way higher than the benefit from the ones that were right. (P2).

Finally, by adopting an outsourced solution, focal firms delegated strategic processes to an outside firm. A similar phenomenon was observed by [Merendino et al. \(2018\)](#) who noted that, in outsourcing big data strategy, firms gave away commercially sensitive information to third parties, and relinquished control over key aspects of the business. The transfer of information from focal firms to suppliers is particularly relevant in the case of AI technology, as data are essential for the development and improvement of algorithms ([Batistic & van der Laken, 2019](#)). On the one hand, the third-party supplier's solution is appealing because it was developed and validated by accessing large databases. On the other hand, to use the solution, focal firms need to share their data with the third-party supplier, further strengthening the latter's algorithms and, therefore, its technological superiority over other network actors:

[AI tech giants], they've got lots and lots of data. And they've done all this computing for you. And they've got services available that you can just plug into. So, if you want to do image recognition,

they've got loads of pre-trained models. Then, when you ask the model the question, you've got to send your data outside of your environment to go get the answer. (P09).

At this juncture in the AI-adoption process, disappointment with the performance of some AI solutions seeps in, for focal firms. Moreover, the disadvantages of relying on external AI providers for strategic decision-making comes to the fore. Data assume a new role at this point: datasets that keep on being augmented with focal firms' data become an amplifier of power imbalances in the AI ecosystem, where the experienced and resourceful dancers dominate most of the dance floor.

4.2.3. Future steps, beats and rhythms

Given the prediction that AI will disrupt marketing practice (Davenport et al., 2020), we also asked interviewees to project how they would be using this technology in the next five to ten years. There was a unanimous view that AI would become increasingly ubiquitous in B2B:

AI will become ubiquitous in marketing and in every application that you use. We may not even think of it as AI, but it will be there, and we'll be interacting with it in everything we do. (P08).

With AI embedded into everyday life, the lack of awareness of its presence will play into the hands of both focal firms and suppliers. Participants were optimistic about the benefits of AI in B2B marketing, suggesting that the future will be streamlined for a much more enjoyable experience:

Every touchpoint is going to be influenced by AI. If you engage with leads by email, or from what they're searching for on the web, or even a phone call, the next steps after that engagement will be AI driven. Such as a bot for automation, an IVR system where you've got to pick through menus, or direct people to further information? So, every step of what happens next, from now on will all be AI driven. (P04).

Echoing Rust and Huang (2014), interviewees felt that customers' expectations would be a significant driver of further AI adoption:

People are more accepting because the AI is getting better all the time. It's pull and push. It's the push from the companies, but it's a pull also from the market. (P04).

However, the increased use of AI is expected to attract heightened scrutiny from law and policy makers, as well as the general public. GDPR, PECR and other internationally held standards already exert pressures on the capabilities of AI solutions. Should restrictions on the harvesting, manipulation and utilisation of customer data tighten any further, it would wreak havoc for the AI marketing solutions industry. Our experts also expect increased scrutiny around biased decision-making and possible ethical conundrums, in line with Lambrecht and Tucker (2019) and De Bruyn et al. (2020):

The same way as GDPR requires us to think about the impact of what we do on the privacy of individuals, think a bit more broadly about what's the impact of that decision on a human being? Is that going to affect them in terms of whether something's available to them or not? Is it going to affect whether they have something that's affordable? Thinking about the kind of accidental, things that might happen. A good example might be around if we allow algorithms to converge on presenting what most people click on. And just to think about, what does that create in terms of, for example, filter bubbles? (P14).

Focal firms will be faced with two choices. First, continuing to outsource their marketing solutions to AI suppliers who continue to grow as result of amassing focal firms' data and keeping their algorithms secret. Second, developing their own solutions in-house. Aware of the risks of the former and the need for explainability of AI decisions, one focal firm

interviewed was developing their own AI expertise. This was done through upskilling existing staff and buying in AI competencies:

We recently took on a PhD student whose focus is to look at personalised, connected healthcare. One of the big challenges we face is how do we create an intelligent system that is impactful in someone's life and potentially can save someone's life, but also know how (the system) came to that conclusion, based on a set range of criteria? If something was to go wrong, for legal (reasons), you need to be able to back that up. (P07).

Those that envisaged continuing to work with AI suppliers, were beginning to consider how they could claw back some control. Some mentioned the threat of outsourcing to other supplier firms. This was as a way of fighting back the dominance of particular players in the service network, which is a typical move to reduce over-dependence (Emerson, 1962). Others considered which skills they would need to bring in-house to act as a boundary spanner with AI suppliers:

Who can understand the business problem, frame and articulate it in such a way that somebody else can go and build a model with cloud data processing? I have to take big lumps of data and send them out of the organisation. Then, when it comes back, this person would know what to do with it, and how to evaluate what did work or not. That's what really matters, right? The fine tuning of this thing, so we know which customers leave, and we can identify the ones that are more likely to leave. How are you going to know that what you're doing works or not? They're the people who know business studies and statistics, as much as you need to, in order to be able to do that. And, then, let the people who love the really heavy stuff go off and do it at an industrial level. (P02).

Small suppliers can secure long-term relationships with focal firms by producing creative innovations in AI and offering unique propositions. That is, a strong focus on technical expertise and technological capabilities might help small suppliers communicate credibility to focal firms and fight off the competitive pressure of tech giants. Suppliers may also be able to use the experience with previous clients to gain new ones. Nevertheless, access to data emerges as a lynchpin point, again due to contract clauses or evolving market perceptions, suppliers may be prevented from exchanging or sharing commercially sensitive customer information. Overall, there was agreement that larger players will continue to dominate the marketplace due to the wealth of data accumulated by means of both small suppliers and focal firms using their cloud computing infrastructure. However, where the tech giants are actively supporting smaller suppliers to provide niche and creative solutions, or bespoke plug-in AI solutions for focal firms, they may create opportunities for continuing innovation.

There is huge competition in the AI space at the moment and firms recognise they need to become more intelligent at what they're doing. It's not enough just having a mass market solution anymore, as all of this is happening in a rapidly changing network where they're constantly changing and dynamically using AI. (P03).

4.3. Negotiating the dancefloor space

Drawing on the power dependence theory, a spotlight is directed onto the different members of the dancefloor. They draw on specific types of power as they pursue their goals, and adjust to the manoeuvres of other network members to maintain their competitive positioning. The study finds that AI technology, expertise, trusting relationships and trustworthy reputation are used as power ebbs and flows between the various actors at different point in time (Table 4). This power movement is dynamic and multi-directional, revealing how different actors negotiate their competitive positioning in service networks, akin to a bustling dancefloor where multiple couples use their moves to impress and to

create space against the other couples. Even within their own dance, disagreement may occur, as famous Tango dancer Juan Carlos Copes refers to those who will “lead and be led, and to create positive and productive dialogue”.

4.3.1. *Spotlight on customers – Watching from the audience*

The AI literature identifies two organisation-driven reasons to adopt AI technology: cost savings and enhanced functionality. Yet, the empirical data highlighted a third driver: customers’ expectations. However, in order to materialise these, customers need to consent to the capture and use of their data by focal firms and/or the AI suppliers used to deliver the desired solution. That is, customers exchange their data for the promise of enhanced performance of AI.

Once the solution gets deployed, the customer risks being adversely affected by biased systems (Lambrecht & Tucker, 2019) or by errors, which focal firms may be unable to explain – or even prevent – due to the opacity and lack of explainability of AI algorithms. Such service failures at the level of the supplier impact not only focal firms who outsourced part of the service solution, but also others in the service network (Henneberg et al., 2013). For the time being, customers are powerless in the face of the algorithm gatekeepers. Nevertheless, through increased scrutiny of the use of algorithms and of the power of big tech companies, in the future, customers may be able to expect more transparency about how their data are used, and how the decisions that affect them are made.

4.3.2. *Spotlight on the focal firm – Tentative first steps*

Focal firms enter the AI space in pursuit of financial rewards and improved brand image. However, this requires technical expertise and technological prowess that many focal firms lack, presently. Faced with either entering a very costly and risky in-house process, or engaging the services of third party-suppliers, many focal firms opt for the latter, a facet of the AI B2B market that is largely ignored by the extant literature. This allows focal firms to engage the technical expertise and technological power of the suppliers in order to deliver a complete solution to their customers. Though, it is difficult for focal firms to assess the quality of the solution on offer. Hence, focal firms may trade off small suppliers’ algorithms fit for the tech giants credibility. Moreover, problems with the task fit of the algorithms and the focal firms’ inability to probe the algorithms, exposes the firms to service failures, which may erode their credibility vis a vis their own customers, possibly resulting in customer defection. Focal firms may also be exploited by the third-party suppliers directly, through sharp increases in contract fees, or indirectly, by not being compensated for the use of their data. Finally, firms are outsourcing strategic decision-making to third parties.

Whether the dependency on the AI suppliers’ technical expertise and technological power will intensify over time or not, depends on whether the focal firm invests in building its own technological resources and skills. Either way, it is clear that, as with previous waves of digitalisation (Quinn et al., 2016), AI technology will change the nature and function of marketing in the B2B organisation.

4.3.3. *Spotlight on small suppliers – Creative moves*

AI technology works best when applied to a clearly-specified problem and when tasked with performing mechanical or analytical jobs (Huang & Rust, 2020). Small suppliers may be best positioned to offer specialised solutions because of their focus on specific types of problems and specific industries. Tech giants not only offer the small ones a specific service (namely, its computing power), but they also provide the latter credibility which allows them to tap into the riches of the AI marketplace.

With time, some players may be able to establish their reputation without the need to associate themselves with the tech giants. However, that may be hampered by the fact that small suppliers have further augmented their larger counterparts’ datasets and the tech giants’ ability to develop powerful models (Batistic & van der Laken, 2019). The

small players try to overcome this disadvantage by fiercely defending the secrecy of their algorithms, under the guise of intellectual property.

4.3.4. *Spotlight on the tech giants– Conducting the orchestra*

Large companies like Amazon, Google and Microsoft dominate many aspects of the digital economy, and AI marketing solutions are no exception. With their vast computational power, they can develop algorithms which they supply directly to focal firms in need of generic AI solutions. In addition, the allure of the supporting infrastructure that they offer presents significant technological and technical advantages, such as computing power, lots of data, a large pool of talent, research, and assurance (Zuboff, 2015). These suppliers sell computing processing power to focal firms and small suppliers alike. Through their cloud computing service, they offer capabilities far beyond what any start-up is capable of performing. This not only gives the big players financial rewards, but also gives them access to additional datasets, which further strengthen their AI capabilities. In addition, by supplying services to the small suppliers, they use the latter’s expertise and technological capabilities to develop AI innovations, which is then sold on to clients, without them having to innovate from scratch. That is, by supporting the small suppliers in the short term, the tech giants are further extending their technological and economic power in the AI domain.

By shining the spotlight on the actors involved in the power tango dancefloor, Table 4 presents an overview of the power dynamics of AI adoption in B2B marketing.

5. Discussion

Findings unveil the various desires and motivations for adoption of AI amongst B2B firms who lack the technological skills and knowledge, as well as the suppliers of AI marketing solutions in service networks (both small suppliers and tech giants). In doing so, the findings extend the power literature by outlining the intricate system of power gains and losses amongst network actors in AI adoption. Power sources endemic to AI adoption in marketing are identified as well as evidence of their negotiation, and renegotiation, revealing a highly complex network of power dynamics. To characterise the fluidity of power between and amongst the various actors within the B2B AI service network, we present our conceptual framework in Fig. 2. It presents the ten propositions, derived from the findings, illustrates the actors and their associated movements, as well as the fluidity of power exchanges on the Power Tango dancefloor. In the process of examining power exchanges, a better understanding of hitherto unknown aspects of AI adoption are identified, such as the pivotal role of data and how it is used by network actors as a power source to negotiate competitive advantage.

5.1. *Theoretical contributions*

This paper contributes to extant literature in four ways. Firstly, it extends previous debates of power dynamics beyond the dyadic perspective (Hingley et al., 2015), by looking at power dependence amongst actors in a dynamic AI ecosystem. Looking at the power negotiations amongst focal firms, customers, small AI suppliers and tech giants through the adoption of AI technology and expertise, this paper argues that power symmetry or asymmetry is best understood from a network perspective. We show that power and dependence are constantly being negotiated and exchanged through various moves enacted amongst interconnected network actors (Henneberg et al., 2013). AI technology and expertise are the main power sources being identified and employed by each network actor to create temporal power moves and renegotiate their competitive positioning with their counterparts. The negotiation between the partners is affected by others and their alternative offerings, akin to a busy dance floor where multiple couples are tangling and negotiating their moves together, while keeping an eye on others in the limelight.

The dance floor motif also helps explain the temporal changes

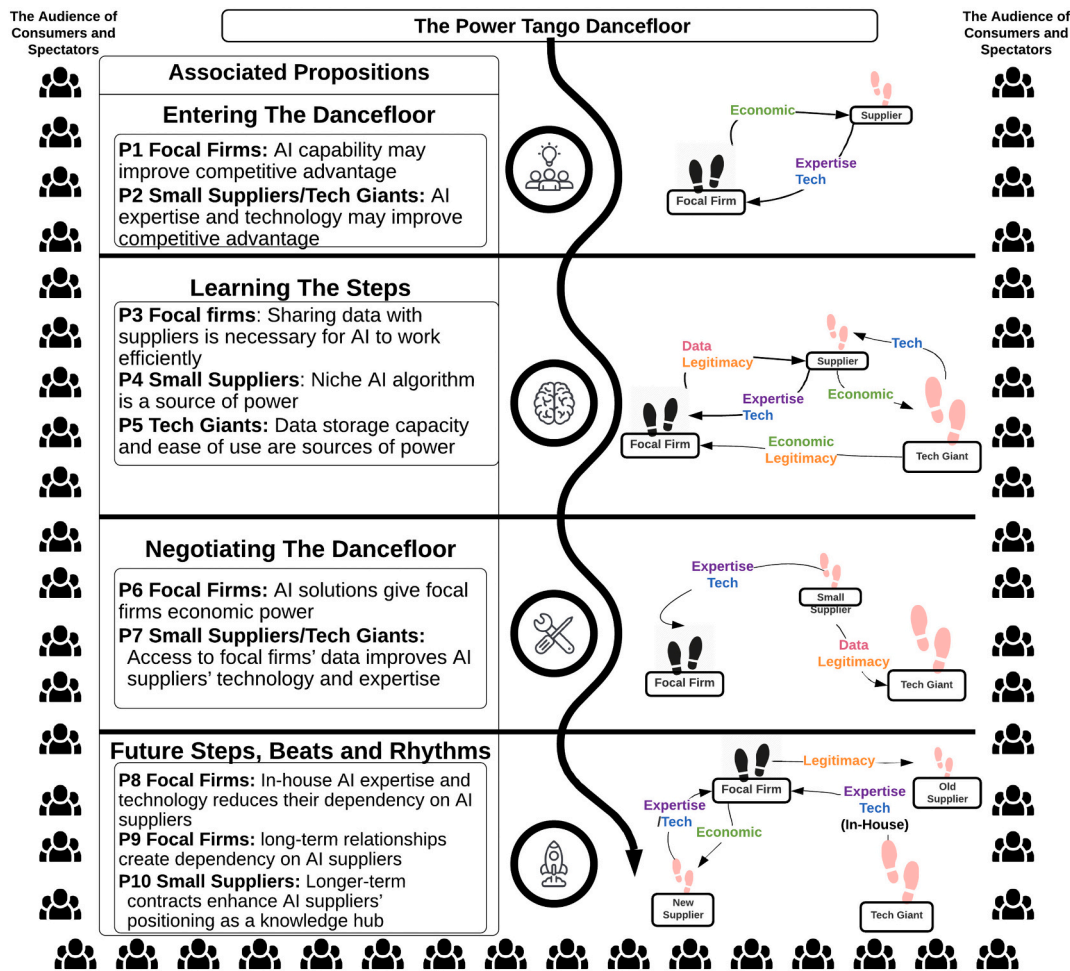


Fig. 2. The power tango dancefloor

amongst network actors, presenting a fluid view and challenging the understanding of power dependence as static. Partners can be changed when a new tune starts, like focal firms can change suppliers to best serve their customers. Whilst different actors move in order to gain control and minimise dependence upon other network actors, the findings reveal complex and ever-changing power dynamics between network members. This highlights the importance to consider fluidity and multidirectionality when studying power. As such, it is argued that power relationships between two network actors cannot be evaluated or understood in isolation or at a static point in time. This is because their relative power postures are not only affected by their counterparts, but are dependent upon their relationships and negotiations with other network actors over time, as illustrated in Fig. 2.

By showing that data accumulation leads to stronger AI solutions, the paper identifies data as a new power source, which follows similar principles to the economic power source of company size, in that the larger the volume, the more powerful it is (Hingley, 2005). Nevertheless, although data volume suggests power in the AI service network, this power has not been exercised actively by any of the network actors. This may be because the ownership of data has not been clearly defined between data creators (customers) data collectors (focal firms), data processors (AI small suppliers) and data storage platforms (tech giants). Legitimacy of data ownership is yet to be defined and claimed, which calls for future research attention and debate.

This paper also contributes to AI literature in the B2B field by showing that innovative reputation is a driver for AI adoption. The findings show that many focal firms rush to adopt AI because they want to gain the reputation of being innovative. Nevertheless, whilst focal

firms wish to be considered as technology-driven and capable, some of them have lost their autonomy to third-parties due to their own lack of AI technology and expertise. The findings highlight a gap between perception and reality, underlining a key challenge that is faced amongst AI service network actors in discussing future value co-creation.

Finally, the paper contributes to the service network literature by looking at a newly emerged service network that has not received much research attention before. By studying the AI service network from the theoretical lens of power and dependence, this paper adds nuance to the understanding of the tensions and power negotiations between service network members within this constellation (Henneberg et al., 2013).

5.2. Managerial implications

The current literature provides scant empirically-based, practical guidance to B2B managers (e.g., Han et al., 2021; Upadhyay et al., 2021), even though AI is expected to disrupt marketing practice. This gap is addressed by offering the following implications emerging from our study which translate into advice to focal firms for their AI adoption, as well as more general observations for AI suppliers, and tech giants.

The first implication from our findings is that B2B marketing managers need to pay careful attention to the procurement process, and assess whether AI technology offers the anticipated cost savings. While AI may enable some savings via automation of certain tasks, there are many additional costs that need to be considered when investing in this technology, including equipment, processing power and skills. In addition, managers need to consider possible trade-offs in terms of system performance (Cormen, Leiserson, Rivest, & Stein, 2001) – namely, the

trade-off between choosing a cheaper but less accurate solution in the short-term, versus the costs of false positive and false negative errors that may occur. Moreover, managers need to weight the possible reputational cost of delaying AI adoption against other cost factors, as well as potential technology failures. Hence, specific assessment of the focal firms' requirements, with thorough consultation and testing of the algorithm is recommended. Our findings indicate that smaller suppliers offer more creative solutions, whereas tech giants lack variation in their offering. Lastly, in terms of contractual agreements, performance targets should be considered when adopting a marketing solution, to avoid suppliers increasing costs through the SaaS model. This paper's findings also show that AI suppliers may raise their fees as focal firms become increasingly dependent on their services, creating a lock-in that potentially decreases market competition.

The second implication concerns the role of data in the network's relationships. In the surveillance economy, the accumulation of data leads to power asymmetries between the owners of data-driven services and the users of those services (Zuboff, 2015). When focal firms transfer their proprietary datasets to the AI service providers, they are increasing those suppliers' power in the market. Moreover, focal firms are foregoing a possible income source associated with this valuable asset. Thus, a key recommendation emerging from our findings is that, when negotiating with AI suppliers, firms need to carefully assess how their valuable data sets will be used in the future.

Regarding AI suppliers, our findings reveal that collaborations with tech giants provide multiple advantages, such as access to large databases and facilitating platforms. This leads to better value co-creation for the focal firms. Nevertheless, it is important to point out that, whilst partnering with tech giants is a relatively easy process, it is the ability to create customised solutions that differentiates small players from others, which gives them a competitive edge.

Finally, for tech giants, the findings confirm their advantageous position (Zuboff, 2015) on the power tango dancefloor. Their current strategy of supporting smaller AI start-ups through platform collaborations and model-sharing secures their network leader positioning, and facilitates their continued dominance in the AI marketplace.

5.3. Limitations and future research directions

As this is the first attempt to portray the network power dynamics within the AI service network, our study has some limitations. Firstly, although the findings discuss the power dynamics within the AI service network, the data was collected from only business managers, engineers and academics who represent focal firms, AI suppliers and third-party experts. Customers and tech giants were mentioned by participants in discussing the power dynamics, however, they have not been interviewed in this research. Future research could expand the scope of this study by incorporating customers and tech giants in their data collection, thus capturing all perspectives of this network's dynamics and power multi-dimensionality.

Secondly, considering the fluidity of power and the constant moves enacted by different network actors, as illustrated in the power tango dancefloor, future research should collect longitudinal data so that the power fluidity can be documented over time. This is especially relevant for the AI service network, because AI technology is still advancing and the network constellation is continuously expanding. Observing this developing network over time can shed new light on the power tango.

6. Conclusions

Our study examined the role of power dependencies within AI adoption in B2B marketing. By unveiling strategies for power gains and losses, we developed the Power Tango motif to describe how each actor vies for leading the dance to their benefit. By enlisting AI suppliers to perform marketing services, power ebbs and flows between dance partners. We also show how the dancefloor has become increasingly

complex and crowded over time and buyers and suppliers often switch and change, illustrating the fluidity and multi-dimensionality of power dependencies. This study offers a unique contribution to the B2B marketing literature by highlighting previously unknown complexities involved in outsourcing AI marketing solutions. Furthermore, we offer a fresh perspective to the power literature by showing the intense fluidity of power dynamics amongst service network actors. Lastly, the role of data as a power source is a new addition emerging from our findings. We hope that by conceptualising the Power Tango dancefloor, a spotlight is shone on pitfalls and complexities that should be avoided for continuing use of highly complex technological applications in B2B marketing.

No funding has supported this research.

References

- Abosag, I., Yen, D. A., & Barnes, B. R. (2016). What is dark about the dark-side of business relationships? *Industrial Marketing Management*, 55, 5–9.
- Akter, S., McCarthy, G., Sajib, S., Michael, K., Dwivedi, Y. K., D'Ambra, J., & Shen, K. N. (2021). Algorithmic bias in data-driven innovation in the age of AI. *International Journal of Information Management*, 60, 102387.
- Bag, S., Gupta, S., Kumar, A., & Sivarajah, S. (2021). An integrated artificial intelligence framework for knowledge creation and B2B marketing rational decision making for improving firm performance. *Industrial Marketing Management*, 92, 178–189. <https://doi.org/10.1016/j.indmarman.2020.12.001>
- Bastl, M., Johnson, M., & Choi, T. Y. (2013). Who's seeking whom? Coalition behavior of a weaker player in buyer–supplier relationships. *Journal of Supply Chain Management*, 49, 8–28.
- Batistic, S., & van der Laken, P. (2019). History, evolution and future of big data and analytics: A bibliometric analysis of its relationship to performance in organisations. *British Journal of Management*, 30(2), 229–251.
- Borges, A. F., Laurindo, F. J., Spínola, M. M., Gonçalves, R. F., & Mattos, C. A. (2021). The strategic use of artificial intelligence in the digital era: Systematic literature review and future research directions. *International Journal of Information Management*, 57, 102225.
- Brown, T. L., & Potoski, M. (2004). Managing the public service market. *Public Administration Review*, 64(6), 656–668.
- Burrell, J. (2016). How the machine 'thinks': Understanding opacity in machine learning algorithms. *Big Data & Society*, 3(1), 1–12. <https://doi.org/10.1177/2053951715622512>
- Canhoto, A. I., & Clear, F. (2020). Artificial intelligence and machine learning as business tools: Factors influencing value creation and value destruction. *Business Horizons*, 63(1), 183–193. <https://doi.org/10.1016/j.bushor.2019.11.003>
- Choi, T. Y., & Wu, Z. (2009). Taking the leap from dyads to triads: Buyer–supplier relationships in supply networks. *Journal of Purchasing and Supply Management*, 15, 263–266.
- Cormen, T. H., Leiserson, C. E., Rivest, R. L., & Stein, C. (2001). *Introduction to Algorithms* (2nd ed.). London: McGraw-Hill.
- Cortez, R. M., & Johnston, W. J. (2017). The future of B2B marketing theory: A historical and prospective analysis. *Industrial Marketing Management*, 66, 90–102.
- Davenport, T., Guha, A., Grewal, D., & Bressgott, T. (2020). How artificial intelligence will change the future of marketing. *Journal of the Academy of Marketing Science*, 48(1), 24–42. <https://doi.org/10.1007/s11747-019-00696-0>
- De Bruyn, A., Viswanathan, V., Beh, Y. S., Brock, J. K. U., & von Wangenheim, F. (2020). Artificial intelligence and marketing: Pitfalls and opportunities. *Journal of Interactive Marketing*, 51, 91–105. <https://doi.org/10.1016/j.intmar.2020.04.007>
- Dimitrieska, S., Stankovska, A., & Eftemova, T. (2018). Artificial intelligence and marketing. *Entrepreneurship*, 7(2), 298–304.
- Duan, Y., Edwards, J. S., & Dwivedi, Y. K. (2019). Artificial intelligence for decision making in the era of big data—evolution, challenges and research agenda. *International Journal of Information Management*, 48, 63–71.
- Dwivedi, Y. K., Hughes, L., Ismagilova, E., Aarts, G., Coombs, C., Crick, T., ... Williams, M. D. (2021). Artificial intelligence (AI): Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. *International Journal of Information Management*, (August), 57 (101994).
- Dwivedi, Y. K., Ismagilova, E., Hughes, D. L., Carlson, J., Filieri, R., Jacobson, J., ... Wang, Y. (2021). Setting the future of digital and social media marketing research: Perspectives and research propositions. *International Journal of Information Management*, 59, 102168. <https://doi.org/10.1016/j.ijinfomgt.2020.102168>
- Dwyer, F. R., Schurr, P. H., & Oh, S. (1987). Developing buyer–seller relationships. *Journal of Marketing*, 51(2), 11–27.
- Eisingerich, A. B., & Bell, S. J. (2008). Managing networks of interorganizational linkages and sustainable firm performance in business-to-business service contexts. *Journal of Services Marketing*, 22(7), 494–504.
- Emerson, R. M. (1962). Power-dependence relations. *American Sociological Review*, 31–41.
- Fereday, J., & Muir-Cochrane, E. (2008). Demonstrating rigour using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *Journal of Qualitative Methods*, 5(11), 80–92.
- Finne, M., & Holmström, J. (2012). A manufacturer moving upstream: Triadic collaboration for service delivery. *Supply Chain Management: International Journal*, 18, 21–33.

- Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2012). Seeking qualitative rigour in inductive research: Notes on the Gioia methodology. *Organizational Research Methods*, 16(1), 15–31.
- Gonzalez-Cabañas, J. C., & Mochón, F. (2016). Operating an advertising programmatic buying platform: A case study. *International Journal of Interactive Multimedia and Artificial Intelligence*, 3(6), 6–15.
- Grewal, R., Johnson, J. L., & Sarker, S. (2007). Crises in business markets: Implications for interfirm linkages. *Journal of the Academy of Marketing Science*, 35(2007), 398–416.
- Hadjikhani, A., & LaPlaca, P. (2013). Development of B2B marketing theory. *Industrial Marketing Management*, 42(3), 294–305.
- Hadjikhani, A., Lindh, C., & Thilenius, P. (2012). The impact of discontinuity on firms' business relationship behaviour. *European Business Review*, 24(2), 134–150.
- Han, R., Lam, H. K. S., Zhan, Y., Wang, Y., Dwivedi, Y. K., & Tan, K. H. (2021). Artificial intelligence in business-to-business marketing: a bibliometric analysis of current research status, development and future directions. *Industrial Management & Data Systems*. <https://doi.org/10.1108/IMDS-05-2021-0300> (ahead-of-print).
- Henneberg, S. C., Gruber, T., & Naude, P. (2013). Services networks: Concept and research agenda. *Industrial Marketing Management*, 42(1), 3–8.
- Hingley, M. K. (2005). Power to all our friends? Living with imbalance in supplier–retailer relationships. *Industrial Marketing Management*, 34(8), 848–858.
- Hingley, M. K., Lindgreen, A., & Grant, D. B. (2015). Intermediaries in power-laden retail supply chains: An opportunity to improve buyer–supplier relationships and collaboration. *Industrial Marketing Management*, 50, 78–84.
- Huang, M.-H., & Rust, R. T. (2020). Artificial Intelligence in Service. *Journal of Service Research*, 21(2), 155–172.
- Jabbar, A., Akhtar, P., & Dani, S. (2019). Real-time big data processing for instantaneous marketing decisions: A problematization approach. *Industrial Marketing Management*, 90(2020), 558–569. <https://doi.org/10.1016/j.indmarman.2019.09.001>
- Katsikeas, C., Leonidou, L., & Zeriti, A. (2019). Revisiting international marketing strategy in a digital era. *International Marketing Review*. Doi:<https://doi.org/10.1108/IMR-02-2019-0080>. Vol. ahead-of-print No. ahead-of-print.
- Krippendorff, K. (2004). *Content analysis*. Thousand Oaks, CA: Sage.
- Lambrecht, A., & Tucker, C. (2019). Algorithmic bias? An empirical study of apparent gender-based discrimination in the display of STEM career ads. *Management Science*, 65(7), 2966–2981.
- Leonidou, L. C., Talias, M. A., & Leonidou, C. N. (2008). Exercised power as a driver of trust and commitment in cross-border industrial buyer–seller relationships. *Industrial Marketing Management*, 37(1), 92–103.
- Li, M., & Choi, T. Y. (2009). Triads in services outsourcing: Bridge, bridge decay and bridge transfer. *Journal of Supply Chain Management*, 45(3), 27–39.
- Liu, X. (2020). Analyzing the impact of user-generated content on B2B Firms' stock performance: Big data analysis with machine learning methods. *Industrial Marketing Management*, 86(2020), 30–39. <https://doi.org/10.1016/j.indmarman.2019.02.021>
- Longoni, C., Bonezzi, A., & Morewedge, C. K. (2019). Resistance to Medical Artificial Intelligence. *Journal of Consumer Research*, 46(4), 629–650.
- Lundin, R. A., & Steinhörsson, R. S. (2003). Studying organizations as temporary. *Scandinavian Journal of Management*, 19(2), 233–250.
- Mercer, J. (1972). *Fools rush in (where angels fear to tread)*, [recorded by Elvis Presley] on *elvis now*. Nashville, USA: RCA Studios.
- Merendino, A., Dibb, S., Meadows, M., Quinn, L., Wilson, D., Simkin, L., & Canhoto, A. (2018). Big data, big decisions: The impact of big data on board level decision-making. *Journal of Business Research*, 93, 67–78.
- Meyers, M. K., Ricucci, N. M., & Lurie, I. (2001). Achieving goal Congruence in complex environments: The case of welfare reform. *Journal of Public Administration Research and Theory*, 11(2), 165–202.
- Molm, L. D. (2007). *Power-dependence theory*. The Blackwell Encyclopedia of Sociology.
- Morgan, F. N., Deeter-Schmelz, D., & Moberg, C. R. (2007). Branding implications of partner firm-focal firm relationships in business-to-business networks. *The Journal of Business and Industrial Marketing*, 22(6), 372–382.
- Munksgaard, K. B., Johnsen, R. E., & Patterson, C. M. (2015). Knowing me, knowing you: Self- and collective interests in goal development in asymmetric relationships. *Industrial Marketing Management*, 48, 160–173.
- Natter, M., Reutterer, T., Mild, A., & Taudes, A. (2007). Practice prize report - an assortmentwide decision-support systems for dynamic pricing and promotion planning in DIY retailing. *Marketing Science*, 26(4), 576–583.
- Nijssen, E. J., Van Reekum, R., & Hulshoff, H. E. (2001). Gathering and using information for the selection of technology partners. *Technological Forecasting and Social Change*, 67(2/3), 221–237.
- Ostrom, A. L., Bitner, M. J., Brown, S. W., Burkhard, K. A., Goul, M., Smith-Daniels, V., ... Rabinovich, E. (2010). Moving forward and making a difference: Research priorities for the science of service. *Journal of Service Research*, 13(4), 4–36.
- Paschen, J., Kietzmann, J., & Kietzmann, T. C. (2019). Artificial intelligence (AI) and its implications for market knowledge in B2B marketing. *Journal of Business & Industrial Marketing*, 34(7), 1410–1419.
- Pettey, C. (2018). Lessons from artificial intelligence pioneers. Smart with Gartner: Digital business. Retrieved from <https://www.gartner.com/smarterwithgartner/lessons-from-artificial-intelligence-pioneers/>.
- Quinn, L., Dibb, S., Simkin, L., Canhoto, A. I., & Analogbe, M. (2016). Troubled waters: The transformation of Marketing in a Digital World. *European Journal of Marketing*, 50(12), 2103–2133. <https://doi.org/10.1108/EJM-08-2015-0537>
- Rust, R. T., & Huang, M. H. (2014). The service revolution and the transformation of marketing science. *Marketing Science*, 33(2), 206–221.
- Sampson, S. E., & Spring, M. (2012). Customer roles in service supply chains and opportunities for innovation. *Journal of Supply Chain Management*, 48(4), 30–50.
- Siemieniako, D., & Mitrega, M. (2018). Improving power position with regard to non-mediated power sources—the supplier's perspective. *Industrial Marketing Management*, 70, 90–100.
- Sleep, S., Dixon, A. L., DeCarlo, T., & Lam, S. K. (2020). The business-to-business inside sales force: Roles, configurations and research agenda. *European Journal of Marketing*, 54(5), 1025–1060.
- Spring, M., & Araujo, L. (2014). Indirect capabilities and complex performance: Implications for procurement and operations strategy. *International Journal of Operations & Production Management*, 34, 150–173.
- Upadhyay, N., Upadhyay, S., & Dwivedi, Y. K. (2021). Theorizing artificial intelligence acceptance and digital entrepreneurship model. *International Journal of Entrepreneurial Behavior & Research*. <https://doi.org/10.1108/IJEBR-01-2021-0052> (ahead-of-print).
- Weigel, S., & Hadwich, K. (2018). Success factors of service networks in the context of servitization – Development and verification of an impact model. *Industrial Marketing Management*, 74, 254–275. <https://doi.org/10.1016/j.indmarman.2018.06.002>
- Wynstra, F., Spring, M., & Schoenherr, T. (2015). Service triads: A research agenda for buyer-supplier-customer triads in business services. *Journal of Operations Management*, 35, 1–20. <https://doi.org/10.1016/j.jom.2014.10.002>
- Yen, D. A., Yang, H. P. S., & Cappellini, B. (2012). Ranking gives power: Relationships between UK universities and Chinese agents. *Journal of General Management*, 38(1), 23–44.
- Zuboff, S. (2015). Big other: Surveillance capitalism and the prospects of an information civilization. *Journal of Information Technology*, 30, 75–89.