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Article

Predicting the supplier relationship management system's magnificence and investigating its effect on corporate shareholder value via the mediating role of marketing brand strength: A SEM-ANN hypered approach

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Abstract: Purpose—In the business sector, reliable and timely data are crucial for business management to formulate a company's strategy and enhance supply chain efficiency. The main goal of this study is to examine how strong brand strength affects shareholder value with a new Supplier Relationship Management System (SRMS) and to find the specific system qualities that are linked to SRMS adoption. This leads to higher brand strength and stronger shareholder value. **Design/Methodology/Approach**—This study employed a cross-sectional design with an explanatory survey as a deductive technique to form hypotheses. The primary method of data collection used a drop-off questionnaire that was self-administered to the UAE-based healthcare suppliers. Of the 787 questionnaires sent to the healthcare suppliers, 602 were usable, yielding a response rate of 76.5%. To analyze the data gathered, the study used Partial Least Squares Structural Equation modelling (PLS-SEM) and artificial neural network (ANN) techniques. **Findings**—The study's data proved that SRMS adoption and brand strength positively affected and improved healthcare suppliers' shareholder value. Additionally, it demonstrates that user satisfaction is the most significant predictor of SRMS adoption, while the results show that the mediating role of brand strength is the most significant predictor of shareholder value. The results demonstrated that internally derived constructs were better explained by the ANN technique than by the PLS-SEM approach. **Originality/Value**—This study demonstrates its practical value by offering decision-makers in the healthcare supplier industry a reference on what to avoid and what elements to take into account when creating plans and implementing strategies and policies.

Keywords: supplier relationship management; brand strength; corporate shareholder value; Social Exchange Theory; Supply Chain Intelligence System; artificial neural network analysis; business to business

1. Introduction

In a corporate climate, competition intensifies quickly, pushing companies to maximize the effectiveness of their competent supply chains to satisfy service standards that affect consumer fulfilment (Chopra, 2019). Supply Chain Management (SCM) aims to improve effective and efficient performance at every stage of the supply chain process, from acquiring raw materials to converting raw materials into finished commodities, to delivering completed goods to distributors, and eventually end users. According to Hugos (2018), globalization now necessitates the capacity to adjust to fluctuations in client demand that occur constantly. Additionally, to provide high-value products that meet end consumers' expectations, the organization must constantly innovate. The value of goods and services a company provides to customers determines its competitiveness (Shwedeh et al., 2022). Indeed, the integration of

suppliers, manufacturers, distributors, and retailers must be accomplished effectively and efficiently for the supply chain to function at its best. Therefore, a well-functioning supply chain demonstrates the extent to which businesses can effectively provide goods or services to customers at the appropriate time, place, and cost. SCM is a useful technique for increasing the effectiveness and efficiency of current supply networks (Chopra, 2019).

Reliable and timely data are crucial for business management to formulate a company's strategy and enhance supply chain efficiency (Tarigan et al., 2019). In essence, client data that are converted into high-quality information enhance supply chain efficiency and eventually boost customer happiness (Torres and Tribó, 2011). Moreover, strong brand equity and retailer satisfaction may be achieved through high-quality information (Anggraini and Hananto, 2020; Chen et al., 2018; Tarigan et al., 2019; Vandeput, 2021). Coordination between functions may be performed successfully and efficiently in an organization when integrated information is available within it. An instance of this kind of coordination would be the relationship between the marketing department, production planning, and inventory control planning; it would also involve the marketing department and the company's warehousing department. Suppliers can create materials or items needed by the firm using information that is accessible and integrated with external parties, such as corporate suppliers (Alshikhi and Abdullah, 2018; Azemi et al., 2018; Shaharudin et al., 2023; Torres and Sidorova, 2019; Vandeput, 2021).

Tarigan and Siagiana (2019) added that since the supplier can appropriately prepare material needs, a tight relationship with them can boost flexibility and speed up the process of product identification. The permanency of a corporation's production scheme is also impacted by the unreliability of suppliers' material supply, particularly when it comes to the acquisition of materials and submaterials. Due to this circumstance, businesses find it challenging to fulfil client orders for items. In the face of variable supply and demand, businesses need to be able to quickly meet demand in terms of production volume while simultaneously minimizing production costs. Supply chain dynamics require a quick response through increased adaptability (Chopra, 2019; Vandeput, 2021). Consequently, businesses must become more innovative and utilize information technology in accordance with the demands to anticipate changes that may arise. In fact, corporate clients can access the firm through the use of information technology, which helps lessen uncertainty (Sáenz and Knoppen, 2018; Torres and Sidorova, 2019; Shwedeh et al., 2022).

The increase in products with integrated branding indicates that branding is becoming a crucial marketing strategy in today's rapidly changing (Kim and Baker, 2022). The benefits of branding in business marketplaces have often been disregarded in terms of brand equity, despite its success in producing favorable impacts on value chain participants (Nagurney et al., 2015; Robinson and Hsieh, 2016; McMaster et al., 2020). Certainly, if brands can be personified, consumers can also connect with them. Accordingly, it makes sense to consider a brand as a relationship.

A Supplier Relationship Management System (SRMS) investigates how it increases shareholder value by fortifying brand strength. In other words, the goal was to assess shareholder value with a recently implemented SRMS (using brand strength as a mediator) and identify the specific system qualities linked to SRMS adoption,

which will ultimately increase strong shareholder value and brand strength. Consequently, there is a growing need for SRMS across many industries, and the medical field is no exception. The company's outstanding flexibility in its supply chain enables it to accommodate a wide range of consumer needs, resulting in strong brand equity and increased cheerfulness. Numerous businesses actively work with suppliers to enhance flexibility by successfully and consistently exchanging high-quality information (Shaharudin et al., 2023; Torres and Sidorova, 2019; Tarigan et al., 2019; McMaster et al., 2020; Vandeput, 2021; Dumitriu et al., 2019). Researchers should examine this matter more thoroughly because of the need to create new qualities that are unique to the medical field.

Consequently, the following succinctly describes the primary contributions of the current study. First, the study examines the direct and indirect impact of antecedents on SRMS adoption. This may be put into practice to improve our understanding of the factors that influence SRMS implementation by adopting a creative and integrated research approach. In other words, prior studies performed in various business contexts have examined the impact of distinct quality system constructs (e.g., Electronic Medical Record "EMR") independently and directly (Alshikhi and Abdullah, 2018; McKnight et al., 2017; Putra et al., 2020; Seggie et al., 2006; Tarigan et al., 2019). To highlight the importance and predictability of the findings, a theoretical model was established that combines the Technology Acceptance Model (TAM), Diffusion of Innovation Theory (DOIT), and Content Richness Theory (CRT) to highlight the implications and predictability of the findings. This study uses brand strength as a mediator to examine how SRMS adoption affects shareholder value. To the best of our knowledge, this is the first study to quantify the significance of SRMS in the medical domain, relying on an integrated and comprehensive model to close a vital research gap in the pertinent literature. Numerous studies have been conducted in the SRM field, but they have not examined the effect of such a system on brand equity, and in particular, brand strength (Forkmann et al., 2016; Kumara and Rahmanb, 2015; Mettler and Rohner, 2009; Miocevic and Crnjak-Karanovic, 2012; Nyarku and Oduro, 2019; Piercy, 2009; Putra et al., 2020; Seggie et al., 2006; Teller et al., 2016). Second, the current study aimed to assess the efficacy of implementing SRMS in the medical sector, a topic of great significance to healthcare providers and consumers. In healthcare, vendors and clients are becoming more eager to expand their advantages and open the door to more suggestions. It has been acknowledged that SRMS acceptability affects both suppliers' and customers' use of the system, and not only their decisions. Third, the external variables used in this study are unique to the significance of SRMS's external characteristics of SRMS in the medical domain. Unlike previous studies by Tarigan and Siagian (2019) and Putra et al. (2020), which concentrated on availability and mobility, this study distinguishes its external influences. As the main external variables affecting SRMS, innovation and content richness were the focus of the current study. The core implication of this study is that it explores the efficacy of SRMS from a purely supplier medical perspective. This work differs from previous revisions in that it concentrates on two factors, personal innovativeness and content richness, which promote the adoption of SRMS technology. The effectiveness of these two variables led to a higher level of SRMS adoption. Finally, this study employs a novel and multifaceted approach to data analysis using

an Artificial Neural Network (ANN) analytical tool, which is also recognized as the most effective tool for forecasting health technology adoption.

2. Literature review

2.1. Supplier relationship system

A business procedure that oversees all conventions between a company and its suppliers is known as supplier relationship management (SRM) (Oakland et al., 2021). The firm establishes cooperative and well-coordinated associations with its primary suppliers to address its challenges. Active supplier engagement in generating corporate value through cost efficiency improvements, competitive product offerings, and risk sharing will significantly aid a company's ability to produce new goods and gain market share (Beranek and Buscher, 2023). Indeed, developing partnership connections with essential suppliers with the goals of cutting costs, generating new goods, and creating value for both sides is one of the opportunities presented by the SRM. The second is to build on the success of strategic sources and projects. If this cooperation is founded on a dedication to working together for long-term advantages, it is possible to accomplish this.

According to Amoako-Gyampah et al. (2019), SRM is critical because it extends the life cycle of products, enhances their quality, spurs process innovation, and accounts for a variety of consumer demands. Consequently, the SRM created by the company in close cooperation with the supplier can generate long-term profits. Essentially, SRM give businesses a competitive edge by enabling them to pool their current resources (Hong et al., 2018; Mumelo and Selfano, 2017; Oakland et al., 2021).

Shaharudin et al. (2023) conducted a content analysis to examine and provide the most recent research on SCM literature. They concluded that in order to become more competitive, businesses needed to optimize each step of the value creation process—from the provision of raw materials to end-user services—by putting in place a workable supply chain. Consequently, collaboration between businesses and suppliers is made possible and advantageous when both supplier and corporate information are integrated. Tarigan et al. (2019) and Whipple et al. (2015) showed that working with outside parties can provide businesses with a competitive edge. A company's effective application of SCM through SRM makes integration between the business and its suppliers possible. Working together, suppliers and enterprises may significantly reduce operating expenses, which will boost the company's competitive edge and enhance its performance.

A good relationship with the supplier can boost flexibility and speed up the progression of merchandise recognition because the supplier can appropriately prepare for material needs, according to Sáenz et al. (2018). They concluded that the unpredictability of suppliers' material supply has an impact on the consistency of the corporation's production scheme, particularly when it comes to the acquisition of materials and sub-materials. In essence, it is challenging for businesses to fulfil client orders for items because of these circumstances. In the face of variable supply and demand, businesses need to be able to quickly meet demand in terms of production volume while simultaneously minimizing production costs. The supply chain's flow must react quickly to changes by becoming more flexible to handle them. However,

businesses must become more innovative and utilize information technology in accordance with the demands to anticipate changes that may arise. Corporate clients will have access to the company's information technology, which will help lessen uncertainty in the workplace. Amoako-Gyampah et al. (2019) supported the idea that SRMS is critical because it extends the life cycle of a product, enhances its quality, spurs process innovation, and caters to a heterogeneous client base. Lii and Kuo (2016) and Mumelo et al. (2017) concluded that the SRMS that the firm has rigorously developed with the supplier is able to deliver advantages to both parties and produce profits in the long term, further validating such perspectives. The SRM provides businesses with a competitive edge by enabling them to pool their current resources. Furthermore, because solid cooperation in the SRM helps businesses anticipate changes in demand patterns, inflationary pressures, currency fluctuations, and governmental regulations, it is crucial for both sides (buyer-suppliers).

2.2. Supplier relationship system in healthcare

The incorporation of information and communication technology (ICT) into the healthcare industry is currently regarded as an opportunity to enhance the accessibility of up-to-date information, financial openness, and the overall efficacy, efficiency, and quality of healthcare services (Almarzouqi et al., 2022). Despite significant investments in innovation and vast opportunities for entrepreneurs, the healthcare business has not yet experienced a fundamental change in its approach. The implementation of economic principles in numerous nations, such as establishing fees for medical procedures or implementing charges for medical registration, is intended to reduce healthcare costs and enhance competition among healthcare providers, thereby increasing the demand for effectiveness and efficiency. According to Alharthi et al. (2014), Uzir et al. (2021), and Ravikumar et al. (2023), healthcare is different from most other industries because it is heavily regulated, the government spends a lot of money on it, and there is little pressure on state-funded healthcare organizations to be effective and efficient. There has also been little focus on patient needs. Consequently, the information system structure in the healthcare industry is comparatively immature (Ravikumar et al., 2023). However, it has been a long-standing practice to integrate information outside the conventional bounds of a single healthcare institution to enable optimal health service delivery. Additionally, there is an immediate need for collaboration to meet the demands of external stakeholders (patients, suppliers, and governmental authorities) as well as internal stakeholders (e.g., pharmacists, nurses, and physicians).

SCM in healthcare is distinct because all stakeholders have interests that must be safeguarded. Various phases of supply chain flow can concentrate on achieving their objectives (Almarzouqi et al., 2022). Put simply, the hospital administration aims to acquire cost-effective products of superior quality, whereas carers may prefer a specific brand because of their training and familiarity with it. Medical device manufacturers could wish to make money from their goods in the meantime. SCM in the healthcare industry may be seen as a backend program that is always in operation, allowing all the various operations to be integrated (Arora and Gigras, 2018).

The SCM that has been put in place guarantees that a product or medication will be available when needed, reduces inventory waste, improves patient care, and maintains departmental coordination to reduce pharmaceutical mistakes or human errors. Some possible ways to do this are to use RFID technology, Standard Product Codes, and Global Identification Numbers (GIN), as well as to integrate subsystems and improve the workflow (Abdulsalam et al., 2018; Arora and Gigras, 2018). Arora and Gigras (2018) concluded that giving patients access to quality treatment is the hospital's main goal. A sufficient amount of superior medication is required in many divisions. SCM is crucial to hospitals for guaranteeing that medications are available on time and at the best possible price. Different suppliers, SRMS, vendor agreements, floating of proposals, rounds of discussions, and freeze-on product delivery procedures are required in the supply chain because certain medications may only be carried at specific temperatures.

Kros et al. (2019) conducted an empirical test of a model in different research that emphasizes the vital role that information management plays in the relationship between the quality of the buyer-supplier relationship and performance results in the healthcare industry. The results show that in the context of cooperative buyer-supplier agreements, information management and relationship quality are linked to a number of advantages based on survey data from healthcare managers. Oduro et al. (2019) compared the organizational performance relationships and SRM characteristics between Ghana's public and private hospitals. They concluded that while collaboration, atmosphere, and adaptation differ depending on the setting, SRMS features in terms of communication and trust improve the performance of both private and public hospitals. Accordingly, this discrepancy in outcomes may account for some of the differences in performance between public and private hospitals.

An analysis of the existing body of knowledge on healthcare suggests that good SRMS can lower ex-post transaction costs (Kros et al., 2019), build trust in partners' honesty and dependability, and make it easier for people in the supply chain to work together (Dewitt et al., 2014; Duku et al., 2018; Feibert et al., 2019). Oduro et al. (2019) and Putra et al. (2020) suggest that SRMS can help businesses become more adaptable and better suited to manage the variety, complexity, and heterogeneity inherent in the supply chain. Empirical research shows that using SRMS to improve communication leads to considerable performance improvements in manufacturing and service companies (Arora and Gigras, 2018; Oakland et al., 2021; Putra et al., 2020; Tangus et al., 2015).

2.3. Brand strength

According to Parris and Guzmán (2023), a brand is any name, word, sign, symbol, design, or mix of these used to identify and set one seller's or group of sellers' products and services apart from those of rivals. As a significant asset for any corporation, brands are essential to today's service-oriented businesses (Hamadneh et al., 2021). Since the 1980s, branding has garnered significant attention in marketing literature. Numerous studies (Hamadneh et al., 2021; Keller, 2016; Nazari et al., 2015; Parris and Guzmán, 2023; Sharma et al., 2016) have provided various perspectives on the factors and causes that influence branding. However, the growing importance of brands in

marketing strategy, as well as management attention and research prospects, has been attributed to the concept of brands (Parris and Guzmán, 2023). In reality, a brand's strength determines its ability to develop a devoted customer base (Da Rocha, 2012; Hamadneh et al., 2021; Parris and Guzmán, 2023). Moreover, it represents the current value of the advantages of future ownership as an economic brand asset. (Hamadneh et al., 2021; Sinclair and Keller, 2014).

Assessing brand strength may assist managers in creating reliable benchmarking tools. Based on the idea that a strong brand is more dependable for future revenue with less risk, a brand strength model is used to calculate a brand's worth (Da Rocha, 2012; Parris and Guzmán, 2023). Personality, image, reputation, and trust are useful metrics for gauging brand perception and performance (Górska-Warsewicz, 2022). Building good customer-brand relationships is essential for strengthening a brand (Górska-Warsewicz, 2022; Hamadneh et al., 2021). According to Page and Herr (2002), product design has a significant influence on brand strength, which, in turn, affects customers' opinions of the product's likeability and quality. Brand strength affects online customer reviews and OCRs, which have a cascading effect on sales (Górska-Warsewicz, 2022; Hamadneh et al., 2021; Ho-Dac et al., 2013).

To build a strong brand in B2B marketplaces around the world, business-to-business (B2B) associations rely on their corporate governance, innovation, and competence. Product and distribution perceptions influence brand strength for marketing mix tools (Parris and Guzmán, 2023). Nonetheless, brand value and customers' sentiments about a brand shape their impression of its strength (Baniyani et al., 2020). According to Parris and Guzmán (2023), brand strength is determined by consumers' perceptions of the brand, rather than its intrinsic and unchanging attributes. This is a viewpoint on the capabilities and attributes of a brand. Brand equity and brand value are two other ideas that frequently surface in the brand literature and are linked to brand strength. Some academics include Ho-Dac et al. (2013), Hamadneh et al. (2021), Górska-Warsewicz (2022), and Parris and Guzmán (2023). In essence, market leadership, brand stability, present market prospects, brand expansion opportunities, internationalisation potential, time adaptability, brand support, and legal protection are the seven factors used to evaluate brand strength (Banuyani et al., 2020; Parris and Guzmán, 2023).

2.4. Corporate shareholder value

Owing to varying viewpoints on shareholder value (SV), such as those in finance and marketing, the literature on corporate SV suggests that its metrics and methodology represent the most difficult and contentious topics (Akroush, 2011). Nevertheless, there is not enough space in this essay to go into great depth regarding SV analysis methods. Research on financial theory (Martin and Petty, 2009) and marketing (Day and Wensley, 1988; Doyle, 2000; Rust et al., 2004) provides a comprehensive analysis of these strategies. Financial theory scholars have their own take on SV, concentrating on specific financial problems and methods (Black et al., 2001). Marketing academics, on the other hand, concentrate on how marketing strategy and capabilities affect SV. Cash flow is seen as a measure of SV in marketing and finance theory literature (Doyle, 2000; Gruca and Rego, 2004; Gruca and Rego,

2005). Utilizing an integrated approach, the researcher acknowledges the importance of corporate social performance and SV for building brand strength, with an emphasis on incorporating all stakeholders and SRMS users in particular.

This study makes two conclusions. First, brand strength partially mediates the relationship between SV creation and SRMS adoption. Second, there is an inverse U-shaped link between SV and SRMS adoption because of this mediation. The firm's SV and brand equity will deteriorate if a manager prioritizes pleasing the most important stakeholders (i.e., consumers) while ignoring the other stakeholders. This strategy differs from conventional literature, which contends that adopting new technology would unquestionably improve consumer pleasure, which would then impact value creation. According to Wieteska (2016) and Ouduro et al. (2019), adaptability is a fundamental component of a successful business partnership. It helps companies respond to substantial changes in the external environment, boosts customer satisfaction, and influences various aspects of overall business performance, including market share and brand equity.

2.5. Theoretical framework and hypotheses development

To emphasize the importance and predictability of the findings, a conceptual model that incorporates the TAM, DOI theory, and CRT, also known as the information richness theory, was established for this work. MRT is a method for ranking and assessing the richness of certain communication channels such as SRMS. In 1986, Daft and Lengel developed the model. A proposition known as DOI aims to explain why and how quickly new concepts and technological advancements proliferate. In essence, Everett Rogers brought the notion to a wider audience with his 1962 book Diffusion of Innovations. According to Rogers, the process of diffusion is how an invention spreads over time between the associates of a societal scheme. Perceived ease of use and perceived utility are the dual chief elements that influence an individual's purpose to utilize new technology, according to one of the most well-known models of technology adoption, the TAM (Davis, 1989). This study assumes that the TAM components of perceived utility and perceived ease of use are closely related to content richness and personal innovativeness. To quantify the ultimate objective of SRMS adoption, the TAM has been expanded to incorporate the external elements of innovativeness and content richness.

Relevance, timeliness, and adequacy are three qualities that can be included in learning resources or CRT (Jung et al., 2009). Sufficiency, which is related to the range of information offered to consumers, is a requirement for content richness. Conversely, timeliness, sometimes known as "correctness," refers to how well users can obtain the current information (De Wulf et al., 2006; Doll and Torkzadeh, 1988). It has been claimed that outdated knowledge is not useful. Technology-derived information might, therefore, be regarded as time-critical (Eiriksdottir and Catrambone, 2011; Al-Maroof et al., 2021). The link between the type of information collected and user demands is referred to as relevance (Park et al., 2009). Al-Maroof et al. (2021) and Park et al. (2012) concentrated on the connection between perceived usefulness and content richness. When technology benefits users, it may be categorized as having high-quality content. Based on this, the following hypothesis was formulated:

H1: Relevance has a positive impact on the perceived usefulness of SRMS.

H2: Timeless has a positive impact on the perceived usefulness of SRMS.

H3: Sufficiency has a positive impact on the perceived usefulness of SRMS.

Users' willingness to adopt new technology as soon as it is developed and made accessible directly correlates with their level of personal innovativeness (INN) (Rogers, 1995). PI and perceptions of technology are closely related. Individuals with a high degree of personal inventiveness also tend to be more self-assured. Similarly, people who see technology favorably are also more likely to be highly inventive (Lewis et al., 2003; Lu et al., 2005). Users choose the technologies to use based on the aforementioned assumption. One option that a user may have that may impact how they accept technology is their level of personal inventiveness. It appears that PI is successful and directly improves consumers' acceptance or adoption of technology. This is consistent with the TAM hypothesis, which holds that perceived utility and simplicity of use positively influence an individual's capacity for innovation (Al-Maroof et al., 2021; AlMarzouqi et al., 2022; Cheng et al., 2013; Tan et al., 2014). Therefore, the following hypothesis is formulated:

H4: Personal innovativeness has a positive impact on the perceived usefulness of SRMS.

H5: Personal innovativeness has a positive impact on the perceived ease of use of SRMS.

Prior research has extensively employed the TAM to forecast technology uptake, acceptance, and intention across several domains (Davis, 1989; Al-Maroof and Salloum, 2020). More precisely, two TAM components that are thought to be directly related to the adoption of SRMS technology were the subject of the current investigation. Perceived Usefulness (PU), the first variable, is best described as consumers' attitudes regarding the potential Usefulness of the technology. The other variable gauges the extent to which users perceive the technology to be effort-free (Davis, 1989; Al-Maroof and Salloum, 2020). According to a number of studies, including Joo (2018), Han and Ji Sa (2022), and Legramante et al. (2023), a specialized business platform's Perceived Ease of Use (PEU) and PU both positively impact user satisfaction. Based on previous research, this study developed the following assumptions.

H6: Perceived usefulness of SRMS has a positive impact on SRMS user satisfaction.

H7: Perceived ease of use of SRMS has a positive impact on SRMS user satisfaction.

To further our understanding of the factors that influence SRMS adoption, this study employed an inventive and integrated research approach. Healthcare information systems (IS) have moved from Business Intelligence Systems (BIS), Transaction Processing Systems (TPS), Management Information Systems (MIS), and Decision Support Systems (DSS) to Knowledge Management Systems (KMS) (Chang et al., 2012). Because of their various settings, job domains, and operational scopes, these traditional ISs have varied properties and roles. However, the common enterprise IS framework and recent advancements in information technology show that some TPS, MIS, DSS, BIS, and KMS functions, such as Customer Relationship Management (CRM), SCM systems, and Enterprise Resource Planning (ERP) systems,

are frequently integrated into an IS to preserve a competitive advantage. According to Chang et al. (2012), this is especially true for information-intensive sectors such as the healthcare industry. To be comprehensive, the assessment of information system quality should incorporate concepts of knowledge, information, and data quality (Almarzouqi et al., 2022). Moreover, there are differences in information, knowledge, and data (Davenport and Prusak, 1998). Information is the result of analyzing the data, whereas data are a record of facts. Enabling users to find and reuse information efficiently and effectively is essential for effective information management. A multitude of components come together to generate knowledge, such as expert views, text-based information, organized experiences, values, and the integration of new information and experiences. Knowledge can be found in normal tasks, operational procedures, and organizational guidelines, in addition to the organization's document storage system. While there is disagreement among academics over what constitutes knowledge, the main topic of discussion is explicit knowledge that a computer system can store and use. According to previous IS research (Chang et al., 2012; Ariyanto et al., 2020; Saptono et al., 2023), the quality of data content, information, and knowledge in various industries has a significant impact on user satisfaction with technology. As a result, the following hypothesis was formulated:

H8: Information quality of SRMS has a positive impact on SRMS user satisfaction.

H9: Data quality of SRMS has a positive impact on SRMS user satisfaction.

H10: Knowledge quality of SRMS has a positive impact on SRMS user satisfaction.

This study was grounded in Social Exchange Theory (SET), as proposed by Ekeh in 1974. Socio-economic theory (SET) is a phenomenon that posits that the development and stability of society are achieved through cooperative exchanges between parties. This makes the case that every social connection develops as a consequence of an entity's subjective cost-benefit analysis, which includes weighing the pros and cons of various options. It also recommends that individuals calculate the total value of a relationship by subtracting its costs from its benefits. According to SET, the fulfilment of each party's self-interest drives interpersonal interaction. As a result, mutual reliance and accountability increase each party's level of pleasure. In return, healthcare organizations receive service novelty, judicious delivery, reduced hazard of non-supply, improved superiority, low-cost, sustainable and foreseeable supply, financial support, procedural support, feedback, and supplier training that add value to the supplier. In other words, improved data flows and interactions that support functioning procedures, such as collaborative investments, prediction, invention, and procurement scheduling in creative programs, can improve the performance of both suppliers and healthcare organizations. This is because SCM is essential for the superior performance of healthcare organizations. This study makes the case that suppliers in the UAE may perform better if reciprocal social interchange in the SRM is improved via efficient use of external partners' resources and competencies. Trust, collaboration, communication, commitment, and relationship standards are among SET tenets (Pratt and Dirks, 2007; Oduro et al., 2019).

An important aspect of SRM, which is thought to improve a company's performance and SRMS adoption, is trust-based relationships. There has been much

debate regarding the significance of trust in IS (Fang et al., 2023; Uzir et al., 2021). According to Uzir et al. (2021), trust is the attitude of confidence that two parties will honor their promises, even in the face of changing circumstances. Previous research (Akrout and Nagy, 2018; Zhang and Cao, 2018) has emphasized the importance of trust and how it affects interactions between customers and firms and their goods through technology. Therefore, trust is the conviction that each partner in the relationship will have the highest integrity in all their interactions with the other. Although establishing trust can be expensive, time-consuming, and challenging, it can also result in long-term, successful buyer-seller relationships, lower ex-ante and ex-post transaction costs, better information flows, increased commitment, improved customer relationships, and the elimination of unnecessary quality assurance and complex legal contracts and conditions (Al-Abdallah et al., 2014; Kim and Chai., 2017; Oduro et al., 2019; Shahzad et al., 2018; Stuart et al., 2012). Trust is a complex and multifaceted concept that influences how satisfied customers are with the technology they acquire and use (Oduro et al., 2019; Uzire et al., 2021). Previous research has examined the link between satisfaction and trust when it comes to utilizing technology as a predictor or mediator (Oduro et al., 2019; Sahin et al., 2011; Setyawan and Kussudiyarsana, 2015). According to these scholars, the link between customer satisfaction and technology adoption is strengthened when trust is present. Hence, we formulate the following hypothesis:

H11: Trust of SRMS has a positive impact on the adoption of SRMS.

Cooperation refers to working together to increase a supplier's capacity in terms of price, delivery, technology, and quality. Successful collaboration between buying companies and their suppliers can lead to sustainable competitive advantage (Stuart et al., 2012). Owing to the reliance on outside resources and the volatility of supply and demand, long-term collaboration in supply chains has been acknowledged as a critical component of supply chain interactions in the healthcare industry (Oduro et al., 2019). Research has shown that business organizations' financial performance is enhanced when buyers and suppliers work together (Khalid and Ali, 2017). Based on social exchange, the study contends that close, long-term cooperation between healthcare and suppliers increases the likelihood of timely delivery of high-quality health products, which can improve the performance of suppliers and healthcare organizations. Stated differently, the benefits that suppliers and healthcare organizations receive from working together will encourage them to implement a robust SRMS that will have an impact on their operations. This brings us to the eleventh hypothesis.

H12: Cooperation among buyers and suppliers has a positive impact on the adoption of SRMS.

When consumers' feelings about certain past experiences align with their expectations, user satisfaction results. Reactions to technology, whether favorable or unfavorable, are influenced by user satisfaction. Consumers typically favor technology that is easy to use and practical for daily use. Consumers' inner and extrinsic motives are triggered in such circumstances. Users' sense of self-efficacy and creativity dominates their expectations. Therefore, when consumers receive what they expect, they are satisfied (Bhatt 2020; Almarzouqi et al. 2022). User satisfaction can forecast technology uptake, and user expectations affect satisfaction. A user's level of

satisfaction increases with the degree to which a technology meets its expectations. User cheerfulness is the main predictor of technology usage, according to research that has shown a strong correlation between user satisfaction and the adoption and use of technology (Salloum and Shaalan, 2019; Salloum et al., 3023). Thus, this study proposes the following hypotheses in light of customer satisfaction:

H13. User satisfaction has a positive impact on SRMS adoption.

The degree to which a buyer and seller spend significantly on a relationship is referred to as adaptation, and the exchange of a particular investment constitutes adaptation (Oudro et al., 2019). In light of this, Wieteska (2016) sees adaptation as a fundamental component of every productive business partnership and assists companies in adapting to substantial environmental shifts. Almarzouqi et al. (2022) identified several aspects of adaptation such as delivery systems, value analysis, quality control, cost targeting, and product and process design. Su et al. (2008) state that adaptation is a crucial strategy for establishing enduring relationships because it shows that both parties have committed particular resources to the relationship's development, and that these investments have a significant impact on the company's supply chain operations. Academics have proposed that in circumstances where there is a significant degree of adaptation, both purchasing and supply firms would make significant efforts to maintain the connection, according to Parris and Guzmán (2023). In this manner, as the supply chain knows, the supplier adjusts to the demands of major clients, and clients or purchasing companies adjust to the capabilities of primary suppliers. Although there are few academic studies on the adaptation process in B2B relationships, adaptation is known to be the foundation for relationship benchmarking, which may improve both parties' performance (Parris and Guzmán, 2023). According to SET, suppliers and the healthcare industry demonstrate their mutual reliance by investing in one another's advantages. This may enhance both companies' success in terms of brand equity and corporate shareholder returns (Oakland et al., 2021; Parris and Guzmán, 2023).

To create shareholder value, this study adopts an integrated approach and acknowledges the importance of brand strength, including all stakeholders in general and SRMS users in particular. This study makes two conclusions. First, brand strength mediates the relationship between the adoption of SRMS and the creation of shareholder value. Second, this mediation revealed an inverse U-shaped link between shareholder value and the adoption of SRMS. Certainly, a manager who prioritizes pleasing the most important stakeholders (customers) at the expense of other stakeholders may see a decline in a firm's brand equity and shareholder value. This strategy differs from conventional literature, which contends that adopting new technology would unquestionably improve consumer pleasure, which would then impact value creation. According to Torres and Tribó (2011), there is an ideal degree of customer preference that creates value for shareholders. However, this effect becomes negative over that point. According to Wieteska (2016) and Ouduro et al. (2019), adaptability is a fundamental component of every successful business partnership. This enables companies to respond to substantial changes in the external environment, boost customer satisfaction, and influence all aspects of company performance, including market share and brand equity. Companies that behave responsibly can maintain the support of their stakeholders and gain access to important

resources that help build positive, distinctive, and strong brand associations. These factors also enhance brand knowledge and brand strength, which helps a company retain its shareholder value (Torres and Tribó, 2011). Finally, De Mortanges and Riel (2003) provided additional support for this viewpoint by assuming that brands serve as a company's asset and source of cash flows and profitability both now and in the future. Therefore, a firm's market value should reflect the brand's power, which affects shareholder value. Based on the above arguments, the research makes the following hypotheses are proposed:

H14: SRMS adoption has a positive impact on brand strength.

H15: SRMS adoption has a positive impact on corporation shareholder value.

H16: Brand strength mediates the relationship between SRMS adoption and corporation shareholder value.

2.6. Conceptual framework

Figure 1 illustrates the relationship between TAM external variables, SRMS predictors, user satisfaction, SRMS adoption, and the creation of the brand strength of UAE suppliers, which in turn affects corporate shareholder value. The TAM external variables in this study include relevance, timeliness, sufficiency, and personal innovativeness. The dimensions of the SRM that function as independent variables are perceived usefulness, perceived ease of use, information quality, data quality, knowledge quality, trust, and cooperation. In this study, through the mediating effect of the brand strength variable, it is anticipated that the SRMS variables will have a positive impact on the dependent variables of company shareholder value.

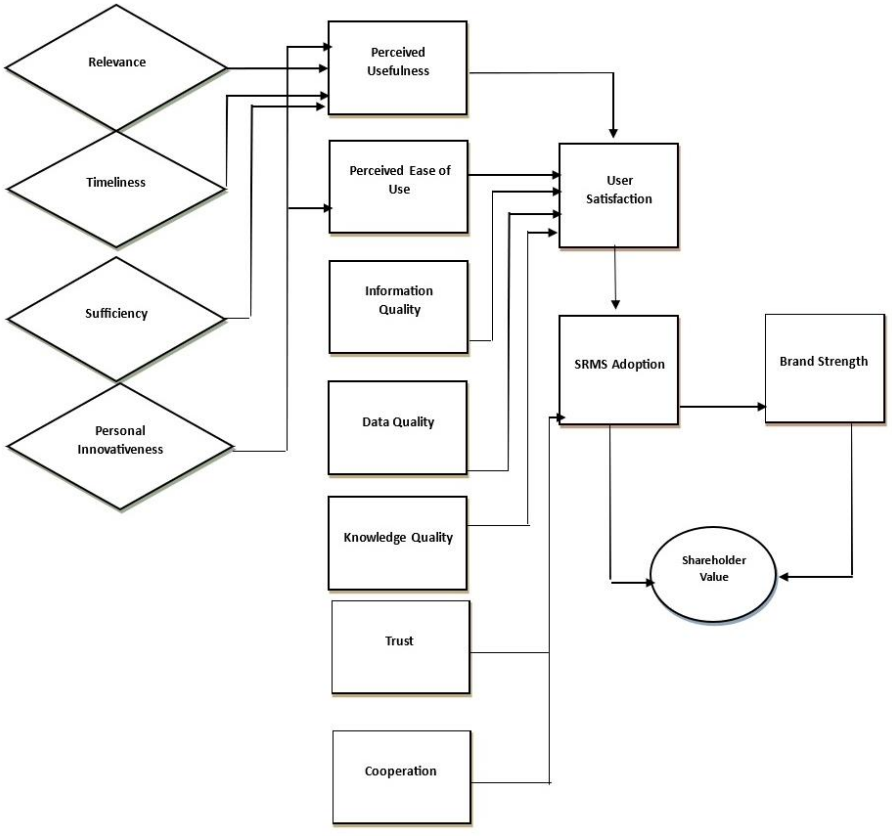


Figure 1. Conceptual model.

3. Research methodology

The value and demand for medical supplies and equipment are growing rapidly in the UAE. Strict regulations govern the level of medical supplies and equipment in the UAE to ensure the safety and quality of surgical and paramedic equipment. The UAE Ministry of Health and Prevention maintains a register of all medical equipment and pharmaceutical products (MOH, 2023). Federal law states that only registered medicines, equipment, and other pharmaceutical products can be distributed within the country. Hence, only registered products receive import permissions. Any company that wishes to trade medical equipment must also register itself with the equipment it wishes to trade with the UAE Ministry of Health and Prevention. In the UAE, two activity groups are classified under medical equipment trading: Medicine Trading (MT) and Mechanical and Engineering Equipment Trading (MEET) (MOH, 2023). Indeed, reselling certain equipment and precise medical devices to treat particular diseases and conditions is included in the trade of medical and surgical goods and requisites. It also includes devices, such as medical shoes, artificial limbs, batteries for cardiac patients, and replacement parts for damaged organs. This activity falls under the category of MT. Instruments and equipment for medicine and surgery and the resulting tools and equipment used in clinics and hospitals for X-rays, physical therapy, rehabilitation, and diagnostics is a type of trade activity. It also includes manual kits and tools for bandaging, examinations, sterilization, and surgical procedures. This activity falls within the MEET category. Overall, 845 medical supplies, medical equipment, and pharmaceutical suppliers are registered in the UAE (MOH, 2023).

To improve the variability and generalizability of the data, this study used a cross-sectional design with an explanatory survey as a deductive technique to form hypotheses (Saunders et al., 2016). Quantitative research was employed to assess the models and hypotheses for findings and generalizations (Easterby-Smith et al., 2015). The primary method of data collection used a drop-off questionnaire that was self-administered to the UAE-based healthcare suppliers. The research investigation was conducted in UAE-based healthcare supply facilities. Indeed, 787 of the 845 registered healthcare suppliers agreed to participate in this investigation, which should be sufficient for any SEM study. According to Hair et al. (2017), probability was selected as the sampling approach for this investigation, using a simple random systematic procedure. The policies of the selected healthcare suppliers also had an impact on the sampling approach selection, as did the fact that simple random sampling is a time-, money-, and resource-efficient method for accessing large samples (Easterby-Smith et al., 2015). The survey was distributed to all SCM managers, directors, and senior management personnel who were formally involved in SCM operations and had knowledge of the financial and marketing aspects of each participating company. Examples of these individuals include CEOs of central and regional medical stores, procurement managers, and marketing managers who oversee the logistics operations of companies. Subsequently, “the company” was used as the unit of analysis. It may be its SCM manager, director, or any member of senior management who is charged with overseeing SCM, marketing, and finance. The final sample comprised 602 firms. Thus, employees who are not in touch with the SRMS and do not possess adequate

knowledge of their organizational performance were not included in our sample. In essence, these people are a worthy source of information relating to SRMS practices within any supplier organization. Furthermore, many researchers have chosen the unit of analysis for this study as the target population in relation to the empirical study of SRMS (Oduro et al., 2019). The study found that 602 of the 787 questionnaires sent to healthcare suppliers were usable, yielding a response rate of 76.5 percent.

Data collection took place over four months, between November 10, 2022, and March 9, 2023. An information sheet and permission form were included on the first page of the survey. To preserve the privacy of the data, the respondents might leave at any time without explanation. Additionally, no personal identity was required. The participants in the survey received no payment of any kind for their participation. The point of the response volume is important. The number and quality of responses are the most crucial factors to consider when choosing a questionnaire dissemination strategy (Saunders et al., 2016). Comparatively speaking, drop-and-pick methods often provide a greater response rate than other methods such as mail surveys (Collis and Hussey, 2014). Nonetheless, visits by the firms were carried out to ensure that the supplier management members and the researcher were appropriately acquainted. These staff members were then given an explanation of the purpose and topic of the study by the researcher. The researcher manually distributed and collected the questionnaires while seeking assistance from some of the organizations' directors. By going to the respondents and giving them the questionnaire in person, the researcher was able to motivate them and give them faith in the study. Throughout this communication process, the researcher addressed any technical queries and clarified any issues raised by the participants. Questionnaires were left to be filled out on the days that followed in situations where managers were too busy to meet with the researcher during these visits. In essence, managers of the organizations were notified that each department had a secret box ready for participants to place their filled-out surveys. In order to promote participation and remind respondents to complete their surveys, phone calls were also made to managers and supervisors of participating organizations whenever feasible.

In this study, the primary tool used to gather data was a structured questionnaire. De Wulf et al. (2006) and Mun et al. (2006) served as the basis for the relevance, timeliness, sufficiency, and personal innovativeness dimension scales of the TAM external factors. These included relevance (three items), timeliness (two items), sufficiency (two items), and personal innovativeness (two items). The SRMS elements were taken and adjusted from DeLone and McLean (2016), Fynes et al. (2004), Woo and Ennew (2004), Su et al. (2008), Huang et al. (2012), Shahzad et al. (2018), and Oduro et al. (2019), PU (three items), PEU (three items), information quality (five items), data quality (six items), knowledge quality (three items), trust (four items), and cooperation (five items). The user satisfaction construct was adapted from Almarzouqi et al. (2022) and included three items. The SRMS adoption measurement scale was taken and adjusted from Davis et al. (1989) and Rai and Selnes (2019) and includes three items. The aforementioned constructions were evaluated using a 5-point Likert-type scale, where 1 indicated "strongly disagree" and 5 indicated "strongly agree."

Jia and Zhang (2013) developed a market strength model that includes brand history (two items), brand status (three items), and brand prospects (two items) as a

way to measure brand strength. The constructs stated above were measured using a 5-point Likert-type scale, where 1 meant "strongly disagree" and 5 meant "strongly agree." the variables used in the empirical analysis are defined in **Table 1**. Corporate shareholder value was the primary dependent variable. In this study, Tobin's q is used to calculate shareholder value. This ratio mostly dates back to Tobin's (1969) and Peasnell's (1981, 1996) original research. Ohlson and Juettner-Nauroth (2005) and Ohlson (1995) have reignited interest in this crucial metric. The ratio of market value (MV) to book value (BV) is known as market value added (MVA) or MV/BV. This may be computed by merely examining the company's historical accounting costs, accounting value, and market capitalization, which are ascertained in the stock market. MVA is a transparent indication of the value that management generates for company owners. The business adds value to shareholders if the ratio is higher than one. A ratio of less than one for MV/BV indicates that the company has destroyed some of the investors' money. For SV, the information came from the company's financial statements available for purchase on the UAE Stock Exchange Market for the last four years (2018–2022). For every organization that participated in the study, the average of each metric for the previous four years was determined.

Table 1. Variables definition and measurement level.

Constructs	Instrument	Measurement level	Sources
Relevance (REL)	REL 1: "SRMS offers adequate content that I need". REL 2: "SEMS has very useful information for me". REL 3: "SMRS offers relevant information for me"	Scale	De Wulf et al. (2006)
Timeliness (TIM)	TIM 1: "SRMS has up-to-date required information that I need". TIM 2: "SRMS is able to give me the information I require promptly".	Scale	
Sufficiency (SUF)	SUF 1: "SRMS has sufficient information that I need". SUF 2: "SRMS has provided me with satisfactory information whenever I need it".	Scale	
Innovativeness (INN)	INN 1: "I'm willing to use new technology whenever it emerges". INN 2: "Among my peers, I am usually the first to try out new information technologies".	Scale	Mun et al. (2006)
Usefulness (PU)	PU 1: "I believe that SRMS helps me develop my technical abilities". PU 2: "I believe that SRMS increases my motivation to consistently learn new things". PU 3: "I believe that SRMS is a reliable resource for both suppliers and customers".	Scale	Huang et al. (2012); Almarzouqi et al. (2022)
Ease of Use (EOU)	EOU 1: "I believe that SRMS is easy to use among users". EOU 2: "I would find the SRMS flexible to interact with". EOU 3: "It would be easy for me to become skilful at using the SRMS".	Scale	

Table 1. (*Continued*).

Constructs	Instrument	Measurement level	Sources
information Quality	IK 1: "The output of SRMS is detailed enough". IK 2: "The output of SRMS is trustable". IK 3: "The output of SRMS is accurate". IK 4: "The output of SRMS is easy-to-read". IK 5: "The output of SRMS can be provided in time when users need it".	Scale	Chang et al. (2012); DeLone and McLean (2016)
Data Quality	DQ 1: "Data records in SRMS are correct". DQ 2: "Data records in SRMS are timely". DQ 3: "Consistency exists between pertaining data records in SRMS". DQ 4: "Data records in SRMS are not missing". DQ 5: "Definition of data structure and input control matches the acknowledged standards and guidelines of SRMS". DQ 6: "Data structure and input control are proper".	Scale	
knowledge Quality	KQ 1: "SRMS is beneficial to learning new knowledge". KQ 2: "SRMS is beneficial to researching or inventing useful knowledge". KQ 3: "SRMS is beneficial to applying knowledge to works".	Scale	
Trust	TR1: "We are confident in our SRMS dependability". TR2: "We believe that we can rely on our SRMS to assist us". TR3: "We feel that we can trust our key SRMS completely". TR4: "Our SRMS have a high level of veracity".	Scale	
Cooperation	CO1: "We work closely with our main vendors on SRMS process design". CO2: "We work closely with our vendors on their SRMS delivery systems". CO3: "We work closely with our SRMS vendors on procurement planning and forecasting.". CO4: "Our SRMS vendors are able to handle our problems immediately". CO5: "Our SRMS vendors are collaborative in resolving conflicts with us".	Scale	Oduro et al. (2019)
User Satisfaction (SAT)	SAT 1: "With SRMS, I have had positive experiences". SAT 2: "A SRMS will satisfy all my needs". SAT 3: "Overall, I am satisfied with this company's SRMS services".	Scale	Almarzouqi et al. (2020)
SRMS Adoption (ADP)	ADP 1: "Using a SRMS is recommended within a supplier environment". ADP 2: "Using a SRMS within my context and with my peers helps me in my career". ADP 3: "Overall, I think that adopting the SRMS will increase the effectiveness of my work".	Scale	Davis et al. (1989); Rai and Selnes (2019)
Brand Strength (BS)	BS 1: "The brand's developmental path in my company is steady". BS 2: "In my company, the brand is built on advertising or technology". BS 3: "Whether the industry is mature, stable and highly competitive". BS 4: "Whether the branded product take the leading position in the industry market". BS 5: "Whether the enterprise attaches great importance to brand protection". BS 6: "Whether the brand is able to obtain sustained investment ". BS 7: "Whether the brand product can maintain a sustainable competitive advantage".	Scale	Jia and Zhang (2013)
Shareholder Value	MV/BV: "market value (MV) to book value (BV) (MV/BV) ratio. It is calculated simply by looking at the firm's historical accounting cost, or the accounting value and the MV which is determined in the stock market through its market capitalisation.".	Binary	Tobin (1969)

4. Data analysis

4.1. Suppliers' demographic information

Table 2 shows that most of the companies that participated in this study are located in Dubai (44%). Furthermore, it reveals that supplier companies vary fairly evenly in size and have rather long SRMS utilization. More than half of the suppliers (57%) are considered large in terms of size, and most (85%) have been utilizing the SRMS system for more than a year. Concerning the respondents' position, **Table 2** indicates that two-thirds of them (64%) were SCM managers.

Table 2. Suppliers' demographic information.

Criterion	Factor	Frequency	Percentage (%)
Emirate	Abu Dhabi	162	26.9
	Dubai	264	43.9
	Sharjah	92	15.3
	Ajman	45	7.5
	Umm Al Quwain	13	2.2
	Fujairah	9	1.5
	Ras Al-Khaimah	17	2.7
Company size	Small	179	29.7
	Meduim	342	56.8
	Large	81	13.5
Respondent's position	Logistics manager	109	18.1
	Marketing manager	19	3.2
	Procurement Manager	88	14.6
	SCM Manager	382	63.5
	CEO	4	0.6
	Other	0	0
SRMS utilization	Less Than 1 year	87	14.5
	1 To 5 Years	218	36.2
	More Than 5 Years	297	49.3
Total		**602**	**100 %**

4.2. Instrument's validity and reliability

The investigator employed a single tool to gather primary data from the vendors to verify the postulated hypothetical model. Before assessing the hypothetical model, the instrument's validity and reliability were assessed. The use of dependable and valid measurement scales served as the foundation for hypothesis testing. To assess the validity and reliability of the selected constructs in the current study, factor loading and reliability analyses were performed. Using Cronbach's alpha, component loading analysis was used to examine construct validity and internal consistency reliability. **Table 3** presents the results of factor analysis and internal consistency reliability testing. Remarkably, with the exception of the SV variable, which was tested based on

the binary level, all constructs were mostly assessed using the measurement model analysis. Cronbach's alpha was used to assess internal consistency of the items. According to Churchill and Brown (2014), an instrument is considered consistent if its components exhibit strong correlation with one another. This means that the items could assess comparable factors. Specifically, it is considered acceptable if Cronbach's alpha value is 0.60 or above, according Churchill and Brown (2014). According to Churchill and Brown (2014) criteria, the lowest acceptable dependability level of the alpha in the current investigation was 0.60 or above. Each study item underwent a separate SPSS 25.0, reliability software analysis once all the data were input into a computer. **Table 3** presents Cronbach's alpha coefficients for several study parameters. It is clear from the table that certain scales have higher dependability than the others, with reliability coefficients ranging from 0.641 to 0.892. Consequently, the tools used in this study were reliable. Indeed, whether a questionnaire properly assesses the topic under investigation in a given study is known as the questionnaire validity. Factor analysis (FA) was performed on all 51 study items using principal component analysis (PCA) as the extraction method and variance with Kaiser normalization as the rotation technique. Reducing the data into more manageable measurement units is the rationale behind applying the FA (Field, 2009). Additionally, FA aids in the identification of representative items from each variable and, in certain situations, helps create new, smaller-number variable groupings or replace the original variables (Hair et al., 2019). According to Hair et al. (2019), a correlation is deemed significant if the loadings surpass or equal to 0.50. In the current investigation, the standard cut-off point was determined at a factor loading value of 0.50 using the PCA approach. **Table 3** presents the results. With the exception of item 6 on the BS scale, the table shows that all of the items had factor loadings greater than 0.50 on all factors. As a result, Item 6 was removed from this scale. Consequently, there were six measurement items on the scale. Furthermore, the most commonly used technique for determining whether items are loaded on a single factor is the latent root criterion, also known as the eigenvalue (Hair et al., 2019). Regarding PCA, the important components were those with eigenvalues greater than 1. Any factor with an eigenvalue of less than one was considered insignificant in the current study and was thus ignored. Based on the premise that the eigenvalues should be greater than 1, factor analysis revealed that all the items on each scale in this research formed a single factor. Consequently, it can be said that the metrics used in this investigation are legitimate and dependable.

Table 3. Internal consistency, factor loading, PCA tests.

Factor	Item	FA	Eigenvalue	Variance %	Cronbach's alpha
REL	REL 1	0.732	3.619	68.429	0.688
	REL 2	0.645			
	REL 3	0.818			
TIM	TIM 1	0.591	2.144	60.592	0.641
	TIM 2	0.616			
SUF	SUF 1	0.729	2.995	61.587	0.611
	SUF 2	0.668			

Table 3. (*Continued*).

Factor	Item	FA	Eigenvalue	Variance %	Cronbach's alpha
INN	INN 1	0.548	3.029	64.228	0.649
	INN 2	0.717			
PU	PU 1	0.682	4.572	68.411	0.719
	PU 2	0.812			
	PU3	0.788			
EOU	EOU 1	0.728	3.998	67.553	0.738
	EOU 2	0.786			
	EOU 3	0.666			
IK	IK 1	0.824	6.336	71.804	0.795
	IK 2	0.799			
	IK 3	0.864			
	IK 4	0.816			
	IK 5	0.895			
DQ	DQ 1	0.658	6.990	71.902	0.881
	DQ 2	0.731			
	DQ 3	0.862			
	DQ 4	0.844			
	DQ 5	0.838			
	DQ 6	0.790			
KQ	KQ 1	0.802	4.301	61.403	0.680
	KQ 2	0.730			
	KQ 3	0.884			
TR	TR 1	0.811	5.054	64.402	0.751
	TR 2	0.707			
	TR 3	0.820			
	TR 4	0.609			
CO	CO 1	0.723	5.008	67.048	0.709
	CO 2	0.896			
	CO 3	0.765			
	CO 4	0.711			
	CO 5	0.790			
SAT	SAT	0.803	3.104	66.108	0.719
	SAT	0.587			
	SAT	0.709			
SRMS ADP	ADP 1	0.830	4.077	63.531	0.733
	ADP 2	0.748			
	ADP 3	0.821			

Table 3. (*Continued*).

Factor	Item	FA	Eigenvalue	Variance %	Cronbach's alpha
	BS 1	0.827			
	BS 2	0.882			
	BS 3	0.872			
BS	BS 4	0.799	6.197	73.661	0.892
	BS 5	0.836			
	BS 6	0.401			
	BS 7	0.833			

Construct reliability (composite and constructs) and validity (discriminate and convergent) should be considered to evaluate the measurement model. The composite reliability coefficients in **Table 4** range between 0.716 and 0.955. These coefficients also considerably exceed the 0.7 thresholds (Hair et al., 2019). Hair et al. (2019) indicate, correspondingly, the use of Dijkstra-Henseler's rho (pA) reliability coefficient to assess the construct's reliability. The pA coefficient equal to or exceeding 0.7 for exploratory studies should be considered significant (Hair et al., 2019). **Table 4** shows that pA for each measurement construct exceeds 0.70. Thus, the results in **Table 4** confirm the presence of construct reliability. The study assessed the convergent validity of each measurement using factor loading and average variance extracted (AVE). The AVE value in **Table 4** falls between 0.662 and 0.872. These values exceed the 0.5 threshold. The factor loading values exceed the 0.7 thresholds. These results also confirm the presence of convergent validity (Hair et al., 2019).

Table 4. Construct convergent validity.

Factor	CR	PA	AVE
REL	0.756	0.749	0.687
TIM	0.734	0.739	0.675
SUF	0.726	0.730	0.662
INN	0.729	0.718	0.663
PU	0.742	0.731	0.702
EOU	0.716	0.701	0.697
IK	0.823	0.817	0.808
DQ	0.955	0.940	0.834
KQ	0.768	0.779	0.723
TR	0.899	0.808	0.836
CO	0.760	0.752	0.654
SAT	0.773	0.774	0.721
SRMS adoption	0.771	0.776	0.688
BS	0.954	0.920	0.872

4.3. Structural and measurement models' fitness

This study employed SEM to evaluate the proposed theoretical model. There are two methods for estimating this model. First, the structural models and all the

measurement model routes were evaluated simultaneously. An alternative method, referred to as two-stage analysis, involves independently evaluating the trajectories of the two models. In fact, a two-stage structural equation modelling procedure is preferred by the majority of researchers (Hair et al., 2019). On the other hand, 602 supplier observations were made for this investigation. Surprisingly, these observations were insufficient to estimate the measurement and structural models simultaneously. In this respect, a two-stage analytical approach was selected for the estimation. Furthermore, the routes that link the latent constructs are discussed as the structural model and the paths that connect the latent variables and their specific indicators are known as the measurement model. Several indices were used to check the fit of the structural and measurement models. These included the standardized root mean square residual (RMSR), chi-square statistic, adjusted GFI index (AGFI), goodness-of-fit index (GFI), and normed fit index (NFI).

After looking at the fit indices, all the parameter estimates for the suggested structural model were written down, along with the levels of significance found using t-values or standard error. However, the PCA approach was used in the preceding section to estimate the parameters for the measurement model (**Table 3**). For the measurement model, the general chi-square was 106.101 with 69.0 df and a p-value less than 0.00503. If the p-value is higher than 0.050 ($p > 0.05$) or the chi-square is not significant, as stated differently, there is not much difference between the expected and actual matrix (Hair et al., 2019). Interestingly, the predicted and real matrices differed significantly for modest p-values in the model. The sample size and the number of factors being estimated are known to have an impact on the chi-square statistic. Consequently, according to Hair et al. (2017), the normed chi-square ($\chi 2$/df) test is suitable. The measuring model used in this investigation had a normed chi-square value of 1.537. This indicates that the model fit is adequate, because it falls between the recommended ranges of 1.00 and 2.00 (Hair et al., 2019). In addition to the normed chi-square, the model captured the observed data well, as shown by the fit indices (GFI = 0.91, AGFI = 0.88, and NFI = 0.87), all of which fell around the predicted level of 0.900 (Hair et al., 2019). Finally, the standardized RMSR (0.0521) suggests that there are only minor differences between the predicted and real covariance matrices (Hair et al., 2019). With 70.0 df and $p < 0.0055$, the general structural model's chi-square was 107.073. In fact, it illustrates little distinction (chi-square difference of.972, df = 1) between the measurement and structural models. The measurement model can cover all latent constructs, which indicates that the model is fit according to a comparison of conceptual and measurement models. However, the findings demonstrated no significant difference between the models, supporting this hypothesis. The measurements and other structural model fit results were almost the same: $\chi 2$/df = 1.529, GFI = 0.91, AGFI = 0.880, NFI = 0.870, and standardized RMSR = 0.0511, which met the previously mentioned standard fit requirements.

4.4. Hypotheses testing using PLS-SEM

PLS-SEM provides the estimated values of t for each coefficient in the structural model, together with the likely coefficients and standard errors. This study utilized T values to assess the level of parameter approximations for the structural model. This

hypothesis is validated if the projected route coefficient is statistically significant and exhibits the anticipated sign. One-tailed significance thresholds were used in the current study because the hypotheses accurately anticipated the way one variable would affect another. A result of p less than 0.050, indicating moderate significance, corresponds to a *t*-value > 1.6450. Conversely, a value of p less than 0.010 indicates substantial significance, whereas a value of t larger than 2.3260 is the same (Harnett and Murphy, 1985). The coefficients of the structural elements of the proposed model are listed in **Table 5**.

Table 5. Structural standardized path coefficients and model fitness.

Model relations	**Std. path coefficient**	***T* value**	**Hs. decision**
REL→PU	0.139	1.702 *	Accepted (+)
TIM→PU	0.186	1.874 *	Accepted (+)
SUF→PU	0.202	2.006 *	Accepted (+)
INN→PU	0.188	1.998 *	Accepted (+)
INN→PEU	0.214	2.105*	Accepted (+)
PU→SAT	0.267	2.905 **	Accepted (+)
PEU→SAT	0.283	3.007 **	Accepted (+)
IQ→SAT	0.275	2.873**	Accepted (+)
DQ→SAT	0.377	4.629 **	Accepted (+)
KQ→SAT	0.431	5.761 **	Accepted (+)
TR→ADP	0.376	4.411 **	Accepted (+)
CO→ADP	0.149	1.806 *	Accepted (+)
SAT→ADP	0.285	4.876 **	Accepted (+)
ADP→BS	0.521	6.778**	Accepted (+)
Structural model fit: $\chi 2$=107.073; df=70; $\chi 2$/df=1.529; GFI = 0.91; AGFI = 0.880; NFI = 0.870; RMSR= 0.0511.			

*$p < 0.05$. **$p < 0.01$.

In **Table 5**, the standardized path coefficients between REL, TIM, SUF, INN, and PU support H1, H2, H3, and H4 (β = 0.139, 0.186, 0.202, and 0.188, respectively; $p <$ 0.05). Furthermore, the fifth hypothesis H5, regarding the causal correlation between INN and PEU, was supported (β = 0.214, t = 2.105, $p < 0.05$). Concerning the relationship between PU, PEU, IQ, DQ, and KQ from one side and user satisfaction from the other side, they are all significant, based on **Table 5**. Therefore, H6, H7, H8, H9, and H10 were supported (β = 0.267, 0.283, 0.275, 0.377, 0431, $p < 0.01$), respectively. In addition, **Table 5** indicates that trust in using SRMS and cooperation have a significant impact on the adoption of SRMS; therefore, H11 and H12 are supported (β = 0.376, $p < 0.01$; and β = 0.149, $p < 0.05$), respectively. Moreover, the SEM analysis proves that user satisfaction has a significant effect on SRMS adoption. So, H13 was supported (β = 0.285, $p < 0.01$). Finally, **Table 5** strongly asserts the significant effect of SRMS adoption on the brand strength of suppliers. Consequently, H14 is supported (β = 0.521, t = 6.778; $p < 0.01$).

4.5. Mediation testing using binary logistic regression

To look into the possible good effects of BS's role as a mediator and the use of the SRMS system on SV, **Table 6** displays the outcomes of an LR study carried out with SBSS 25.0.

Table 6. Logistic regression analysis.

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	SRMS adoption	5.982	3.039	3.875	1	0.049*	0.003
	Brand strength	6.043	2.929	4.255	1	0.039*	0.002
	Mediation	1.333	.659	4.098	1	0.043*	3.793
	Constant	28.461	13.283	4.591	1	0.032	2292136982518.780

a. Variable(s) entered on step 1: SRMS Adoption, Brand Strength, Mediation.
*b. Mediation Path: ADP→BS→SV; Exp (SV)=ADP * BS; *p < 0.05. **p < 0.01.*

The researcher employed the LR coefficient to illustrate Exp (B) between the independent (SRMS ADP), mediating (BS), and dependent variables (SV) variables. Subsequently, the LR results are introduced for each path. Therefore, LR was used to test the H15 hypothesis in this part of the study, which aimed to measure the effect of SRMS adoption as an independent variable on SV as a dependent variable. **Table 6** shows that SRMS adoption had a significant positive effect on SV (Exp (B) = 0.003, $p < 0.05$). Accordingly, the results of the model analysis indicate that H15 was accepted. Thus, SRMS adoption has a significant positive effect on SV. Based on its standardized regression weight, the direct effect of SRMS adoption on SV was =0.003. **Table 6** further shows that BS had a significant positive effect on SV (Exp(B) = 0.002, $\rho < 0.05$). Based on the standardized regression weight, the direct effect of BS on SV in this study was 0.002. In addition, H16 aims to investigate the role of BS in mediating the relationship between SRMS adoption and SV. **Table 6** shows the relationship between SRMS adoption and SV, when BS is considered a mediating variable. As shown, SRMS adoption has a significant positive effect on SV when BS is added to the model (Exp(B) = 3.793, $p > 0.05$). Another interesting finding is that the SRMS adoption effect is stronger when the BS variable is added to the model (Exp(B) = 3.793) than when we only looked at the effect of SRMS adoption on SV (Exp(B) = 0.003). Therefore, H16 is accepted and BS partially mediates the relationship between SRMS adoption and SV for UAE suppliers.

4.6. Model predictive power

The model showed a very high level of accuracy in predicting the variation in how SRMS affects corporate SV, as shown in **Table 7**.

Table 7 shows that the PLS-SEM model demonstrates robust fitness at an R-squared of 0.701, indicating that 70.1% and 64.7% of the variation in PU and PUE are explained by REL, TIM, SUF, and INN, respectively. Furthermore, it indicates that 76.8% of the variation in SAT is explained by PU, PEU, IQ, DQ, and KQ. In addition, the table above revealed that 74.1% of the variation in SRMS ADP (1) was explained by TR and Co, and 83.1% of the variation in SRMS ADP (2) was explained by SAT. The table further supports that 78.2%

of the variation in BS is explained by SRMS ADP. Finally, using LR and specifically NagelKerke R-squared, the table above indicates that 79.3% of the variation in corporate SV is explained by SRMS ADP. In conclusion, the model in use has proven to have very excellent predictive power in favour of the variance pertaining to the impact of SRMS ADP on corporate SV.

Table 7. R-squared of the latent variables.

Latent variables	R-squared	PPV
PU	0.701	High
PEU	0.647	High
SAT	0.768	High
SRMS ADP*	0.741	High
SRMS ADP **	0.831	High
BS	0.782	High
NagelKerke R-squared		
SV	0.793	High
SV (When BS is added)	0.506	Medium

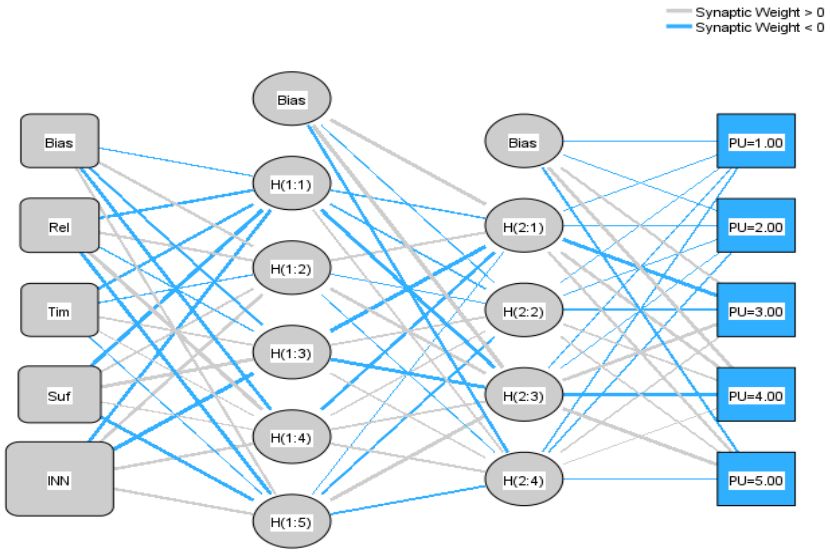
Note: (1) PP is the Predictive Power Value; (2) SRMS ADP *: PP between (TR and CO) and SRMS ADP; SRMS ADP **: PP between SAT and SRMS ADP.

4.7. Artificial neural network model analysis (ANN)

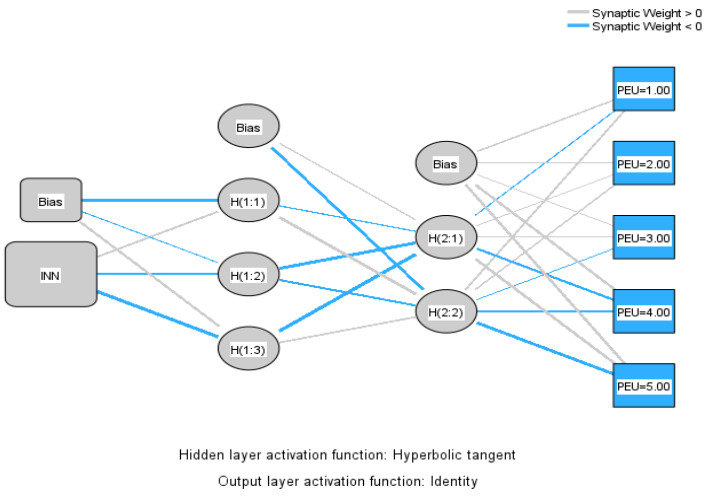
Although the PLS-SEM approach is widely accepted, there is a chance that it may cause the complexity of the calculations to be oversimplified when making decisions (Abubakar et al., 2020; Almarzouqi et al., 2022). The ANN has been widely employed in information systems recently and in healthcare, particularly with the models being taken into consideration in the artificial intelligence approach. The ANN model is utilized in this study because it performs estimations with a high degree of accuracy and is unique and superior to other modelling tools such as PLS-SEM and regression modelling approaches. In essence, because of its overall efficiency in modelling complex interactions with flexible non-linear response values, the ANN tool offers a stronger prediction capability than other traditional modelling tools (Lie´bana-Cabanillas et al., 2018; Taneja and Arora, 2019). Apart from its ability to uncover non-linear practical linkages hidden in the provided statistics, the ANN modelling approach also enables the modelling tool to apply the discovered relationships to a new set of data (Lie'bana-Cabanillas et al., 2018). In fact, this study predicts whether SRMS will be acceptable in healthcare settings and how it will affect companies' BS and SV by combining parts of the PLS package, such as PLSR, with ANN, which includes neural networks. In this study, PLS regression was used to make this method workable and to help understand how the factors are structured and how the amount of change in the predictor variable affects the responder variable. On the other hand, ANNs are utilized in modelling and simulation, as well as in assessing the correctness of research conducted in accordance with previously established protocols. In other words, ANN is employed to evaluate, supplement, and validate the PLS-SEM analysis, in addition to determining how independent factors affect the dependent variable. Considered a

parameterization tool, ANN is helpful when complex and non-linear interactions exist between the inputs and outputs.

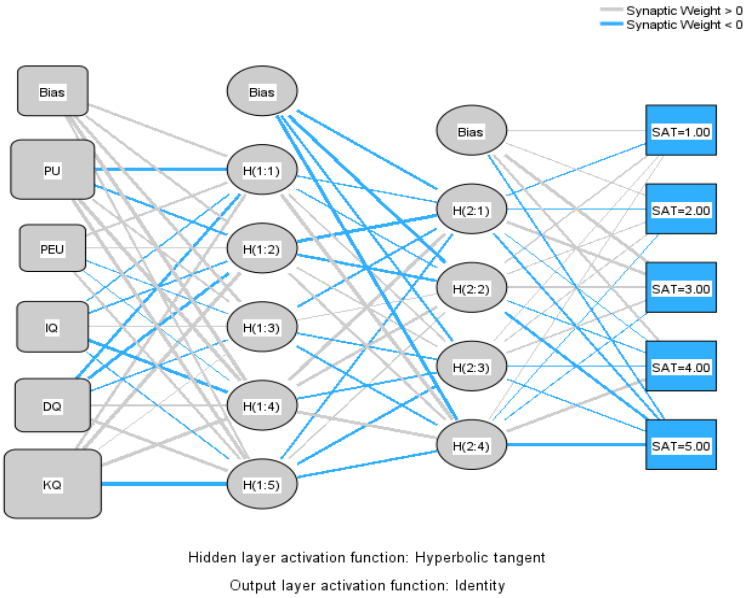
ANN analysis was performed using SPSS. In the ANN analysis, only pertinent predictors from the PLS-SEM results were considered. **Figure 2** (Network Diagrams 1–8) illustrates how the latent variables were considered in the ANN analysis. Diagram 1 includes four input neurons (REL, TIM, SUFF, and INN) and one output neuron (PU). Diagram 2 includes one input neuron (INN) and output neuron (PEU). Diagram 3 includes five input neurons (PU, PEU, IQ, DQ, and KQ) and one output neuron (SAT). Diagram 4 includes two input neurons (TR and Co) and one output neuron (SRMS-ADP). Diagram 5 includes one input neuron (SAT) and one output neuron (SRMS ADP). While diagram 6 includes one input neuron (SRMS ADP) and one output neuron (BS), diagram 7 includes one input neuron (SRMS ADP) and one output neuron (SV). Finally, Diagram 8 includes three input neurons (SRMS ADP, BS, and the mediation role of BS) and one output neuron (SV).



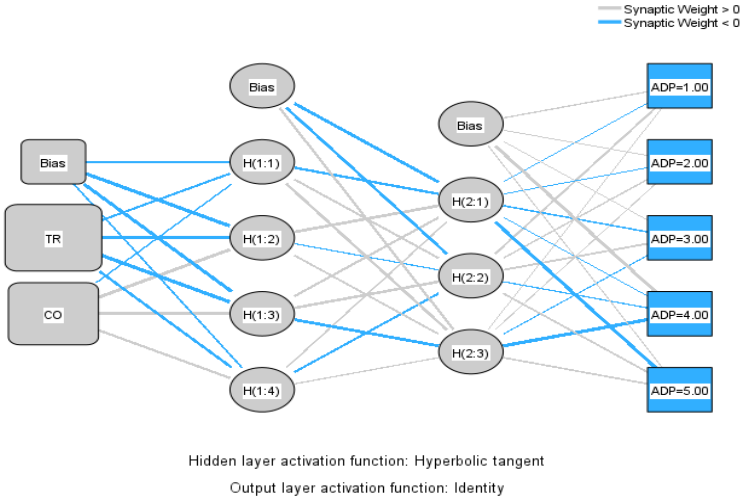
(a) ANN model network 1: (REL, TIM, SUFF, and INN) → (PU).



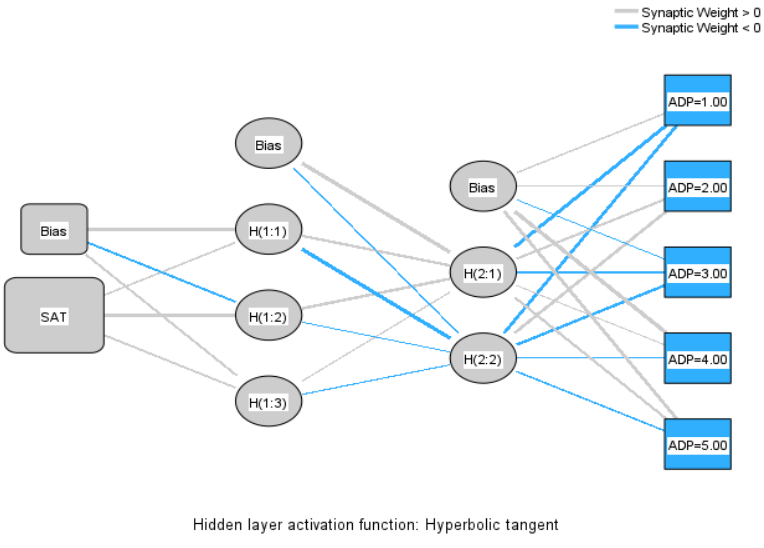
(b) ANN model network 2: INN → PEU.



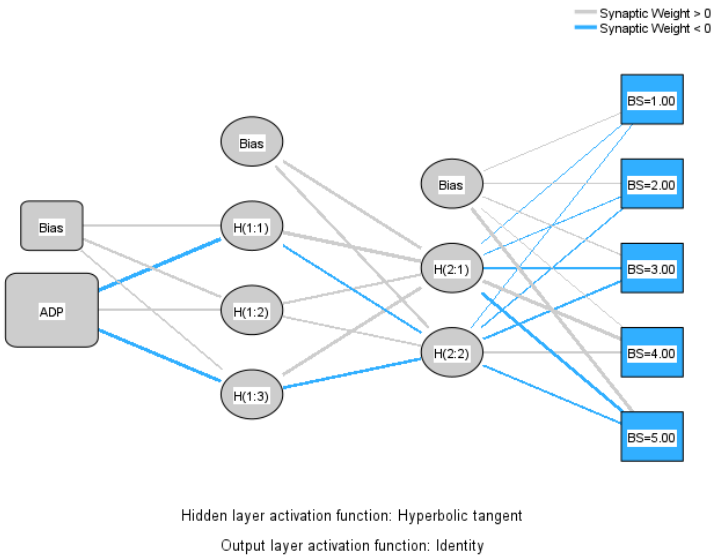
(c) ANN model network 3: (PU, PEU, IQ, DQ, KQ) → SAT.



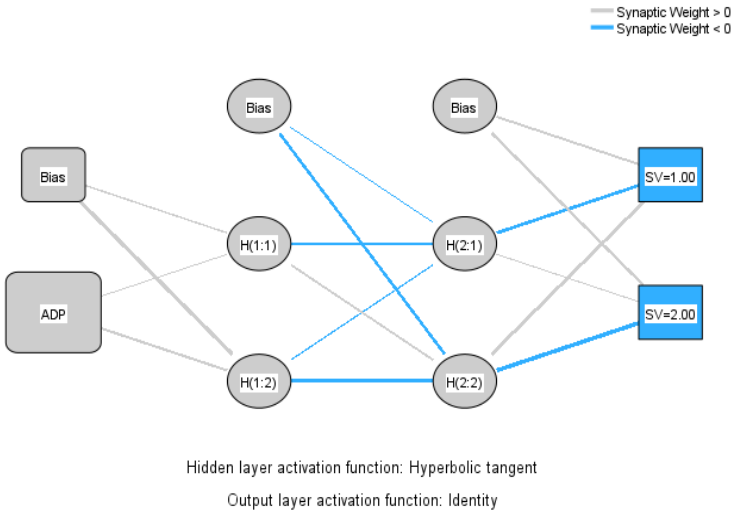
(d) ANN model network 4: (TR and CO) → SRMS ADP.



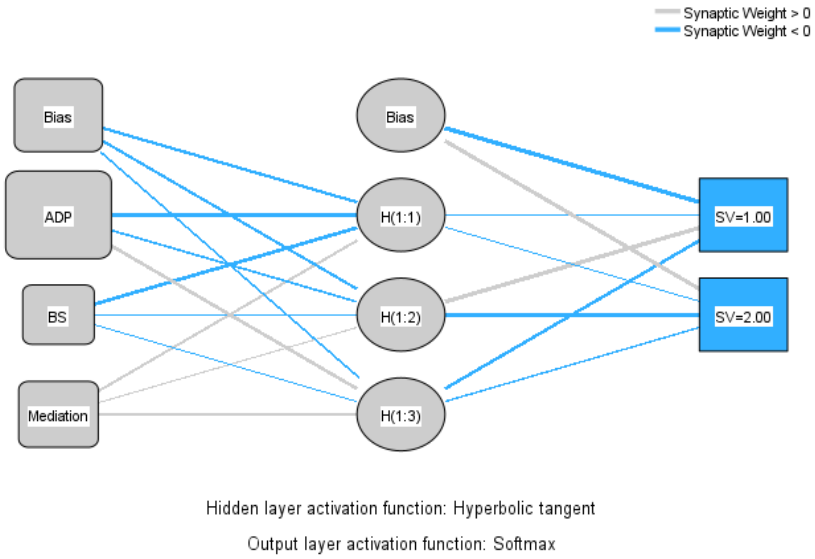
(e) ANN model network 5: SAT → SRMS ADP.



(f) ANN model network 6: SRMS ADP → BS.



(g) ANN model network 7: SRMS ADP → SV.



(h) ANN model network 8: Mediation of BS → SV.

Figure 2. ANN model network diagrams (1–8).

In this study, a two-hidden layer deep ANN architecture was employed in order to integrate all of the "output neuron nodes" and allow for deeper learning. In essence, the "sigmoid function" serves as the "activation function" for both "hidden and output neurons." To enhance the efficacy of the proposed study model, normalized between [0,1] is the spectrum for both "input and output neurons." To reduce overfitting in ANN models, tenfold cross-validation was employed using a 70:30 ratio for "training and testing data." According to Almarzouqi et al. (2022), the "Root Mean Square of Error (RMSE)" is a recommended metric for determining the accuracy of a neural network model. The comparatively small differences in the study's computed RMSE and the standard deviation of the training and testing data of 0.0068 and 0.0033, respectively, illustrate the relevance of the ANN technique's accuracy. Therefore, it can be concluded that the proposed research model achieved improved precision.

To determine normalized significance, the average of each predictor was compared to the highest mean value, represented as a percentage. **Tables 8** and **9** display the mean relevance and normalized importance of each predictor used in the ANN model. According to **Tables 8** and **9**'s "sensitivity analysis," results from **Table 8** indicate that SAT is the most significant predictor of SRMS ADP, while results from **Table 9** indicate that the mediation role played by BS is the most significant predictor of SV (mean 0626). It was also suggested to check the goodness of fit, which is similar to the R2 in PLS-SEM analysis (Leong et al., 2019; Elnagar et al., 2021). This confirms that the ANN application was correct and worked properly. Consequently, the findings showed that the predictive capacity of ANN analysis (R^2 = 87%) was noticeably higher than that of PLS-SEM (R^2 = 74.5%). These results demonstrate that endogenous constructs are better explained by the ANN technique than the PLS-SEM approach. Furthermore, the results indicate that the predictive capacity of the ANN analysis (R^2 = 79%) is noticeably higher than that of LR (NagelKerke R^2 = 50.6%) when BS is added to the model as a mediator.

Table 8. Independent variable importance of SRMS adoption.

	Importance	**Normalized importance**
Relevance	0.022	8.6%
Timeliness	0.123	48.9%
Sufficiency	0.021	8.5%
Personal innovativeness	0.050	19.9%
Perceived usefulness	0.095	37.7%
Perceived ease used	0.119	47.2%
Information quality	0.072	28.7%
Data quality	0.029	11.3%
Knowledge quality	0.051	20.3%
Trust	0.139	55.2%
Cooperation	0.026	10.3%
User satisfaction	0.252	100.0%

Table 9. Independent variable importance of SV.

	Importance	Normalized importance
SRMS adoption	0.185	29.5%
Brand strength	0.189	30.2%
Mediation effect of BS	0.626	100.0%

5. Discussion of findings

The core intention of this investigation was to evaluate the prominence of SRMS and investigate how it increases shareholder value by fortifying brand strength. In other words, the goal was to assess shareholder value with a recently implemented SRMS (using brand strength as a mediator) and identify the specific system qualities linked to SRMS adoption, which will ultimately increase strong shareholder value and brand strength. The research findings confirm the widely held hypothesis or conviction that supplier-oriented businesses greatly benefit from their orientation. In essence, active supplier engagement in generating corporate value through cost efficiency improvements, competitive product offerings, and risk sharing significantly aids the company's ability to produce new goods and gain market share. Developing partnership connections with essential suppliers to cut costs, generate new goods, and create value for both sides is one of the opportunities presented by SRMS. The second is to build on the success of strategic sources and projects. If this cooperation is founded on a dedication to working together for long-term advantages, it is possible to accomplish this. Therefore, SRMS is critical because it extends the life cycle of products, enhances their quality, spurs process innovation, and accounts for a variety of consumer demands. Additionally, the SRMS developed by the company in close cooperation with the supplier can generate long-term profits. Overall, the SRM provides businesses with a competitive edge by enabling them to pool their current resources.

The questionnaire findings revealed that REL, TIM, SUFF, and INN had positive effects on PU. Indeed, REL, TIME, and SUF are three qualities that can be included in learning resources (Jung et al., 2009). SUF, which is related to the range of information offered to consumers, is one of the requirements for content richness. On the other hand, TIME refers to how well users can obtain current information. It has been asserted that outdated information is meaningless. Technology-derived information might, therefore, be regarded as time-critical (Al-Maroof et al., 2021; Eiriksdottir and Catrambone, 2011). The link between the type of information collected and user demands is referred to as relevance (Park et al., 2009). Moreover, this study supports the claim that users' willingness to adopt new technology as soon as it is developed and made accessible directly correlates with their level of personal innovativeness. Personal innovativeness and perceptions of technology are closely related. In other words, individuals who possess a high degree of personal inventiveness tend to be more self-assured. Similarly, people who see technology favorably are also more likely to be highly inventive. However, the results of the present study clearly demonstrate the influence of REL, TIME, SUF, and INN on users' perceptions of the utility and usability of technology, which is consistent with previous

studies, such as Eiriksdottir and Catrambone (2011), Park et al. (2012), Cheng et al. (2013), Tan et al. (2014), Al-Maroof et al. (2021), and AlMarzouqi et al. (2022).

The data support the hypothesis that PU and PEU have positive impacts on SAT with SRMS. Thus, the results of this study indicate that a stronger belief in the benefits of utilizing a specific technology and a greater desire to adopt a new technology as soon as it becomes available directly contributes to a better level of user satisfaction. Previous studies that have widely used TAM to predict technology adoption, acceptability, and intention across several areas provide additional support for these findings (Al-Maroof and Salloum, 2020; Davis, 1989). More specifically, based on several studies (Han and Ji Sa, 2022; Joo, 2018; Legramante et al., 2023), the PEU and PU of a specialized business platform both have a favorable effect on user satisfaction. In addition, this study found that IQ, DQ, and KQ were significantly correlated with user satisfaction when using the SRMS. In addition, this study found that IQ, DQ, and KQ were strongly associated with user satisfaction when using SRMS. Essentially, the assessment of information system quality should incorporate the concepts of knowledge, information, and data quality. Additionally, according to previous IS research (Ariyanto et al., 2020; Chang et al., 2012; Saptono et al., 2023), the quality of data content, information, and knowledge in various industries has a significant impact on user satisfaction with technology.

The results of this study support the notion that effective collaboration and confidence in technology are essential components of SRM, and also corroborate the notion that TR and CO enhance operational connections and empower buyers and suppliers to manage complexity, thereby enhancing each other's performance. One important aspect of SRM that is thought to improve a company's performance and SRMS adoption is trust-based relationships. Previous studies (Akrout and Nagy, 2018; Zhang and Cao, 2018) have emphasized the importance of trust and how it affects interactions between customers, firms, and their goods through technology. Therefore, trust is the conviction that each partner in the relationship will have the highest integrity in all their interactions with the other. Correspondingly, previous research has examined the link between satisfaction and trust when it comes to utilizing technology as a predictor or mediator (Oduro et al., 2019; Sahin et al., 2011; Setyawan and Kussudiyarsana, 2015). According to these scholars, the link between customer satisfaction and technology adoption is strengthened when trust is present. Cooperation refers to working together to increase a supplier's capacity in terms of price, delivery, technology, and quality. Effective collaboration between buying companies and suppliers can lead to a sustainable competitive advantage (Stuart et al., 2012). Owing to the reliance on outside resources and the volatility of supply and demand, long-term collaboration in supply chains has been acknowledged as a critical component of supply chain interactions in the healthcare industry (Oduro et al., 2019). Based on social exchange, the study contends that close, long-term cooperation between healthcare and suppliers increases the likelihood of timely delivery of high-quality health products, which can improve the performance of suppliers and healthcare organizations. Stated differently, the benefits that suppliers and healthcare organizations receive from working together will encourage them to implement a robust SRMS that will have an impact on their operations.

The questionnaire survey results support the hypothesis that user satisfaction has a favorable impact on SRMS adoption. Thus, the findings of this study support the idea that a higher level of end-user satisfaction leads to a higher level of SRMS adoption. Undeniably, when technology users' feelings about certain past experiences align with their expectations, user satisfaction results. Furthermore, reactions to technology, whether favorable or unfavorable, are influenced by user satisfaction. In general, end users tend to choose a technology that is user-friendly and useful for everyday chores. In such situations, users' intrinsic and extrinsic motivations are activated. Users' ingenuity and a sense of self-efficacy drive their expectations. Customers are therefore happy when they get what they expect. In other words, user satisfaction can forecast technology uptake, and use, as expectations, affects satisfaction. In addition, a user's level of satisfaction increases with the degree to which a technology meets its expectations. The findings of this study are consistent with the current literature on technology adoption. Several studies have concluded that user satisfaction is the main predictor of technology usage (Almarzouqi et al., 2022; Bhatt et al., 2020; Salloum and Shaalan, 2019; Salloum et al., 2023).

Although the questionnaire survey results provided strong statistical support for the hypotheses that SRMS ADP had a favorable impact on BS and corporate SV, the study further validated the mediation function of BS. In other words, to create shareholder value, this study takes an integrated approach and acknowledges the importance of brand strength, including all stakeholders in general, and SRMS users in particular. This study makes two conclusions. First, brand strength mediates the relationship between the adoption of SRMS and the creation of shareholder value. Second, this mediation revealed an inverse U-shaped link between shareholder value and the adoption of SRMS. The study findings are consistent with the results obtained by Wieteska (2016) and Ouduro et al. (2019), who concluded that adaptability is a fundamental component of every successful business partnership. This enables companies to respond to substantial changes in the external environment, boost customer satisfaction, and influence all aspects of company performance, including market share and brand equity. Companies that behave responsibly can maintain the support of their stakeholders and gain access to important resources that help build positive, distinctive, and strong brand associations. These factors also enhance brand knowledge and brand strength, which helps a company retain its shareholder value (Torres and Tribó, 2011). Moreover, De Mortanges and Riel (2003) provided additional support for this viewpoint by assuming that brands serve as a company's asset and source of cash flows and profitability both now and in the future. Therefore, a firm's market value should reflect the brand's power, which affects shareholder value.

6. Theoretical and managerial implications

This work offers empirical evidence that contributes to the academic corpus of knowledge and managerial insights in a variety of ways: (First) In the context of UAE healthcare suppliers, this study is unique in that it attempts to quantify the effect of SRMS deployment on marketing brand strength and corporate share value in a methodical manner. Moreover, it contributes to research on the relationship between corporate SV and SRMS, as well as the predictors of SRMS and BS. This study

contributes to the development of theories concerning the implementation of SRMS in the UAE healthcare provider sector. In other words, the findings of this study expand the research stream on SRM and SCM. By analyzing the SRMS dimensions and corporate SV in the healthcare supplier industry in a developing economy, this study builds on earlier findings. (Second) in the context of emerging nations' healthcare systems, this study represents the first investigation into the relationship between SRMS aspects and organizational performance metrics, including corporate SV and marketing BS. In essence, the implementation of SRMS in the industrialized world's manufacturing sector has received much more attention from research than the model's use in the service sector, especially in developing nations' healthcare sectors. With the use of SET, this study makes it possible to validate the SRMS model across sectors and cultures. (Third) addition to the widely held belief that SRMS can enhance corporate SV, this study adds a new critical perspective to our understanding of the variables influencing SV throughout the implementation of the BS. All BS elements are thought to have a significant impact on SV among the suppliers in the UAE. Consequently, it provides researchers with a more comprehensive and wide-ranging understanding of these elements, which may guide the creation of more efficient and empirically supported models that specifically handle BS aspects. This study further demonstrates the significant role that BS plays in moderating the relationship between corporate SV and SRMS deployment. Current literature represents this topic. This study is the first to examine the role of mediation in the relationship between corporate social value and social responsibility management systems within the specific context of healthcare suppliers in the UAE. (Fourth) this study formulated a conceptual framework to comprehend corporate social value through SRMS implementation. This paradigm also establishes a basis for future investigations in this field. For instance, this study has the potential to be reproduced in several sectors, such as finance, education, and hospitality. (Fifth) In order to optimize the functioning of healthcare facilities and ensure the timely delivery of health products, drugs, and medicines, leaders and managers in supply chain management (SCM) should prioritize the development of a conducive work environment that fosters the promotion of strong relationships with key customers, characterized by trust and cooperation. If these aspects are fostered and effectively promoted, they will raise the standard of healthcare, lower the incidence of medical mistakes, and enhance citizens' quality of life through better access to healthcare. Suppliers and healthcare institutions should view themselves as partners in creating structures and procedures that both parties can employ. (Sixth) This study increases awareness of the significance of SRMS among healthcare suppliers' managers, which could enhance their comprehension of the advantages of adopting SRMS and the optimal strategies for its implementation. In essence, the model developed in this study provides a framework for the successful implementation of SRMS in the UAE supplier sector. Nevertheless, the constructed model could function as a framework for them, outlining the key elements that can facilitate marketing BS and business SV.

7. Limitations and further studies

Similar to previous investigations, this study possesses many constraints that must be taken into account to ascertain potential avenues for future research. This section acknowledges the limitations of the study. The constraints outlined below may limit the applicability of our research findings. (First) given the constraints of limited time and resources, this study focused exclusively on the United Arab Emirates, which is a member of the Gulf Cooperation Council. Additional empirical assessments are required to reproduce these results for diverse situations and environments. Furthermore, the data used in this investigation to evaluate the theoretical model were sourced only from healthcare suppliers, thus constraining the generalizability of the research findings. Perhaps the inclusion of suppliers and healthcare institutions such as hospitals in this study could have yielded divergent research findings. Therefore, it is advisable to conduct further research on diverse business entities. To clarify, this study examined only how suppliers in the healthcare industry perceive their relationships. However, SRMS has a more comprehensive definition that encompasses the relationships with all stakeholders. (Second) self-serving bias among the respondents may have been possible owing to the use of a survey questionnaire. To control for this issue, future studies could employ a secondary data research strategy. (Third) the main tool used in the current investigation was a survey questionnaire, which was only given to top staff to collect data. Consequently, future studies should include data triangulation techniques, such as interviews and observations of healthcare SCM managers, to lessen the subjectivity of data collection. Finally, this cross-sectional study was conducted at a certain moment in time. Therefore, while making judgements about how things have changed over time, their findings must be carefully considered. This restriction will primarily be addressed by using "a longitudinal research design," which will show evidence of varied causality over time.

8. Conclusion

Through the mediation role of BS in the UAE's healthcare suppliers, the current investigation evaluated the factors of SRMS and their effects on corporate SV, a topic that has received only passing attention in the SCM literature. The results of the study show that PU, PEU, DQ, IQ, KQ, trust, and cooperation significantly and positively impact healthcare suppliers' SRMS adoption in the UAE. Predictably, the findings further show that SRMS adoption has a significant and positive influence on the corporate SV of healthcare suppliers through the mediating role of BS. Therefore, SRMS elements, in terms of the above-mentioned factors, enhance the level of both marketing BS and corporate SV. Finally, the findings show that the predictive capacity of ANN analysis is noticeably higher than that of PLS-SEM. These results demonstrate that endogenous constructs are better explained by the ANN technique than the PLS-SEM approach.

Conflict of interest: The author declares no conflict of interest.

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