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Examining the Interlinkages among the Virtual Experiential Techniques Influencing Factors in the eCommerce Industry: An ISM and MICMAC Approach

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Abstract

Globally eCommerce potential is expanding at 55% of CAGR and accounts for 30% of global GDP growth as per the report generated by NASSCOM and Statista. On the other hand, the eCommerce industry's sustainability depends on rising consumer engagement using tailored virtual experiential techniques. Hence, this study focuses on the links among the factors that influence sustainable client engagement via virtual experiential approaches. After reviewing 44 ABDC-indexed literature and utilising the nominal group technique, a list of 19 parameters influencing virtual experiential methods was identified. The driving force-dependency quadrant graph is then built using cross-impact matrix multiplication, and the hierarchical structure of each factor is identified using the ISM soft approach. Resultantly, immersive technologies were identified as the main VET driver for generating long-term customer engagement. This study will help decision-makers create proactive plans and regulations to strengthen operational models and boost the eCommerce industry's sustainable growth.

Keywords: Interpretive structure modelling, MICMAC, sustainable competitive advantage, sustainable customer relationship, virtual experiential techniques.

1 Introduction

Before the current pandemic crisis, eCommerce adoption fell behind that of other industries. The epidemic, on the other hand, changed everything. Due to a surge in demand for contactless payments, 20 to 30% of the commercial industry's business has moved to the Internet (Vishwa Chandra, 2022). The eCommerce sector, like many other industries, has evolved tremendously since the internet's inception, and consumers from virtually every country are gaining profit from the advantages of online purchases as a result of the constant digitalization of modern life. Nearly two billion people will have made online purchases by 2020, with worldwide e-commerce revenues topping 4.2 trillion dollars (Coppola, 2021). According to recent figures, 80% of people avoid shopping in brick-and-mortar stores and malls, and 96% of people have

changed their purchasing habits (Kumar, 2022). Governments and corporations must invest more in virtual technologies as the landscape changes. The industry has been able to reinvent, adapt, and create a digitally seamless customer experience thanks to big data analytics, the Internet of Things (IoT), artificial intelligence (AI), virtual reality (VR), augmented reality (AR), 3D printing, machine learning (ML), and robotics (Hallman, 2021). By 2022, virtual reality and augmented reality are predicted to provide a $50 billion economic impact by offering advertisers an honest, realistic, and engaging experience (Hallman, 2021). Furthermore, businesses are putting a greater emphasis on making customers happy. The rise of digital technology, the supremacy and importance of valuable brands, and the omnipresence of experience and entertainment are all factors that have contributed to this post-modern shift in thinking (Schmitt, 1999). E-commerce has been hailed as a breakthrough technical invention because it provides sophisticated tools for increasing audience engagement, connecting customers, raising revenues, and improving efficiency and user experience. Persuasion marketing methods alone will not be enough to achieve this. As a result, an increasing number of researchers are working on employing immersive technology to increase client engagement (Gavilanes et al., 2018).

As a result of the above discourse, the goal of this study is to identify the components that use Virtual Experiential Techniques and analyse their interrelationships by using the ISM methodology and MICMAC analysis to create a reliable and resilient hierarchy-based model. This paper begins with a general introduction to VET before breaking it down into three sections. A literature review, Interpretive Structure Modelling (ISM), and MICMAC analysis make up the first stage.

2   RELATED WORK

The literature review was conducted in online scientific databases such as Mendeley and Google using the phrases virtual technologies, virtual experience marketing, interpretive structural modelling, and MICMAC analysis. Research articles from renowned academic publications, doctoral theses, master's theses, and working papers were used in this study. Several papers were removed from the review synthesis because they did not meet the requirements or were of insufficient quality.

2.1   Theoretical background on ISM-MICMAC

A large and growing body of literature has implemented the Interpretive Structural Modelling approach and few of them have further escalated their findings by showing the relationship among the variable by running MICMAC and fuzzy-MICMAC approaches. The studies from the past are shown in Table 1, which emphasizes the value of ISM-MICMAC in identifying the important factors that influence the problem areas in the Indian market. By combining fuzzy MICMAC and ISM, Gorane and Kant (2013) discovered Supply Chain Management enablers..

In a subsequent study, the results of the Total Interpretive Structural Model (TISM) helped implement the Flexible Manufacturing System (FMS) and identify the factors that contributed to its success in the currently volatile market, and in that study, they discovered that senior management's commitment to FMS adoption is the crucial factor(Dubey and Ali, 2014). Subsequently, in one of the types of research, the components Recognition, Unusual Work Hours, Work-Life Balance, Job Security, and Pay Policy, etc., are linked, facilitators. The driving forces and interdependencies of each of these components are significant. If appropriately applied, they can establish favourable conditions for the effective deployment of the Software Development Process (SDP), but doing so is largely dependent on other enablers, such as physical safety from a human factors perspective (Majumdar et al., 2016). In 2017, Talib and Rahman used ISM to discover that the constraints, such as insufficient investment in infrastructure growth, interference from private operators, legal and regulatory issues, a lack of maintenance culture, a lack of financial resources, and exorbitant costs, are at the bottom of the hierarchy, indicating great driving power and little dependence (Talib and Rahman, 2017). These five obstacles are therefore considered to be the most important ones for measuring the performance of telecom services because they affect all the other barriers. Later in 2018, research using ISM helps remove the particular barriers that can help women in the field of entrepreneurship overcome challenges and grow while working in MSME (Tripathi and Singh, 2018). The ISM technique is used by Sarmah and Rehman in their study from the same year to connect the many aspects of consumer involvement in service innovation (Sarmah and Rahman, 2018). The ISM approach has also used Deming's 14 quality standards in 2019 to identify contextual correlations between variables (Agrawal, 2019). Following that, in 2021, Sharma and Bumb conducted a ground-breaking study to emphasise the challenges faced while marketing in rural areas during COVID-19 to provide a preferable sequence for overcoming such challenges. The study concludes that employing the SOSTAC (Situation Analysis, Objectives, Strategy, Tactics, Action and Control) model, which was developed to alleviate the challenges present in the lower levels of the ISM model, would be useful in making the rural market a viable target sector (Sharma and Bumb, 2021). Subsequent research has also had ISM and MICMAC to discover that the pandemic-related shift to online shopping is substantially driven by a number of significant categories of enablers, including overstocking, trust, convenience, work-from-home, and referral buying (Sharma et al., 2022). Additionally, the study's use of ISM and consultation with academic experts with securities market expertise revealed that, due to high levels of volatility, carefully choosing multi-baggers could enhance wealth for all investors (Chauhan et al., 2022).

Table 1. Literature review depicts paradigm shift concerning the Indian context.

S.No.	Study	Author	Journal	Year	Keywords
1	Modelling the SCM enablers: an integrated ISM–fuzzy MICMAC approach	S.J. Gorane and Ravi Kant	Asia Pacific Journal of Marketing and Logistics	2013	Supply chain management (SCM), SCM enablers, Interpretive structural modelling (ISM), Fuzzy MICMAC
2	Identification of Flexible Manufacturing System Dimensions and Their Interrelationship Using Total Interpretive Structural Modelling and Fuzzy MICMAC Analysis	Rameshwar Dubey and Sadia Samar Ali	Global Journal of Flexible Systems Management	2014	Flexible manufacturing systems (FMS), ISM, Fuzzy MICMAC and TISM
3	Assessment of environmental factors affecting software development process using ISM MICMAC analysis	Rana Majumdar, P. K. Kapur and Sunil K. Khatri	International Journal of System Assurance, Engineering and Management	2016	Interpretive structural modelling, Impact matrix cross-reference multiplication applied to a classification, Software development process and Structural self-interaction matrix
4	Modelling the barriers of Indian telecom services using ISM and MICMAC approach	Faisal Talib Zillur Rahman	Journal of Asia Business Studies	2017	India, Barriers, Telecommunications, Information and Communication Technology and Interpretive Structure Modelling
5	Analysis of barriers to women entrepreneurship through ISM and MICMAC: A case of Indian MSMEs	Kumari Amrita Tripathi, Saumya Singh	Journal of Enterprising Communities: People and Places in the Global Economy	2018	Women entrepreneurship barriers, Indian MSMEs, Interpretive Structural Modelling and MICMAC Analysis
6	Customer co-creation in hotel service innovation: An interpretive structural modelling and MICMAC analysis approach	Bijoylaxmi Sarmah and Zillur Rahman	Benchmarking: An International Journal	2018	Service innovation, Customer Participation, Hotel Industry, ISM and India
7	Modelling Deming's quality principles to improve performance using interpretive structural modelling and MICMAC analysis	Nishant Mukesh Agrawal	International Journal of Quality & Reliability Management	2019	Total Quality Management, ISM, MICMAC Analysis and Edward Deming.
8	Marketing at the Bottom of the Pyramid: Overcoming the Challenges through MICMAC Analysis	Sangeeta Sharma Arpan Bumb	Journal of Global Marketing	2021	Rural marketing, the bottom of pyramids, challenges, COVID-19, MICMAC, ISM.
9	An ISM and MICMAC Approach for Modelling the Contributors of Multi bagger Stocks	Ajay Chauhan, Swati Gupta Sanjay Gupta	Asia Pacific Financial Markets	2022	Multi bagger stock, Indian security market, Interpretive Structural Modelling, MICMAC Analysis.
10	COVID-19 turbulence and positive shifts in online purchasing by consumers: modelling the enablers using ISM- MICMAC analysis	Meenakshi Sharma, Rupesh Kumar, Pradeep Chauhan	Journal of Global Operations and Strategic Sourcing	2022	Supply chain, MICMAC, COVID-19, Online Purchases, Changing buying behaviour, Digitization Commerce and ISM Analysis.

2.2 Experiential marketing technology implication

Experiential marketing is defined by (Pine et al., 1999) as remarkable incidents or encounters that pique the audience's interest in a personal way, such that he or she feels as if he or she is a part of them while exciting the senses and stimulating the mind, providing enough information to make an informed decision. Consumers need to know how to increase their technology usage and experiential marketing elements, especially when their purchasing habits shift from offline to online (Luo et al., 2011). Experiential marketing strategies elicit more complete internal customer responses, improving emotional and behavioural outcomes (Mainolfi and Marino, 2020). Schmitt's study was the first to propose and investigate experiential marketing, and it has since proven to be an effective communication strategy tool with a favourable impact on consumer behaviour (Kailani and Ciobotar, 2015). As a result, activities that include sensory, emotional, and cognitive elements are more likely to succeed. Because of the internet's widespread use and fierce rivalry among online shops, interactive virtual experiential marketing has emerged (VEM). In contrast to a physical experience that flows directly to the senses, VEM emphasises interfaces that act as substitutes for direct, real-world encounters (Biocca et al., 2001).

2.3 Theoretical Background of Virtual Experiential Marketing

Experiential marketing has been disputed for nearly two decades, and several researchers have analysed and researched it from a conceptual standpoint and define EM as the consumption of delight, feelings, and fantasies, which goes beyond need fulfilment or stimulus-response. The customer experience (CE), strategic experiential marketing (SEM) (Sheu et al., 2017; Ramadan, 2017; Rajaobelina et al., 2018; Shafiee et al., 2020; Bruno and Osaulenko, 2022), immersive technology (IT), experiential value (EV) (Luo et al., 2011) and (Brakus et al., 2009) virtual experiential marketing (VEM) (Luo et al., 2011), Brand image (BI) (Nasution and Sari, 2021) and their satisfaction (Rathee and Rajain, 2020), loyalty (Zhou et al., 2021), trust (Heryanto et al., 2021; Aurier and N'Goala, 2010), word of mouth (Su et al., 2016), brand equity (BE) (Bains and Dewani, 2021) are all demonstrated relationships in the extant literature on experiential marketing.

Schmitt (1999) developed the Experience Grid, which depicts the impact of Expros (Experiential Providers) on the Strategic Experiential Module Figure 1 and employs a variety of scales to assess the genuine value of experiential marketing. Since then, virtual technology has been used in experiential marketing in a variety of situations, including web-based experience and internet-based experiences (Ha and Perks, 2005; Anton et al., 2018; Garcia et al., 2019; Alfaro et al., 2009), necessitating the use of virtual technology in experiential marketing (Figure 1).
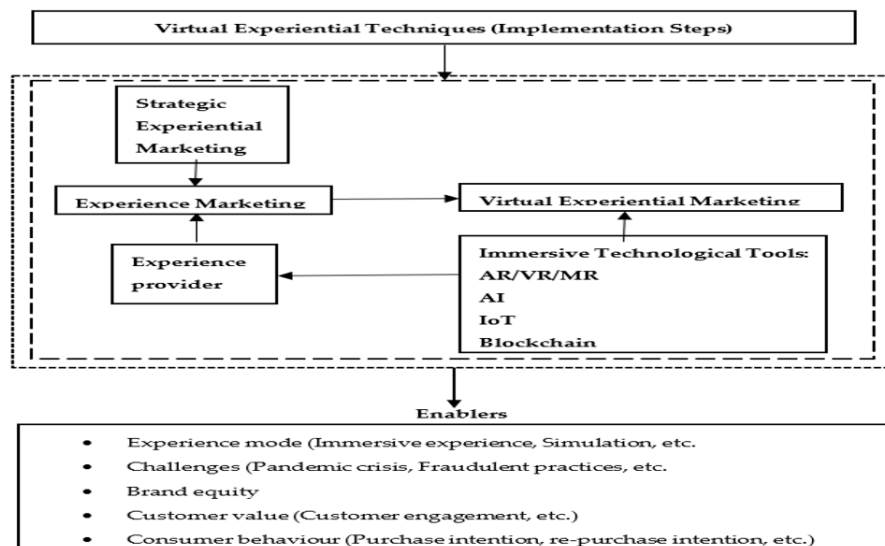
Figure 1. Source: Researcher's construct adapted from Schmitt,1999 and previous studies.

AR=Augmented Reality; VR=Virtual Reality; MR=Mixed Reality; AI=Artificial Intelligence; IoT=Internet of Things.

Virtual experience marketing (VEM) (Shou et al., 2001) is the outcome of the Internet's pervasiveness and severe rivalry among online retailers. Interpretive structural modelling (ISM) is anticipated to be useful to prune the complexity involved in the current work (Bolaños, 2005). The finest qualitative tool for creating a hierarchically based diagraph of the variable is ISM (Warfield, 1976; Farris and Sage, 1975), which validates the comprehension of linkages among numerous components. This study used a similar approach to analyse the interrelationships between the key features that simplify VET, with the following objectives in mind:

Objective 1 To identify the variables that enable virtual experiential technology.
Objective 2 To assess the relationship between identified elements of virtual experiential methodologies by using an ISM-based model.
Objective 3 To classify the discovered aspects of virtual experiential technology by Using MICMAC analysis.

3   METHODOLOGY

Many experts advocate the use of ISM to simplify the intricacy associated with the many elements through graphical depiction (Warfield, 1976; Farris and Sage, 1975). It expresses those complex difficulties as a multilevel structural model. ISM can transform ambiguous situations into ones that are clear and need to transform insufficient mental representations of systems into accurate and precise mental models of systems (Sage and Smith, 1977).

As a result, for this study, a qualitative ISM-based technique is applicable (Bolaños, 2005). ISM is an intellectual tool to learn more about VEM because it is a very new and unexplored subject. In the early stages of learning about virtual experience marketing, prior research also promoted the use of qualitative approaches (Yuan and Wu, 2008). ISM stands for Interactive Structural Modelling and it is a computer-assisted tool and interactive learning technique for building and analysing structural models. The order in the complexity of relationships between the multiple interconnected elements is depicted in structural models. To establish the dependability of the ISM approach, this study uses several sources to gather data, including a literature review and the nominal group technique (NGT) (Kirk et al., 2008; Thakkar et al., 2008).

3.1   Selection of Related Studies

Figure 2 displayed the database's origin and the overall procedure for choosing pertinent literature. A total of 15072 records were located in the initial phase (7433 of which came from Google Scholar, 4414 are from JSTOR, 3053 are from Scopus and 172 from Mendeley). 11,548 pieces of literature remained after removing non-Scopus works for the initial search screening. The number of literary works was decreased to 2111 articles preserved for further title reading after the removal of works of literature like grey literature, extended abstracts, presentations, keynotes, book chapters, non-English language papers, and inaccessible publications. Following the exclusion of metadata and short-reviewed papers, only 611 articles passed the requirements for further abstract reading. After removing non-technology references, only 73 publications were found to still meet eligibility requirements after reading the article abstract. After removing articles that were not part of the A and B categories of journals, only 44 publications were left that satisfied all inclusion criteria (Figure 2).
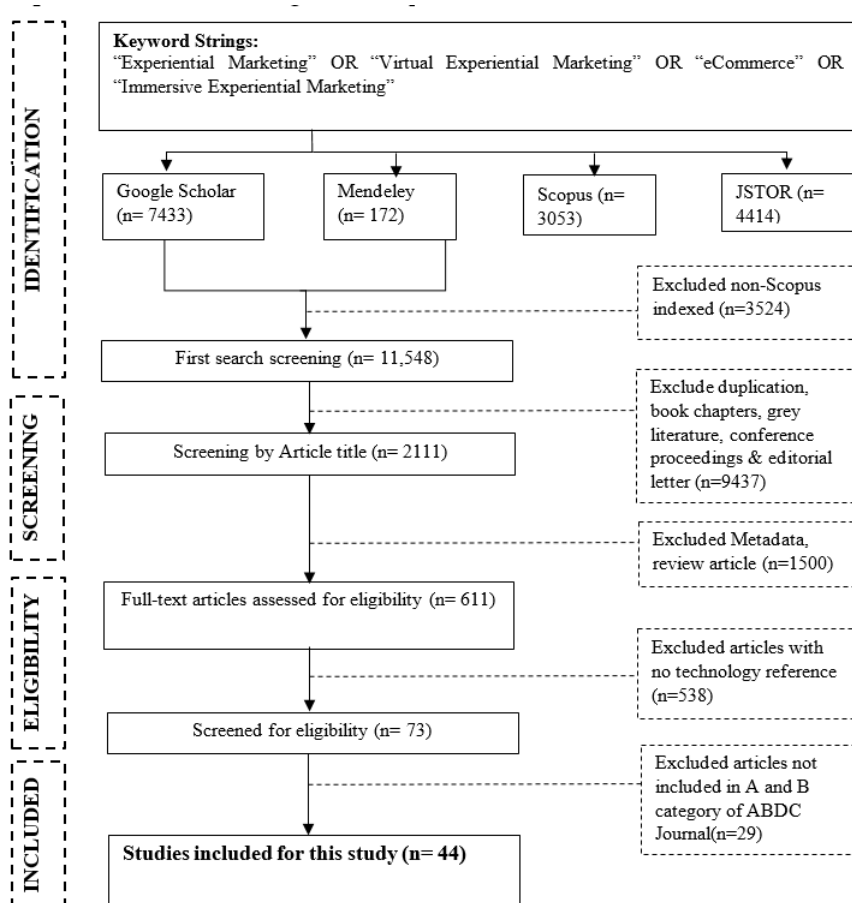
Figure 2. A flowchart showing the review process from different databases.

Source: Researchers' Construct adapted from Moher, 2009

3.2 Application of Interpretive Structure Modelling

Using readily available literature and expert information, the ISM technique Figure 3 relevant to the circumstance breaks down a complex system into several elements. After that, a transitivity-based relevant relationship is constructed between the factors. The set of identified components and contextual interactions is then utilised to generate a binary matrix termed a structural self-interaction matrix (SSIM), which is transitively checked and gives a reachability matrix (RM). The ISM structural model's level division and conical matrix are created in the final step. We'll go over how to determine VET's essential element, construct SSIM and RM, develop level partitions and a conical matrix, and create an ISM-based model in the next section.

3.3 Determine the critical factor of Virtual Experiential Marketing

This study identified a list of various VET characteristics using a relevant literature review. One list was created as a result of the nominal group technique and a thorough literature assessment. After then, the list was sent to the second group of academic specialists, who created a final VET factor list. The following parts go through how to perform a literature review and how to use the nominal group technique.

3.3.1 Stage I: A Literature Review (List I)
A detailed review of relevant and existing literature on experience marketing and virtual experiential marketing (mainly Scopus indexed, A and B categories) was conducted as part of VET. After that, 44 articles were written, and all of the keywords (strategic experiential module, virtual experiential marketing, experiential marketing, experiential value, and so on) were used to build a list of 58 criteria.

3.3.2 Stage II: Nominal Group Technique (List II)
Following that, a final list of 58 elements was handed to six academic experts (two senior marketing professors and middle-level professionals, all with more than 2.5 years of experience in their respective domains) to identify VET aspects. Following a one-week distribution period, a two-hour NGT session was convened with all six academic experts to finalise
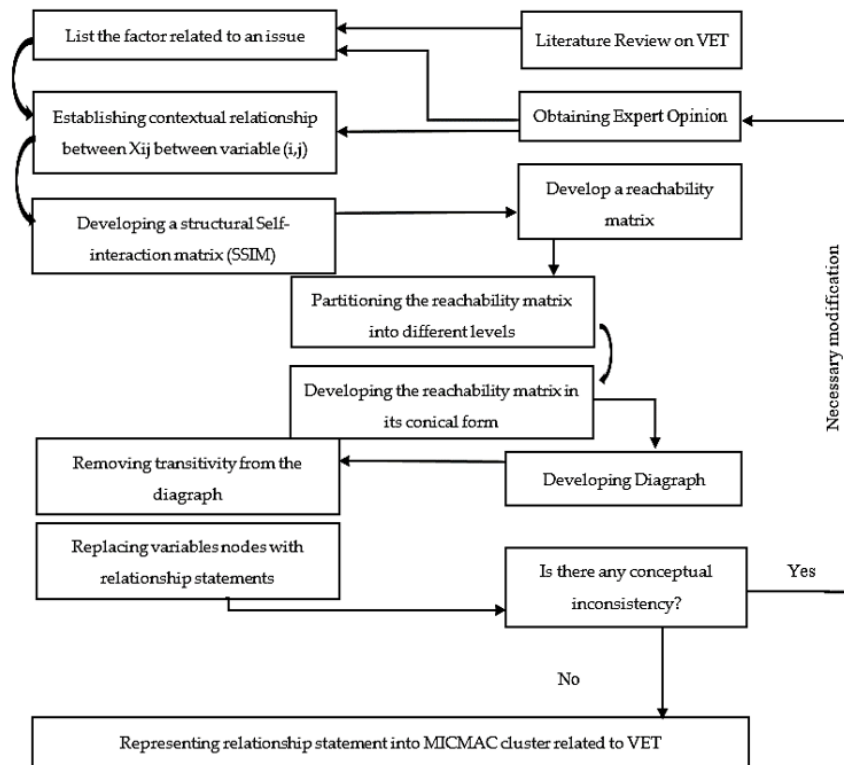
Figure 3. Flow diagram for preparing ISM.

(a) Source: Researcher's construct adapted from Kannan et al., 2009 (b)Note: ISM=Interpretive Structure Modelling; VET=Virtual Experiential Techniques; MICMAC= Matrix Impact Cross-Reference Multiplication Applied to a Classification

inter-related VET elements. Finally, the remaining 19 entries were compiled into a list (Table 2). Based on a literature review and expert opinion, the following significant VET elements (Table 2) have been identified:

Table 2. List of Identified Factors

S. No.	Acronyms	Factors
1	TM	Traditional Marketing
2	CS	Customer Satisfaction
3	L	Loyalty
4	CE	Customer Engagement
5	WOM	Word of Mouth
6	T	Trust
7	BE	Brand Equity
8	EV	Experiential Value
9	RHE	Real-time holistic experience
10	PA	Persuasive Advertisement
11	IT	Immersive Technology
12	SCR	Sustainable Customer Relationship
13	PB	Purchase Behaviour
14	EM	Experiential Marketing
15	SEM	Strategic Experiential Marketing
16	SCA	Sustainability Competitive advantage
17	FP	Fraudulent Practices
18	RANT	Resistant to Adopt New Technology
19	VEM	Virtual Experiential Marketing

1. **Traditional Marketing** Traditional marketing is a strategy that emphasises consumers as rational decision-makers and focuses on product characteristics and advantages in a small product sector with low competition (Ramirez et al., 2018).
2. **Customer Satisfaction** Satisfaction is a judgement that a product or service provides a satisfying level of consumption-related fulfilment (Alkilani et al., 2013). As a result, customer satisfaction is defined as the level of excitement or

disappointment experienced when a product's qualities or performance are compared to personal expectations.

3. Loyalty Loyalty is defined as a favourable, recurrent behaviour that favours one brand above another. Customer loyalty is a crucial marketing idea, yet there is no commonly acknowledged definition. Customer loyalty, according to some academics, is inspired by a customer's strong attachment to a single brand (Anderson and Srinivasan, 2018). Customer loyalty, according to (Kumar et al., 2010) is defined as firm agreements to repurchase or patronise goods or services in the future.

4. Customer Engagement Itrefers to the ongoing interaction between customers and enterprises. It is the process by which a client, either directly or indirectly, gives value to a company. This is in line with Li Chang in 2010, who defines direct contributions as customer purchases and indirect contributions as customer experiences, incentivized referrals, social media conversations about the brand (in the form of blogs, word-of-mouth, etc.) and customer feedback/suggestions to the firm.

5. Word of Mouth: Word of mouth has piqued the interest of marketers (WoM). The post-purchase period includes a significant amount of WoM (Garcia et al., 2019). WoM is linked to both positive and negative consumer feedback, and it has an impact on (re)purchase behaviour in other people.

6. Trust Trust and engagement have been identified as the most essential elements. Trust and engagement are two variables that contribute to good brand-consumer connections, according to a previous study. According to Berraies et al. (2020), trust is an antecedent of attachment, and attachment is related to engagement, hence trust acts as an antecedent to engagement. According to previous research, trust is a crucial component of long-term customer interactions, especially in high-risk e-banking and mobile banking scenarios (Aaker, 1996).

7. Brand Equity Like brand experience, brand equity is a multi-faceted concept (Aaker, 1992). Brand awareness is one facet of brand equity. A buyer can recognise or recall a brand's affiliation with a specific product category (Babin and Darden, 1995). Brand affiliation is the second degree of customer-based brand equity. When you think of a brand, it's whatever comes to mind. As a method of analysing customer-based brand equity, researchers are paying more attention to brand trust. It is the customer's confident expectations about the brand's perceived legitimacy and compassion in circumstances where the consumer is in danger. According to Aaker (1992), brand loyalty is one of the final pillars of customer-based brand equity.

8. Experiential Value: People develop experiential value as a result of both extrinsic and intrinsic benefits from a product (Holbrook and Schindler, 1994; Holbrook, 1982). In the context of technology use, extrinsic benefit refers to the utility of a product, or, in other words, how a technology product aids the user. Intrinsic value, on the other hand, is defined as the enjoyment of an experience for its own sake, regardless of any subsequent consequences (Lutz, 1985).

9. Real-time holistic experience: One of the most distinguishing features of experience-centred services is that they are designed to engage clients, allowing them to develop unique and lasting relationships with the service (Pine et al., 1999). The event will be more memorable if all of the senses are engaged (Schmitt, 1999). Virtual technologies are in line with providing real-time experiences and helping in analysing what consumers remember the most when they are exposed to various new instructional technologies that extrapolate from their physical surroundings when consumers are exposed to various new instructional technologies that extrapolate from their physical surroundings.

10. Persuasive Advertisement Aesthetic appeal, design, content, media support, and other indications embedded in an advertisement can all contribute to shaping customer experiences. Simple words and pictures can generate emotions, sentiments, behaviours, ideas, and images. Persuasive advertising is a potent tool for persuading individuals to change their views, attitudes, and purchasing habits (Urdea et al., 2021).

11. Immersive Technology Any technology that allows the virtual and real worlds to intersect while preserving a sense of immersion is referred to as immersive technology. Immersive measures have an emotional and sensory impact on the experience. Immersive technology research is applied in a range of situations, such as education, marketing, business, and medical care, and is executed through technologies like Virtual Reality (VR) and Augmented Reality (AR), which provide more functionality and depth than immersion (Urdea et al., 2021). The most well-known examples of immersive technology are augmented and virtual reality (AR and VR), and much research has begun to look into how these technologies might improve client experiences.

12. Sustainable Customer Relationships Customer relations refers to how businesses communicate with their customers to improve the overall customer experience, which includes long-term solutions built from best practices based on experiential qualities (Altun, 2019). A company's client retention plan must include a current, engaging, and necessary issue called sustainable customer relationship (SCR). SCR has significant potential and repercussions in the service business. SCR focuses on meeting consumers' renewing requirements, wants, and expectations in a multitude of ways to retain current customers. Furthermore, SCR techniques for fast increase the organization's profitability and market share with information technology.

13. Purchase Intention Purchase intention is the level of perceptive conviction required for an individual to repurchase particular goods/services from a given service provider in the future (Garcia et al., 2019). Intentions are the best translators of individual behaviour, according to the study, since they allow each person to examine all relevant elements that may influence their behaviour. Buying procedure refers to the strength of product preference that buyers experience between doing a purchase evaluation and making a purchase, whereas acquire intention relates to the possibility that consumers would attempt to buy a product or service. Buying behaviour is influenced by the reinforced perceived value supplied by experience marketing: the stronger the feeling toward experience marketing, the stronger the purchasing behaviour (Tsaur et al., 2007).

14. **Experiential Marketing** A company produces an experience when it consciously uses services as the stage and goods as props to engage individual customers in a way that creates a memorable event, according to the authors. Experiential marketing is a concept and method of marketing that goes beyond the traditional features-and-benefits paradigm. Experiential marketing establishes a personal and unforgettable connection between customers and businesses (Mainolfi and Marino, 2020). Experiential marketing's purpose is to create holistically integrated experiences that incorporate sense, feel, think, act, and relate traits all at once (Suh and Prophet, 2018)

15. **Strategic Experiential Marketing** Strategic experiential modules (SEMs) were first introduced as customer experience assessment items by Bernd Schmitt in 1999. Customer experience was classified into five categories: sense, feel, think, act, and relate. Each experience is evaluated in a variety of ways to create meaningful experiential modules. The modules are then used to create an experiential marketing strategy. Many organisations want to try out experiential marketing because it is so current.

16. **Sustainable Competitive Advantage** Sustainable competitive advantage (SCA) is investigated in this study because it provides the theoretical framework for the current research and validates the unintentional interactions between immersive technology (IT) and other elements that influence VET (Dehning and Stratopoulos, 2003). To build a sustainable competitive edge in this fast-changing environment, it has become a company imperative to provide consumers with fulfilling services while also surprising them by leveraging information communication technology to suit experience-oriented consumers. According to empirical research (Urdea et al., 2021), IT can improve a company's performance and competitive position. As a result, information technology (IT) has been designated as a long-term competitive advantage source.

17. **Fraudulent Practices** Fraud is morally reprehensible conduct committed to harm others. In this study, fraud will be examined from the customer's perspective while conducting online transactions (Pakaya and Tasik, 2019). To put it another way, if a buyer can have something without paying for it, they would fight for it no matter how low the product's value is leading to fraudulent actions (Mandal and Deshmukh, 1994).

18. **Resistant to adopting new technology adoption** While much of the innovation literature focuses on experiencing technology acceptance and spread, consumer pushback is common. Consumers' demographic profiles have a huge impact on whether they adopt or reject breakthrough technology like the Internet (Mandal and Deshmukh, 1994).

19. **Virtual Experiential Marketing** According to Schmitt (1999) the term virtual experiential marketing (VEM) was coined in the literature to define the virtual application of experience marketing. Virtual Experiential Marketing is a marketing strategy that encourages customers to try out your product or service digitally or virtually. Virtual world experiences must be complementary to the physical experiences provided by businesses.

The above-mentioned list was developed during the NGT session to reach a consensus on VET issues. None of the prior panels' experts was used again. All of the NGT sessions, which were held under supervision were aided by the facilitator. On a whiteboard, the facilitator typed the list of factors that the experts agreed on.

3.4 Self-Structured Interpreted Model and Reachability Matrix

The present work performed a pairwise comparison among the 19 identified VET elements. The relationship among different elements was indicated using:

- V was used to express the relationship between distinct elements from I to j, but not in both directions.
- A depicts the relationship from j to I but it is not bidirectional.
- X indicates that I and j have a bidirectional relationship.
- And the letter O indicates that items I and j are unconnected.

The process outlined above allowed for the creation of an SSIM matrix. After that, we replace V, X, A, and O with 1 and 0, resulting in the binary form Figure 4. The VAXO matrix leads to a binary matrix, which has been transitively tested. If variable A leads to variable B and variable B leads to variable C, then A is leading to C intransitivity. The transitivity procedure produces a Final Reachability Matrix Figure 5 with horizontal entries indicating driving power and vertical entries indicating enabling dependency power.

3.5 Level Partition and Conical Matrix

According to Warfield, each element will now have a reachability set and an antecedent set generated by RM (Warfield, 1976). The reachability set of a single element is made up of any other components it can reach. The elements themselves, as well as any other elements that may help you get there, make up the antecedent set. Figure 5 shows how the intersection of these two sets was calculated for all elements. If an element's reachability and intersection sets are both equal, it is considered level 1 and is awarded the highest position in the ISM hierarchy (Warfield, 1976). The element/s that make up level 1st are deleted after the first iteration and the technique is repeated with the remaining elements until the levels of each element are determined Figure 6.

The level identification approach requires six iterations to achieve the final level of the partition. As a result, the optimal ISM diagraph location may be determined by two elements with the maximum reachability and antecedent set. In the ISM Figure 6, RANT (Resistant to Adopting New Technology) and CE (Consumer Engagement) are at the top. A single element,

Elements		Virtual Experiential Marketing (19)	Resistant to Adopt New Technology (18)	Fraudulent Practices (17)	Sustainability Competitive Advantage (16)	Strategic Experiential Marketing (15)	Experiential Marketing (14)	Purchase Behaviour (13)	Sustainable Customer Relationship (12)	Immersive Technology (11)	Persuasive Advertisement (10)	Real-time Holistic Experience (9)	Experiential Value (8)	Brand Equity (7)	Trust (6)	Word of Mouth (5)	Customer Engagement (4)	Loyalty (3)	Customer Satisfaction (2)	Traditional Marketing (1)
Traditional Marketing	1	A	O	O	O	V	V	V	O	O	A	V	A	V	O	V	V	V	V	X
Customer Satisfaction	2	A	O	O	O	A	A	A	O	O	O	A	A	V	X	V	O	O	X	
Loyalty	3	A	O	O	O	A	A	A	O	O	A	A	O	V	V	A	V	X		
Customer Engagement	4	A	O	O	O	A	A	A	O	O	O	A	O	O	O	A	X			
Word of Mouth	5	A	O	O	O	A	A	X	O	O	O	A	A	V	O	X				
Trust	6	A	O	O	O	A	A	V	O	O	O	O	A	V	X					
Brand Equity	7	A	O	O	O	A	A	V	O	O	O	O	A	X						
Experiential Value	8	A	O	O	O	A	A	V	O	O	A	A	X							
Real-time holistic experience	9	V	O	O	O	V	V	V	O	O	X	X								
Persuasive Advertisement	10	V	O	O	O	V	V	V	O	O	X									
Immersive Technology	11	V	O	O	V	V	V	V	V	X										
Sustainable Customer Relationship	12	A	O	O	O	A	A	V	X											
Purchase Behaviour	13	A	O	O	O	A	A	X												
Experiential Marketing	14	X	O	O	O	X	X													
Strategic Experiential Marketing	15	X	O	O	O	X														
Sustainability Competitive Advantage	16	V	O	O	X															
Fraudulent Practices	17	A	V	X																
Resistent to adopt new technology	18	A	X																	
Virtual Experiential Marketing	19	X																		

Figure 4. Self-Structured Interpretive Matrix

Source: Researcher's construct adapted from Kannan et al., 2009

such as IT (immersive technology), was discovered at the bottom of the ISM hierarchy at the last (VIth) level. Later, the antecedent reachability set can be used to build a conical matrix to minimise the hierarchical structure's complexity. The lower triangular matrix aids in the creation of a less complex ISM model while still allowing for a clear understanding of each element's position. Figure 7 depicts the conical matrix that resulted from the level of partitioning, which ranked Immersive Technique (IM) first since it has the most driving power.

Customer involvement and aversion to embracing new technology, on the other hand, have the least driving power and the most dependency power, putting them in the seventh tier.

3.6 Interpretive Structure Model (ISM)

The interpretation of ISM must be done correctly to successfully employ ISM in the context of virtual experience approaches. To make the result less difficult and more comprehensible, a seven-layered digraph was produced using vertices and lines of edges based on the level of partition Figure 6 and the conical matrix. The following are the levels obtained in the six-layered ISM-based digraph:

Level 1 According to the outputs of the ISM-conical matrix, the sole element, immersive technology, is in the first level.
Level 2 According to the results produced following the ISM-conical matrix, the sustainable competitive advantage model plays a key role in deploying immersive technology and is on the second level.
Level 3 According to the output obtained after the ISM-conical matrix, the seven elements of virtual experiential marketing, strategic experiential marketing, experiential value, persuasive advertisement, experiential marketing, traditional marketing, and real-time holistic experience are at the third level.
Level 4 According to the outputs of the ISM-conical matrix, this level consists of only one element: a long-term client relationship.
Level 5 According to the outputs of the ISM-conical matrix, the next level consists of seven elements: customer satisfaction, trust, loyalty, word-of-mouth, brand equity, purchasing behaviour, and fraudulent behaviours.
Level 6 The final level consists of customer engagement and resistance to new technology adoption. After then, the digraph is remodelled into the final ISM model Figure 8. With the help of ISM, the final hierarchical-based VET

Elements	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Driving Power
1	1	1	1	1	1	0	1	0	1	0	0	0	1	1	1	0	0	0	0	10
2	0	1	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4
3	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4
4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5	0	0	0	1	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	4
6	0	1	1	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	5
7	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	2
8	1	1	0	1	1	1	1	1	0	0	0	0	1	0	0	0	0	0	0	8
9	0	1	1	0	1	0	0	1	1	1	0	0	1	1	1	0	0	0	1	10
10	1	0	1	0	0	0	0	1	1	1	0	0	1	1	1	0	0	0	1	9
11	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	1	7
12	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2
13	0	1	1	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	5
14	0	1	1	1	1	1	1	1	0	0	0	0	1	1	1	1	0	0	1	12
15	0	1	1	1	1	1	1	1	0	0	0	1	1	1	1	0	0	0	1	12
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
19	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	0	1	1	1	15
Dependence power	4	9	9	9	10	6	10	6	3	2	1	5	13	7	7	2	2	3	7	

Figure 5. Final Reachability Matrix

Source: Researcher's construct adapted from Kannan et al., 2009

model was created. Figure 8 shows that immersive techniques (IT) take up the most space in the model, indicating their relevance in ensuring consumer engagement toward VET.

Through sustainable competitive advantage, greater immersive technological aids in engaging consumers and inducing particular experiences in virtual space. Experiential marketing, virtual experiential marketing, strategic experiential marketing, experiential value, persuasive advertisement, real-time holistic experience, and traditional marketing all benefit from greater immersive strategies. Further, with the enhancement of multi-sensory experience, consumers develop satisfaction, trust, word-of-mouth, loyalty, brand equity, and purchasing behaviour towards sustainable customer relationships provided by the company. On contrary, with the frequent act of digitisation, older individuals may find themselves incompatible with advanced IT, which may lead to a reluctance to adopt new technology as a result of fraudulent practices (Mandal Deshmukh, 1994). Consumers will be more committed to using VET through CS, T, WOM, L, BE, and PB if SCR is improved. In conclusion, offering an immersive experience with the use of technology is a must for developing interrelationships among the many VET elements.

4 MICMAC Analysis

Multiplication of Matrix Impact Cross-Reference MICMAC is a tool used by (Tsaur, 2007) to analyse the driving and dependency power of the components that drive VET. Other aspects influence "driving variables," whereas "dependent variables" are influenced by other elements. Variable 11 (i.e., immersive technologies) has 19 driving power and 1 dependent power, as shown in Figure 9. As a result, we can claim that in the discovered hierarchical model, IT influences all 19 elements and is dependent on 1element. All elements are grouped into four clusters based on driving and dependant power as shown in Figure 9. The first category includes "autonomous variables," which are variables with low dependence and driving power. The first quadrant's parts are disconnected, with little linkages to the remainder of the system. "Dependent variables," or factors with low driving power but strong dependence power, make up the second cluster. "Linkage variables," or variables with high driving and dependent power, make up the third cluster. Because the elements in the IIIrd quadrant both influence and are influenced by others, they are extremely volatile. "Independent variables," or factors with significant driving power but moderate dependence power, make up the fourth cluster. Key factors are variables that fall into the IVth quadrant. Elements such as 11,16,1,8,9, and 10 are key elements in the IVth (i.e., independent variables) quadrant. Elements like 14, 15, and 19 falls into the IIIrd (i.e., linkage variables) quadrant and are high-volatility linking variables. Elements like 4,12,17, and 18 are classified as IInd (i.e., dependent variable). The Ist cluster (autonomous variable) contains no elements, indicating that all 19 of the mentioned elements are linked to VET.

S. No.	Elements	Reachability set	Antecedent set	Intersection set	Rank
1	Traditional Marketing	TM, EV, RHE, PA, EM, SEM, VEM	TM, EV, RHE, PA, IT, EM, SEM, SCA, VEM	TM, EV, RHE, PA, EM, SEM, VEM	IV
2	Customer Satisfaction	CS, L, WOM, T, BE, PB	TM, CS, L, WOM, T, BE, EV, RHE, PA, IT, SCR, PB, EM, SEM, SCA,	CS, L, WOM, T, BE, PB	II
3	Loyalty	CS, L, WOM, T, BE, PB	TM, CS, L, WOM, T, BE, EV, RHE, PA, IT, SCR, PB, EM, SEM, SCA,	CS, L, WOM, T, BE, PB	II
4	Customer Engagement	CE	TM, CS, L, CE, WOM, T, BE, EV, RHE, PA, IT, SCR, PB, EM, SEM,	CE	I
5	Word of Mouth	CS, L, WOM, T, BE, PB	TM, CS, L, WOM, T, BE, EV, RHE, PA, IT, SCR, PB, EM, SEM, SCA,	CS, L, WOM, T, BE, PB	II
6	Trust	CS, L, WOM, T, BE, PB	TM, CS, L, WOM, T, BE, EV, RHE, PA, IT, SCR, PB, EM, SEM, SCA,	CS, L, WOM, T, BE, PB	II
7	Brand Equity	CS, L, WOM, T, BE, PB	TM, CS, L, WOM, T, BE, EV, RHE, PA, IT, SCR, PB, EM, SEM, SCA,	CS, L, WOM, T, BE, PB	II
8	Experiential Value	TM, EV, RHE, PA, EM, SEM, VEM	TM, EV, RHE, PA, IT, EM, SEM, SCA, VEM	TM, EV, RHE, PA, EM, SEM, VEM	IV
9	Real-time holistic experience	TM, EV, RHE, PA, EM, SEM, VEM	TM, EV, RHE, PA, IT, EM, SEM, SCA, VEM	TM, EV, RHE, PA, EM, SEM, VEM	IV
10	Persuasive Advertisement	TM, EV, RHE, PA, EM, SEM, VEM	TM, EV, RHE, PA, IT, EM, SEM, SCA, VEM	TM, EV, RHE, PA, EM, SEM, VEM	IV
11	Immersive Technology	IT,	IT,	IT,	VI
12	Sustainable Customer Relationship	SCR	TM, EV, RHE, PA, IT, SCR, EM, SEM, SCA, VEM,	SCR	III
13	Purchase Behaviour	CS, L, WOM, T, BE, PB	TM, CS, L, WOM, T, BE, EV, RHE, PA, IT, SCR, PB, EM, SEM, SCA,	CS, L, WOM, T, BE, PB	II
14	Experiential Marketing	TM, EV, RHE, PA, EM, SEM, VEM	TM, EV, RHE, PA, IT, EM, SEM, SCA, VEM	TM, EV, RHE, PA, EM, SEM, VEM	IV
15	Strategic Experiential Marketing	TM, EV, RHE, PA, EM, SEM, VEM	TM, EV, RHE, PA, IT, EM, SEM, SCA, VEM	TM, EV, RHE, PA, EM, SEM, VEM	IV
16	Sustainability Competitive Advantage	SCA	IT, SCA,	SCA,	V
17	Fraudulent Practices	FP	TM, EV, RHE, PA, IT, EM, SEM, SCA, FP, VEM,	FP	II
18	Resistant to Adopt New Technology	RANT	TM, EV, RHE, PA, IT, EM, SEM, SCA, FP, RANT, VEM,	RANT	I
19	Virtual Experiential Marketing	TM, EV, RHE, PA, EM, SEM, VEM	TM, EV, RHE, PA, IT, EM, SEM, SCA, VEM	TM, EV, RHE, PA, EM, SEM, VEM	IV

Figure 6. Level Partitioning

Source: Researcher's construct adapted from Kannan et al., 2009

5 RESULT

The results of this study implicate that VET mainly depends on 19 elements. The ISM-based model visualises that the top two-level elements (i.e., Customer Engagement and Fraudulent Practices) were found to be strongly dependent on the rest of the other elements and have the weakest driving power Figure 8. The study's findings show that VET is influenced by 19 elements. Customer engagement and fraudulent practices, which are two top-level elements, were highly dependent on other elements and have little driving power. According to Luo et. al.,2011, the element of experiential marketing and customer happiness have a large and good impact on consumer engagement. Loyalty (Garcia et al., 2019) and SEM (Alkilani et al., 2013) are said to influence consumer engagement. As a result, consumer engagement is influenced by information created by brand equity, experiential marketing, and word of mouth (Nasution and Sari, 2021). Customer engagement, on the other hand, occurs after the product has been purchased and experienced (Yuan and Wu, 2008). Customer participation can mediate the relationship between customer experiences and customer engagement, as satisfaction and emotions are characteristics of customer engagement. As a result, it is assumed that not only customer engagement be integrated into strategy and aspects to promote improved customer experience but that it also leads to strong customer identification, which influences behavioural intention. Sustainable competitive advantage, virtual experiential marketing, and trust are additional factors that influence buying behaviour (Yuan and Wu, 2008; Luo et al., 2011) and leave a lasting impression on consumers' engagement. Consumers are willing to spend more, distribute WOM, and return for a better relationship with strategic experiential marketing, which has a direct impact on customer engagement (Schmitt, 1999). False marketing methods and experiential marketing, on the other hand, have a substantial impact on older people's resistance to embracing new technologies (Mandal and Deshmukh, 1994). The growth of fraudulent practices is heavily influenced by the elements described, and virtual experiential marketing, Strategic experiential marketing, experiential value, real-time holistic experience, persuasive advertisement, and traditional marketing would do well to effectively lead to resistance to new technology adoption.

S.No.	Elements	CE	RANT	CS	L	WOM	T	BE	PB	FP	SCR	TM	EV	RHE	PA	EM	SEM	VEM	SCA	IT	DrP	Rank
1	CE	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	VII
2	RANT	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	VII
3	CS	1	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	7	V
4	L	1	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	7	V
5	WOM	1	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	7	V
6	T	1	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	7	V
7	BE	1	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	7	V
8	PB	1	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	7	V
9	FP	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	IV
10	SCR	1	0	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	8	VI
11	TM	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	17	III
12	EV	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	17	III
13	RHE	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	17	III
14	PA	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	17	III
15	EM	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	17	III
16	SEM	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	17	III
17	VEM	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	17	III
18	SCA	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	18	II
19	IT	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	19	I
	DpP	17	11	16	16	16	16	16	16	10	10	9	9	9	9	9	9	9	2	1		
	Rank	I	III	II	II	II	II	II	II	IV	IV	V	V	V	V	V	V	V	VI	VII		

Figure 7. Level Partitioning

Source: Researcher's construct adapted from Kannan et al., 2009

Much recent research has backed up the importance of these criteria in building effective VET (Tsaur et al., 2007; Rathee and Rajain, 2020; Nasution and Sari, 2021). The bottom-level variable IT in our study's ISM model. In the consumer sector, immersive technology such as augmented and virtual reality is gaining attraction. Augmented and virtual reality (AR and VR) are the most well-known examples of immersive technology, and a lot of studies have begun to look into how these technologies might improve customer experiences (Alfaro et al., 2009). Immersive technology has been highlighted as a significant driver of VET and can help shape a sustainable competitive advantage. VEM, SEM, EV, PA, RHE, EM, and TM are the model's mid-level elements. The performance of these elements is influenced by the performance of the bottom-level elements. For example, immersive technology is built on customer pleasure, trust, word of mouth, and many other aspects that occupy the second stacked position in the ISM-based digraph and are wanted by customers. Strengthening these mid-level components can aid the emergence of top-level aspects, improving overall VET. As a result, companies should focus on strengthening the immersive tactics mentioned in this research. The results of the MICMAC analysis, which divided the elements into four groups, might lead to similar action plans. As a result of this research, driving, autonomous, dependent, and linked variables can be identified in Figure 9. No variable was determined to be autonomous, meaning that all elements are important. Because of their medium-level dependence and driving strength, experience marketing, strategic experiential marketing, and virtual experiential marketing elements operate as linkages between dependent and independent variables (i.e., linkage variables). Because these elements are likely to be adjusted and impacted, even minor changes in them can have an impact on other elements. Customer satisfaction, loyalty, word-of-mouth, trust, brand equity, fraudulent practices, resistance to adopting new technology, sustainable customer relationships, customer engagement, and purchase behaviour are dependent variables that are heavily reliant on elements such as traditional marketing, experiential value, real-time holistic experience, persuasive experience, immersive technology, and sustainable competitive advantage, all of which are grouped as driving variables and are referred to as key enabler variables.

6 CONCLUSION

This study aimed to determine which element influenced VET and what interrelationships existed between them. Relevant data were obtained from the literature and academic authorities to achieve this goal. The interrelationships among the listed components were determined using the ISM technique. The strategy used a hierarchical representation of VET elements to reveal the interrelationships. This method allows us to better understand the various touchpoints where good VET can help improve the experience. Fig3 depicts IT as the most important enabler of VET, as it allows people to visualise how firms are using technology to engage in environmental causes. Artificial intelligence and augmented and virtual reality have revolutionised how we interact with media, much like television did for advertising. As throughout the country malls and offline shopping hubs locked their doors, businesses are waking up to the new opportunities that come with experiential marketing. In conjunction with experiential marketing, virtual technology plays a critical part in simulating a physical world through the use of a digital or simulated world by generating a sensory environment, resulting in a sense of immersion. Virtual experiential technology encompasses all technologies that make the Internet and all of its channels available, including websites, social media, blogs, online games, mobile apps, internet ads, virtualization, artificial intelligence, bots, the Internet of things, virtual reality, augmented reality, and mixed reality, all of which provide
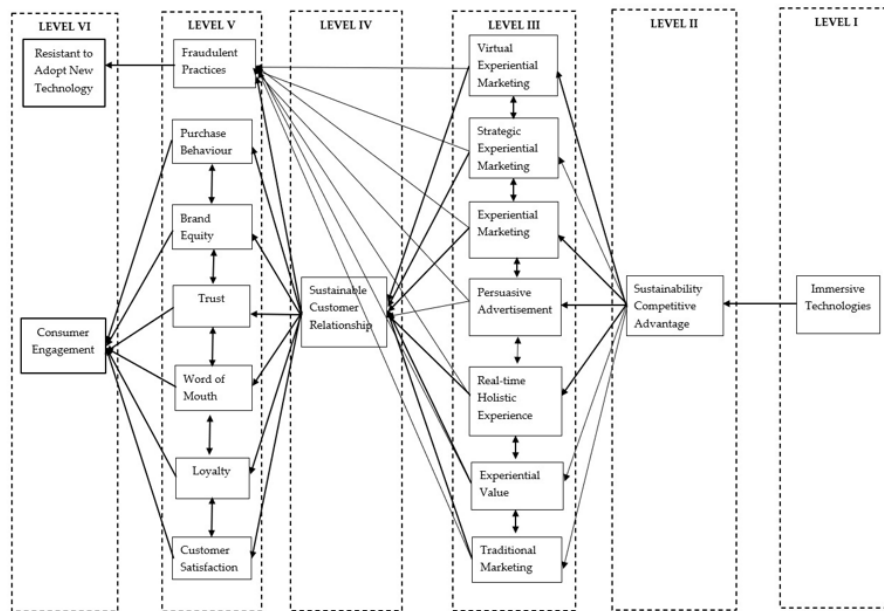
Figure 8. ISM-based diagraph of VET

Source: Researcher's construct adapted from Kannan et al., 2009

an immersive environment enhanced by visual and audio tools.

7 IMPLICATION

The results of this study offer suggestions for raising e-commerce customers' immersion levels and stimulating their level of engagement. This study makes a dual contribution. First and foremost, the creative use of ISM with MICMAC is a methodological advancement with significant benefits over previous multi-criteria decision-making techniques. Level partitioning of factors might offer a full perspective for managerial decision-making. This study's modelling of the factors that impact consumers' and e-commerce websites' decision-making demonstrates its second contribution. It reveals that immersive technology is potentially the key driver for consumer engagement in e-commerce websites, yet this variable ranked at the lowest level of the model. The model's middle level, which serves as the primary interface for the efficiency of the suggested model, is designated as the sustainable customer relationship. This strategic consideration requires managers to give it their full attention.

One of the theoretical implications of this research is to acknowledge the significance of the important elements such as a sustainable competitive advantage in developing the strategies for seven major technology-derived variables such as virtual experiential marketing, strategic experiential module, experiential marketing, persuasive advertisement, real-time holistic experience, traditional marketing, and experiential value, which undoubtedly will influence in constructing long-term competitive advantages. Virtual technological platforms are widely used today, so we don't need to determine whether they have an impact on e-commerce customers. Instead, we need to pinpoint the elements that will raise the level of customer engagement. In this context, key strategic factors driving engagement include trust, consumer satisfaction, purchasing behaviour, word-of-mouth, brand equity, and loyalty. Resistance to accepting new technologies is considered another significant strategic component in the strategy. Fraudulent online actions may actively discourage users from embracing new technology. In 1994, Mandal and Deshmukh demonstrated that older individuals have a significant tendency to resist utilising a new technology. This resistance may be attributed to a variety of factors, including apprehension about change, compatibility problems brought on by a lack of trust, satisfaction, and/or less technology efficacy. Parallelly managers must carefully use virtual technologies to avoid fraudulent behaviours. Dependent factors are important in increasing consumer engagement. Consumer engagement is influenced by sustainable customer relationships, which are mediated by six strategic factors and have the highest dependent power. This result shows that marketers must concentrate on creating an experiential environment by utilising immersive technologies while simultaneously creating a sustainable competitive advantage to get an advantage over the long term. Specifically, managers need to strategically use virtual technology to imitate the real-time experience. Consequently, developing immersive environments helps enhance online customer engagement, which in turn is a crucial requirement for businesses operating on e-commerce platforms.

The ISM provides a starting point for industry practitioners to discover how stakeholders might be brought together and managed to manage a more holistic experience. Prior research in immersive technology appears to agree that implementing relevant technologies has the potential to improve processes, enhance experiences, and improve our lives in general. The suggested framework intends to give the VEM ecosystem a more systematic approach to integrating immersive technology.
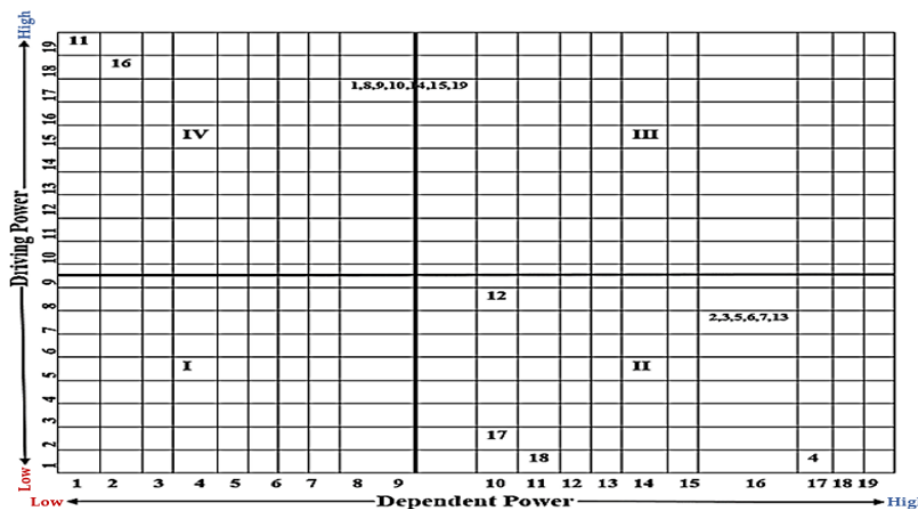
Figure 9. MICMAC

Source: Researcher's construct adapted from Kannan et al., 2009 (a) Note: See Table 1 for Variables names (I-Autonomous Variable; II- Dependent Variables; III- Linkage Variables; IV-Independent Variables)

Declaration

The manuscript has been checked and proofed for any spelling or grammatical errors. The journal requirement guidelines have been followed.

Conflict of Interest

No competing interest has been found.

Abbreviations

The following abbreviations are used in this manuscript:

Table 1

RM	Reachability Matrix	EV	Experiential Value	VEM	Virtual Experiential Marketing
SSIM	Self-Structured Interpretive Model	RHE	Real-time holistic experience	IoT	Internet of Things
MICMAC	Matrix Impact Cross–Reference Multiplication Applied to a Classification	PA	Persuasive Advertisement	AI	Artificial Intelligence
ISM	Interpretive Structure Model	IT	Immersive Technology	VR	Virtual Reality
TM	Traditional Marketing	SCR	Sustainable Customer Relationship	AR	Augmented Reality
CS	Customer Satisfaction	PB	Purchase Behaviour	MR	Mixed Reality
L	Loyalty	EM	Experiential Marketing	3D	3dimension
CE	Customer Engagement	SEM	Strategic Experiential Marketing	ML	Machine Learning
WOM	Word of Mouth	SCA	Sustainability Competitive Advantage	UPI	Unified Payment Interface BHIM: Bharat Interface of Money
T	Trust	FP	Fraudulent Practices	NGT	Nominal Group Technique
BE	Brand Equity	RANT	Resistant to Adopt New Technology		

References

Aaker, D., 1992. Managing the most important assets: Brand equity. Planning review 20, 56−58.

Aaker, D., 1996. Measuring brand equity across products and markets. California Management Review 38, 101−120.

Agrawal, N., 2019. Modelling deming's quality principles to improve performance using interpretive structural modelling and micmac analysis.

Alfaro, L., Rivera, C., Luna-Urquizo, J., F., F., 2009. A virtual reality full immersion technique for enhancing workers performance, 20 years later: a review and a reformulation. International Journal of Advanced Computer Science and Applications 10, 500−510.

Alkilani, K., Ling, K., Abzakh, A., 2013. The impact of experiential marketing and customer satisfaction on customer commitment in the world of social networks. Asian Social Science 9, 262–281.

Altun, D., 2019. The effect of virtual reality experiential marketing on purchase intent: An experimental study.

Anderson, R., Srinivasan, S., 2018. E-satisfaction and e-loyalty: A contingency framework. Psychology & Marketing 20, 123–138.

Anton, C., Camarero, C., Laguna-García, M., 2018. Experience value or satiety? the effects of the amount and variety of tourist activities on perceived experience. Journal of Travel Research 57, 920–935.

Aurier, P., N'Goala, G., 2010. The differing and mediating roles of trust and relationship commitment in service relationship maintenance and development. Revista de Gestão 38, 303–325.

Babin, B., Darden, W., 1995. Consumer self-regulation in a retail environment. Journal of Retailing 71, 47–70.

Bains, K., Dewani, P., 2021. Superseed cotton: A sales forecasting dilemma. Academy of Marketing Studies Journal 25, 1–12.

Berraies, S., Hamza, K., Chtioui, R., 2020. Distributed leadership and exploratory and exploitative innovations: Mediating roles of tacit and explicit knowledge sharing and organizational trust. Journal of Knowledge Management 25, 1287–1318.

Biocca, F., Li, H., Daugherty, T., 2001. Experiential ecommerce: Relationship of physical and social presence to consumer learning, attitudes, and decision-making. In Proceedings of the Presence, 4th Annual International Workshop on Presence in Philadelphia 1, 21–23.

Bolaños, F., 2005. Modal analysis and nonlinear normal modes (nnm) on moving assemblies of loudspeakers. In Proceedings of the VLDB 119, 1–21.

Brakus, J., Schmitt, B., Zarantonello, L., 2009. Brand experience: what is it? how is it measured? does it affect loyalty? Journal of Marketing 73, 52–68.

Bruno, R., Osaulenko, K., 2022. Firm internationalisation and corporate governance: A longitudinal study on the russian federation. In Megatrends in International Business 1, 119–156.

Chauhan, A., Gupta, S., Gupta, S., 2022. An ism and micmac approach for modelling the contributors of multi bagger stocks.

Coppola, D., 2021. E-commerce worldwide-statistics & facts. Retrieved Dec 30, 2021. URL: `https://www.statista.com/topics/871/online-shopping/#topicHeader__wrapper`.

Dehning, B., Stratopoulos, T., 2003. Determinants of a sustainable competitive advantage due to an it-enabled strategy. The journal of strategic information systems 12, 7–28.

Dubey, R., Ali, S., 2014. Identification of flexible manufacturing system dimensions and their interrelationship using total interpretive structural modelling and fuzzy micmac analysis.

Farris, D., Sage, A., 1975. On the use of interpretive structural modelling for worth assessment. Computers electrical engineering 2, 149–174.

Garcia, J., Freire, O., Santos, E., Andrade, J., 2019. Factors affecting satisfaction and loyalty to online group buying. Revista de Gestão 27, 211–228.

Gavilanes, J., Flatten, T., Brettel, M., 2018. Content strategies for digital consumer engagement in social networks: Why advertising is an antecedent of engagement. Journal of Advertising 47, 4–23.

Gorane, S.J., Kant, R., 2013. Modelling the scm enablers: an integrated ism-fuzzy micmac approach.

Ha, H., Perks, H., 2005. Effects of consumer perceptions of brand experience on the web: Brand familiarity, satisfaction and brand trust. Journal of Consumer Behaviour: An International Research Review, 4, 438–452. 4, 438–452.

Hallman, B., 2021. Technology trends shaping ecommerce in 2021. `https://blog.hubspot.com/sales/ecommerce-technology-trends`. Accessed: 2021-04-21.

Heryanto, H., Hidayati, T., Wahyuni, S., 2021. Pengaruh experiential marketing dan kualitas pelayanan terhadap kepuasan konsumendan word of mouth, syntax literate. Jurnal Ilmiah Indonesia 6, 227–229.

Holbrook, M.B. & Hirschman, E., 1982. The experiential aspects of consumption: Consumer fantasies, feelings, and fun. Journal of consumer research 9, 132–140.

Holbrook, M., Schindler, R., 1994. Age, sex, and attitude toward the past as predictors of consumers' aesthetic tastes for cultural products. Journal of Marketing Research 31, 412–422.

Kailani, C., Ciobotar, N., 2015. Experiential marketing: An efficient tool to leverage marketing communication impact on consumer behaviour. In Proceedings of the International Conference on Marketing and Business Development. Bucharest University of Economic Studies Publishing House 1, 281–287.

Kirk, J., Miller, M., Miller, M., 2008. Reliability and validity in qualitative research.

Kumar, D.V., 2022. Ecommerce in india post pandemic: Consumer behaviour & trends of 2022. `https://community.nasscom.in/communities/retail-fmcg-cpg/ecommerce-india-post-pandemic-consumer-behaviour-trends-2022-and-beyond`. Accessed: 2022-05-18.

Kumar, V., Aksoy, L., D.B., Venkatesan, R., Wiesel, T., Tillmanns, S., 2010. Undervalued or overvalued customers: Capturing total customer engagement value. Journal of service research 13, 297–310.

Luo, M., Chen, J., Ching, R., Liu, C., 2011. An examination of the effects of virtual experiential marketing on online customer intentions and loyalty. The Service Industries Journal 31, 2163–2191.

Lutz, R., 1985. Affective and cognitive antecedents of attitude toward the ad: A conceptual framework, psychological process and advertising effects. Theory, research, and application 1, 45–63.

Mainolfi, G., Marino, V., 2020. Destination beliefs, event satisfaction and post-visit product receptivity in event marketing. results from a tourism experience. Journal of business research 116, 699–710.

Majumdar, R., Kapur, P., Khatri, S., 2016. Assessment of environmental factors affecting software development process using ism & micmac analysis.

Mandal, A., Deshmukh, S., 1994. Vendor selection using interpretive structural modelling (ism). International Journal of Operations & production management 14, 52–59.

Nasution, W., Sari, D., 2021. The influence of brand image, experiential marketing and word of mouth on purchase decisions at e-commerce shopee in sidoarjo. Academia Open 4, 10–21.

Pakaya, F., Tasik, H., 2019. The impact of fraudulent marketing practices and experiential marketing on seniors resistance in adopting new technologies (in case of e-commerce). Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi 7, 13–24.

Pine, B., Pine, J., Gilmore, J., 1999. The experience economy: work is theatre & every business a stage. Harvard Business Press.

Rajaobelina, L., Lacroix, C., St-Onge, A., 2018. Does experiential advertising impact credibility. International Journal of Bank Marketing 1, 171–191.

Ramadan, Z.B. & Farah, M., 2017. The pokémonisation of the first moment of truth. International Journal of Web-Based Communities 13, 262–277.

Ramirez, F., Parra-Requena, G., Ruiz-Ortega, M., Garcia-Villaverde, P., 2018. A hybrid approach using ism and fuzzy topsis for the selection of reverse logistics providers. Journal of Business and Industrial Marketing 33, 693–705.

Rathee, R., Rajain, P., 2020. Making customers happy through experiential marketing. ICTACT Journal on Management Studies 6, 1283–1290.

Sage, A., Smith, T., 1977. On group assessment of utility and worth attributes using interpretive structural modelling. In Proceedings of the VLDB 4, 185–198.

Sarmah, B., Rahman, Z., 2018. Customer co-creation in hotel service innovation: An interpretive structural modelling and micmac analysis approach.

Schmitt, B., 1999. Experiential marketing. Journal of marketing management 15, 53–67.

Shafiee, M., Tabaeeian, R., Khoshfetrat, A., 2020. Tourist engagement and citizenship behaviour: The mediating role of relationship quality in the hotel industry. Tourism and Hospitality Research 20, 481–492.

Sharma, M., Kumar, R., Chauhan, P., 2022. Covid-19 turbulence and positive shifts in online purchasing by consumers: modelling the enablers using ism- micmac analysis.

Sharma, S., Bumb, A., 2021. Marketing at the bottom of the pyramid: Overcoming the challenges through micmac analysis.

Sheu, J., Su, Y., Chu, K., 2017. Segmenting online game customers–the perspective of experiential marketing. Expert Systems with Applications 36, 8487–8495.

Shou, L., Chionh, J., Huang, Z., Ruan, Y., Tan, K., 2001. Walking through a very large virtual environment in real-time. In Proceedings of the VLDB 1, 401–410.

Su, Y., Kuo, Y., Chang, B.e.a., 2016. The impact on the brand's value perception by experiential marketing to the attitude formation and behavioural intentions on active seniors-comparing the level of commitment. In Proceedings of the Managing Innovation and Diversity in Knowledge Society Through Turbulent Time: Proceedings of the Make Learn and TIIM Joint International Conference 1, 619–629.

Suh, A., Prophet, J., 2018. The state of immersive technology research: A literature analysis. Computers in Human Behaviour 86, 77–90.

Talib, F., Rahman, Z., 2017. Modelling the barriers of indian telecom services using ism and micmac approach.

Thakkar, J., Kanda, A., Deshmukh, S., 2008. Interpretive structural modelling (ism) of it enablers for indian manufacturing smes. Information Management and Computer Security 16, 113–136.

Tripathi, K., Singh, S., 2018. Analysis of barriers to women entrepreneurship through ism and micmac: A case of indian msmes.

Tsaur, S., Chiu, Y., Wang, C., 2007. The visitor's behavioural consequences of experiential marketing: An empirical study on taipei zoo. Journal of Travel & Tourism Marketing 21, 47–64.

Urdea, A., Constantin, C., Purcaru, I., 2021. Implementing experiential marketing in the digital age for a more sustainable customer relationship. Sustainability 13, 1865–1881.

Vishwa Chandra, P.G., 2022. The next horizon for grocery e-commerce: Beyond the pandemic bump. https://www.mckinsey.com/industries/retail/our-insights/the-next-horizon-for-grocery-ecommerce-beyond-the-pandemic-bump.

Warfield, J., 1976. Societal Systems. Planning, Policy and Complexity.

Yuan, Y., Wu, C., 2008. Relationships among experiential marketing, experiential value, and customer satisfaction. Journal of Hospitality and Tourism Research 32, 387–410.

Zhou, Q., Lim, F., Yu, H., Xu, G., Ren, X., Liu, D., Wang, X., Mai, X., Xu, H., 2021. A study on factors affecting service quality and loyalty intention in mobile banking.