A Structural Model for Adoption of Omnichannel Apparel Retailing in India

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Abstract

Omnichannel translates to an integrated sales experience that melds the advantages of physical stores with the information-rich experience of online shopping.Omnichannel customers are unifying digital with the brick-and mortar enterprises for searching information and purchasing products. This study aims to identify motivating factors or determinantsfor adoption of omnichannel retailing amongst Indian customers in the context of apparel industry. It also analyses contextual and hierarchicalinterrelationships amongst identified determinants for developing a structural (or conceptual) model for omnichannel adoption of apparel retailing(OAAR) in India. The study is based on (a) descriptive research for identifying the determinants for adoption of omnichannel retailing, and (b)Total Interpretive Structural Modelling (TISM) approach to understandthe relationship structure amongst theidentified determinants and to develop a structural model for adoption of omnichannel retailing. Based on TISM approach followed, out of various identified determinants for OAAR, it appears that the determinants: technological development, improved shopping experience and integrated supply chain are crucial ones. These determinants also form underlying basisforhabit, personalization, and social influence. Based on the proposed structural model for OAAR, it is observed that practitioner should invest more resources to have integrated supply chain and technological capabilities such as customer analytics to support cross-channel fulfillments and personalization to aid adoption of omnichannel retailing amongst Indian customers. Further, this study positions the identified determinants in "driving", "dependent" and "linkage" clusters based on the direction and intensity of their influence on other determinants using MICMAC analysis.

Keywords
E-commerce, Omnichannel Retailing, Apparel Industry, Total Interpretive Structural Modelling, MICMAC

1. Introduction
Over the last few decades, retailing has gone through paramount of transformations. Starting from early mom-pop stores to supermarkets to online shopping to now omnichannel shopping, retail has evolved as a complex interaction. Omnichannel retailing is a set of activities involved in selling merchandise or services through all widespread channels, whereby the customer can trigger full channel integration (Levy et al. 2013). In a completely omnichannel approach, all channels are used simultaneously and interchangeably (Beck and Rygl 2015). This way, the convergence of online and offline channels offers a seamless shopping experience (Chen et al. 2018), therebyenhancing the omnichannel behavior. The technological adoption by omnichannel retailers enriches customerinteractionby providing improved shopping experience (Larke et al. 2018). However, customers find it unsatisfactory when their expectations are not fulfilled because of inconsistent offerings and inefficient fulfillment (Piotrowicz and Cuthbertson 2014, Ye et al. 2018). Such unaddressed needs of customers create hinderances in the adoption of omnichannel retailing. omnichannel retailers should understand the motivating factors or determinantsto engage customers seamlessly.

Despitereflecting on the attempts of retailers in developing omnichannel aptitude and customer's acceptance of the same (Verhoef et al. 2015),the intellectual and academic foundation of omnichannel adoption is rather underdeveloped. Most of the studies are limited to the North American or European perspectives (Galipoglu et al. 2018). Also, there needs to be more focus on finding the interrelationships amongst the determinants influencing adoption of omnichannel retailing. In this context, the study seeks to answer the following research questions:

RQ1.What are the determinants that influence adoption of omnichannel amongst Indian customer in the context of apparel retailing in India?

RQ2.How are these determinants interlinked with one another?

1.1 Objective

To address the above research questions, the objective of the study is to identify and assess the determinants for omnichannel retailing adoption amongst Indian customers in the context of apparel industry with Total Interpretive Structural Modelling (TISM) approach. This study contributes to existing omnichannel literature in two ways. First, the study suggests a hierarchical structure of determinants, thereby offering insights about customers' expectations to retailers to aid successful implementation of omnichannel retailing. Secondly, the study positions determinants in "driving", "dependent" and "linkage" clusters based on the direction and intensity of their influence on other determinants. Moreover, the result of the study is expected to provide a better overall understanding of the adoption of omnichannel retailing, which is still in its nascent stage in India.

2. Literature review

2.1 Omnichannel Retailing

Omnichannel experience enables the customers to purchase merchandise and return it however, whenever and wherever they wish. Homburg et al. (2014) studied the impact of omnichannel expansions in different countries and indicated that channel expansions affect the firm value. Herhausen et al. (2015) concluded that omnichannel retailers can create a competitive advantage over purely online competitors by online and offline channel integration. Omnichannel literature presents two perspectives, that of retailer and that of a customer.

From, customer point of view, customers expect an integrated and consistent experience, in a channel agnostic way (Brynjolfsson et al. 2013). They want to interchange seamlessly across channels comprising of traditionalphysical store, internet, and mobile depending on their situation, preferences, and category of the product(Piotrowicz and Cuthbertson 2014). The omnichannel customer not just accesses the channel but is always active in several channels at once (Avery et al. 2013). This isdue to the possibilities offered by mobility and technology. These new omnichannel shoppers want to use their devices to for searching products, comparing prices, asking for references etc. during their omnichannel journey to take advantage of the specific benefits offered by different channels (Bell et al. 2014). Additionally, omnichannel customers are usually confident of the information they have and perceive themselves as being more in control of the purchase process (Rippé et al.2015).

With the surge in demand for omnichannel retailing, managers need to understand the motivating factors, that is determinants, that influence omnichannel retailing adoption (Cook 2014). Hence, following section provides a review and gives an insight in various determinants for adoption of omnichannel retailing.

2.1.1Determinantsfor Adoption of Omnichannel Retailing

Innovations based on mobile technology, e.g., smart phones and tablet devices has enabled customers to reach retailers through both offline and online channels. So, technology development is driving adoption of omnichannel amongst customers (Brynjolfsson et al. 2013, Bell et al.2014). Personalization is another driving factor for omnichannel adoption. Omnichannel retailers can offer improved product offerings and services through customer interactionsthrough multiple touchpoints and hence creating a value-added personalized shopping experience (Herhausen et al. 2015, Lewis et al. 2014). Customers are also driven to omnichannel retailing as it offers an improved shopping experience by easy access to information about product availability,quality, and price, and thus making better purchase decisions (Caoand Li 2018). The use of supporting technologies, such as QR barcode, online payment system, social media applications motivate customer's acceptance of omnichannel by providing improved shopping experience and reduced efforts (Hagberg et al. 2016, Ye et al. 2018).

Analysis of the literature indicated that the integrated supply chain becomes another important determinant(Ishfaq et al. 2016) as integrated supply chain can motivate customer adoption of omnichannel by providing efficient cross channel fulfillment and cross channel returns (Hubner et al. 2016). Integrated channel fulfillment processes *e.g.*, advanced distribution and warehouse management systems can optimize order delivery thus attracting omnichannel Customers (Ishfaq et al. 2016,Hubner et al. 2016).Enhanced Promotions play a big role in customer's adoption of omnichannel retailing. Providing transparent pricing, loyalty programs and attractive sales deals, diverse product and service bundles can drive Customer adoption of omnichannel (Avery et al. 2013).Along with improved shopping experience (Performance expectancy) and Reduced efforts (Effort expectancy), Hedonistic motivationand social influence also plays a role in customer's adoption of omnichannel (Venkatesh et al. 2012,Juaneda-Ayensa et al.2016).

Based on the analysis of the literature, 10 unique determinantsfor omnichannel adoption are identified. Summary of these are listed in Table 1.

Table 1.Determinantsfor adoption of omnichannel retailing

Determinants	Research Studies
Improved Performance	Zhang et al. (2010), Brynjolfsson et al. (2013), Avery et al. (2013), Bermen and Thelen (2018), Ye et al. (2018), Mishra (2020)
Reduced Efforts	Brynjolfsson et al. (2013), Avery et al. (2013), Ye et al. (2018)
Social Influence	Brynjolfsson et al. (2013), Juaneda-Aysena et al. (2016), Picot-Coupey et al. (2016), Ye et al. (2018)
Habit	Juaneda-Aysena et al. (2016)
Hedonic Motivation	Venkatesh et al. (2012). Juaneda-Aysena et al. (2016)
Technology Development	Brynjolfsson et al. (2013), Avery et al. (2013), Hagberg et al. (2016), Simone and Sabbadin (2017), Bermen and Thelen (2018), Ye et al. (2018), Mishra (2020)
Enhanced Promotion	Brynjolfsson et al. (2013), Avery et al. (2013), Bermen and Thelen (2018), Ye et al. (2018)
Integrated Supply chain	Hübner, Kuhn and Wollenburg (2016), Ishfaq et al. (2016), Mishra (2020)
Personalization	Herhausen et al. (2015), Lewis et al. (2014)
Sporadic Event	EH Hwang et al. (2020)

2.2 Research Gaps

There have been many studies pertaining to omnichannel retailing from customer perspective. Minimal efforts have been made for identifying determinants of omnichannel retailing within the context of developing economy such as India (Mishra 2020).Further, none of the studies (listed in Table 1) considered all the identified unique 10 determinants for omnichannel adoption in general, particularly in a developing economy and very specifically in the context of apparel industry.

In addition, only handful of studies are focused on the interrelationship among the determinants affecting adoption of omnichannel retailing (Mishra 2020), but without considering all the possible determinants for adoption of omnichannel. This could be due to the non-availability of a generalized structural (conceptual) model considering all the unique determinants for adoption of omnichannel. Also, to the best of our knowledge, none of the existing studies focuses on interrelation amongst adoption determinants of omnichannel using TISM method from customer perspective. This study aims at addressing these concerns with Indian customers as target population in the emerging markets within the context of apparel Industry.

3. Development of Structural Model for Omnichannel Adoption of Apparel Retailing (OAAR)

This study is conducted in the context of omnichannel apparel Industry. Apparel is one of the fastest going segment of online and omnichannel domain (Gao and Yang 2016). Apparel still has a strong ‘touch and feel’ association because of textures, colors, sizes, and fitment issues. Therefore, apparel is one of the preferred categories by omnichannel shoppers (Mosquera et al. 2018). For India, omnichannel shopping is in the nascent stage and for such an exploration,qualitative research is considered suitable (Eisenhardt 1989). The knowledge obtained through qualitative approach is enriched and informative (Tewksbury 2011).

As the adoption of omnichannel amongst Indian customer is an evolving phenomenon, it is important to consider the interrelations between different influencing determinantsto perceive the structure and hierarchical context of the structural model in a systematic way. For constructing a structural model many researchers use ‘Interpretive Structural Modelling’ (ISM) to transform imprecise and feebly articulated rational models of different systems into uncomplicated and unambiguous models (Sushil 2012). However, ISM does not indicate the causality of linkages and does not have transitive linkages. Therefore, in this study we propose a Total Interpretive Structural Modelling (TISM) modelto study contextual and hierarchical relationship amongst determinantsfor omnichannel retailing.

3.1 TISM for developing a structural model for OAAR

TISMis a modeling technique where the contextual relationships, entire structure and interpretation for direct linkages along with significant transitive linkages are presented by a diagraph model (Sushil 2012). As the step-by-step procedure of TISM is common to any problem domain, the steps followed to conduct TISM modelling for OAAR is presented in Figure 1.

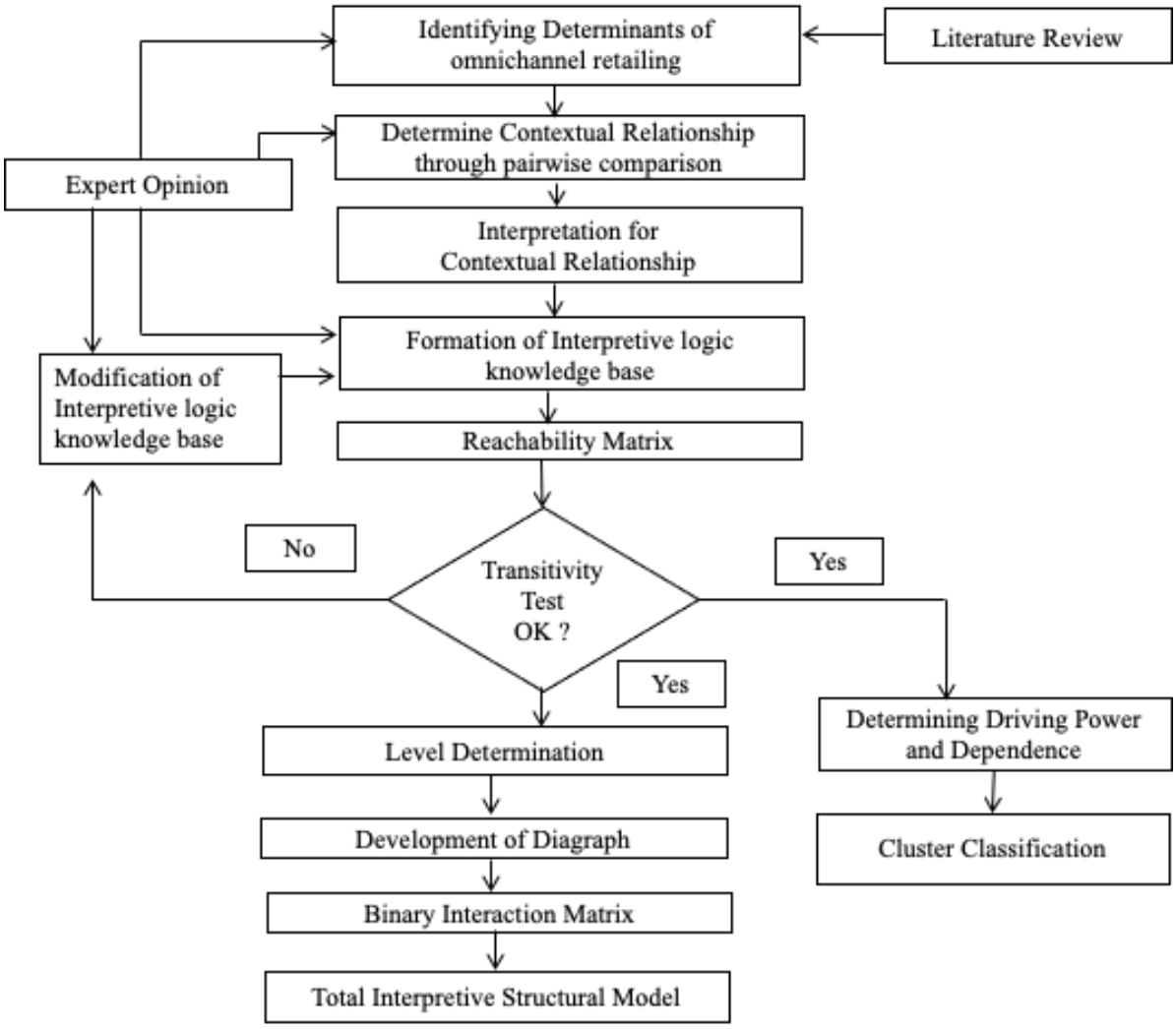

Figure 1: A Schematic Representation of TISM

3.2 Data required for constructing the proposed structural model using TISM approach

Pair wise comparison of influence of one determinant on another is the basis of TISM analysis. In our case, for 10 determinants, 90 such comparisons need to be carried out individually.We selected 35 respondents. The respondents were contacted twice to fulfill the requirement of the study. In the first phase participants shared their insights about determinants of omnichannel retailing amongst Indian customer in the context of apparel industry in a semi structured interview. In the second phase, we conducted pairwise comparison amongst identified determinants. For TSIM, the binary input (that is 'yes' or 'no') given by most respondents has been chosen as valid i.e., if 18 or more respondents answers 'Yes', for a particular pairwise comparison, then 'Yes' is selected as an input to 'Reachability matrix'. Reachability Matrix is the primary input to the TISM analysis.

Respondent selection criteria comprised of thorough knowledge and experience in the field of retailing, customer analytics, supply chain, marketing, or operation research as well general customers. Thus, we selected 35 respondents out of which 12 are industry-academia experts who are also omnichannel customers and 23 are customers who do not have a background in relevant industry. Out of 12 industry-academia respondents, 4 respondents were academicians from reputed institutes in India; 3 respondents were researchers from top tier institutes in the field of supply chain, operation research and psychology respectively; and 5 respondents were senior level industry practitioners with more than seven years of experience, in the field of retailing, omnichannel marketing and customer analytics. The other 23 are customers belonging to different demographics and they bring valuable insights regarding what drives customer behavior. 17 respondents are from city of Mumbai and 18 respondents are from city of Bangalore.

Participants belonged to different age groups, experience level and education level to get rich and diverse insights. Out of 35, 13 people belonged to (21-30) years age group, 17 people belonged to (31 – 39) years age group and 5 people belonged to (40 and above) age group. Similarly, out of 35, 8 people have (less than 5) years of experience, 16 people have (5 – 10) years of experience, 5 people have (10 – 15) years of experience and 6 people are homemakers. Out of 35, 4 people have studied up to class 12, 13 people are bachelors, 12 people are masters and 6 people have pursued PhD.

3.3 Walkthrough of TISM approach for OAAR using collected data

Determinants for OAAR amongst Indian customers are identified based on analysis of literature review and expert opinion and are illustrated in Table1. Contextual relationship between different determinants is established by pairwise comparisonsuch as “whether ‘Improved Shopping Experience’[Determinant 1 (D1)] can enhance or influence ‘Social Influence’[Determinant (D3)]”.If the answer to this contextual relationship is ‘yes’, we also capture “In which way ‘Improved Shopping Experience’ (D1) will impact ‘Social Influence’ (D3)”. This way, each determinant is compared with all other determinant using pairwise comparison to form “Interpretive Logic- Knowledge Base”. Experts’ opinion, for each pair-wise comparison, is represented by entry code “Y” for yes and “N” for no. Table 2 illustrates ‘sample Interpretive Logic- Knowledge Base’

Table 2. Sample Interpretive Logic – Knowledge Base

Sr. No.	Determinant Pair	Paired Comparison between determinants	Y/N	Y	N	In what ways one determinant will influence the other determinant?
1	D1-D2	Improved Shopping Experience will influence Reduced Efforts	N	5	30	
2	D1-D3	Improved Shopping Experience will influence Social Influence	Y	29	6	Positive reviews on social media and word of mouth
3	D1-D4	Improved Shopping Experience will influence Habit	Y	28	7	User wants to repeat experience thus creating habit
4	D1-D5	Improved Shopping Experience will influence Hedonic Motivation	Y	32	3	Customers enjoy enhanced experiences
5	D1-D6	Improved Shopping Experience will influence Technological Development	N	7	28	

The reachability matrix is formed using interpretive logic- knowledge baseby entering 1 if there is “Y” entry code; and 0 for “N” entry code in theknowledge base.The reachability matrix is then checked to assure transitivity rule, i.e., if “D1 enhances D2” and “D2 enhances D3”, these mean “D1 also enhances D3”. Final Reachability matrix is primary input to TISM analysis. Table 3 shows final reachability matrix for proposed TISM analysis. We have illustrated primary input Final reachability matrix, level partioning and final TISM model in this section. For brevity, intermediate results such as diagraph and binary interaction matrix are not shown in this paper.

Table 3. Final Reachability Matrix

	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	**Driving Power**
D1	1	0	1	1	1	0	0	0	0	0	1	5
D2	1	1	1	1	1	0	0	0	0	0	1	6
D3	0	0	1	1*	1	0	0	0	0	0	1	4
D4	0	0	1	1	1	0	0	0	0	0	1	4
D5	0	0	1*	1	1	0	0	0	0	0	1	4
D6	1	1	1*	1*	1*	1	1*	1*	1	1	1	11
D7	0	0	1	1	1	0	1	0	0	0	1	5
D8	1*	1*	0	1	1*	0	0	1	0	1	1	7
D9	1	0	1	1	1	0	1	0	1	0	1	7
D10	1	1	1*	1*	1*	0	0	0	0	1	1	7
D11	0	0	0	0	0	0	0	0	0	0	1	1
Dependence	6	4	9	10	10	1	3	2	2	3	11	

Legends:
D1: Improved customer experience D2: Reduced Efforts D3: Social Influence
D4: Habit D5: Hedonistic Motivation D6: Technological Development
D7: Enhanced Promotion D8: Sporadic EventsD9: Personalization
D10: Integrated Supply Chain D11: Adoption of Omnichannel

The reachability and antecedent sets for each of the determinants are found out from final reachability matrixto carry out level partitioning as shown in Table 4. These determined levels are then used for the development of digraph (directed graph) and TISM-based model for OAAR.

Table 4. Level partitioning for determinants

Determinant	**Reachability Set**	**Antecedent Set**	**Intersection**	**Level**
1	1,3,4,5	1,2,6,8,9,10	1	III
2	1,2,3,4,5	2,6,8,10	2	IV
3	3,4,5	1,2,3,4,5,6,7,9,10	3,4,5	II
4	3,4,5	1,2,3,4,5,6,7,8,9,10	3,4,5	II
5	3,4,5	1,2,3,4,5,6,7,8,9,10	3,4,5	II
6	1,2,3,4,5,6,7,8,9,10	6	6	VII
7	3,4,5,7	6,7,9	7	V
8	1,2,4,5,8,10	6,8	8	VII
9	1,3,4,5,7,9	6,9	9	VI
10	1,2,3,4,5,10	6,8,10	10	VI
11	11	1,2,3,4,5,6,7,8,9,10,11		I

A binary interaction matrix is created by transforming all interactions of digraph as 1 in the respective cell.Interpretive matrix contains insights about interrelations between determinants. Table 5 represents 'Interpretive matrix'**.** TISM for the identified determinants is formulated with the reference of digraph and interpretive matrix. The nodes in the digraph are substituted by actual determinants. In the structural model constructed using TISM and

Table 5. Interpretive matrix

	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11
D1	_____	_____	Positive social media content	New capabilities create habit	Making shopping enjoyable	_____	_____	_____	_____	_____	_____
D2	Flexibility improves experience	_____	_____	Cost saving creates habit	_____	_____	_____	_____	_____	_____	_____
D3	_____	_____	_____	Referral creates habit	Enjoyment create habit	_____	_____	_____	_____	_____	Influence leads to acceptance
D4	_____	_____	Habit generate positive content	_____	Habit creates interest	_____	_____	_____	_____	_____	Habit leads to acceptance
D5	_____	_____	Social media boosts enjoyment	Interest Create Habit		_____	_____	_____	_____	_____	Enjoyment leads to acceptance
D6	_____	_____	_____	_____	_____	_____	_____	_____	Analytics to personalized offers	Connectivity for integrated fulfillment	_____
D7	_____	Promotion enables cost savings	_____	Doscounts create habit	_____	_____	_____	_____	_____	_____	_____
D8	_____	_____	_____	_____	_____	_____	_____	_____	_____	Covid triggering online delivery	_____
D9	_____	_____	Positive social content	_____	_____	_____	Loyalty programs and bundles	_____	_____	_____	_____
D10	High speed delivery	_____	_____	_____	_____	_____	Cross channel coupons	_____	_____	_____	_____
D11	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____

Legends:
D1: Improved customer experience D2: Reduced Efforts D3: Social Influence
D4: Habit D5: Hedonistic Motivation D6: Technological Development
D7: Enhanced Promotion D8: Sporadic EventsD9: Personalization
D10: Integrated Supply Chain D11: Adoption of Omnichannel

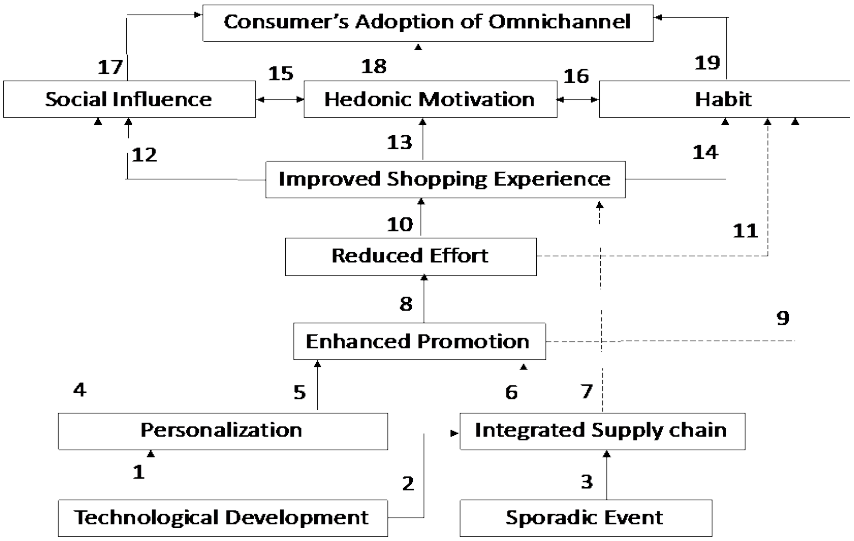

Figure 2.The proposed structural (conceptual) model for OAAR

presented in Figure 2, insight from the interpretive matrix is illustrated by the notation of respective links. This enables total interpretation of structural model by interpreting nodes as well as links.

Table 6. Legends for TISM for Determinants

No	Legends
1	Technology Development such asCustomer analytics can lead to personalized offers
2	Seamless data and smart devices can help integrate cross channel supply chains
3	Sporadic event like covid can trigger integrating supply / demand from multiple channels
4	Personalized offers and discount can enhance social media influence
5	Personalized offer can lead to loyalty programs and customer specific bundles
6	Integrated supply chain can enable promotions valid across the channels
7	Cross channel high speed fulfillment improves shopping experience
8	Promotions valid across different channels can lead to flexibility
9	Regular discounts can make customers habituated to new channel
10	Flexibility and cost saving improves shopping experience
11	Flexibility and cost saving can make customers habituated to new channel
12	Omnichannel capabilities can generate positive social media content
13	Omnichannel capabilities can make shopping enjoyable and interesting
14	Omnichannel capabilities can create habit of new channel
15	Social media content and shopping interest are interlinked
16	Shopping as enjoyment and habit are interlinked
17	Social Influence can lead to acceptance of new channel
18	Shopping as enjoyment can lead to acceptance of new channel
19	Habit can lead to acceptance of new channel

4. MICMAC Analysis

The MICMAC analysis is Cross-Impact Matrix Multiplication Applied to the Classification analysis. The purpose of MICMAC analysis is to analyze the dependence and driving power of determinants. Thedeterminants are graphically represented into four clusters. Figure 3 shows graphical representation of MICMAC analysis. Dependence and Driving power are calculated considering the final reachability matrix (Table 3).

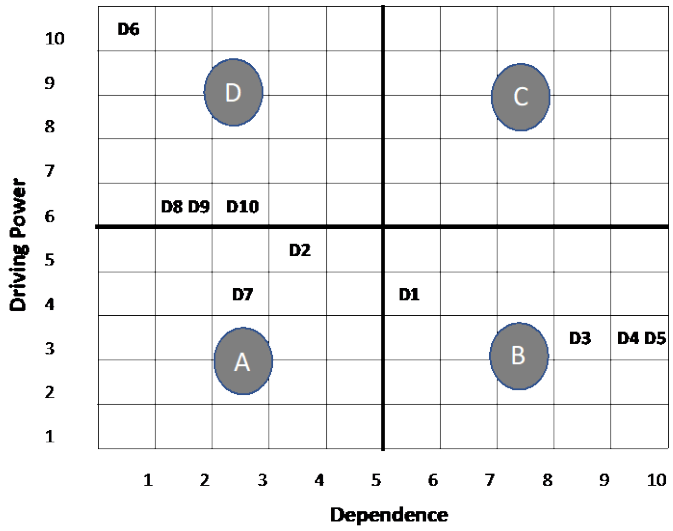

Figure 3. Determinantsof OAAR and their cluster based on MICMAC Analysis

Cluster A: Autonomous Determinants- These determinants have weak driving power as well as dependence. Hence, they are considered relatively detached from other determinants. Determinants D2(Reduced Efforts) and D7 (Enhanced Promotion) are in this cluster.

Cluster B: Dependent Determinants- This group contains the determinants with weak driving power but strong dependence. In cluster B, there are four determinants namely D1 (Improved Shopping Experience), D3 (Social Influence), D4 (Habit) and D5 (Hedonistic Motivation).

Cluster C: Linkage Determinants: These determinants have strong dependence as well as driving power. There are no determinants in this cluster. This suggest there is a clear hierarchical relationship between determinants.

Cluster D: Independent Determinants: These determinants have strong driving power and weak dependence. Generally, if a determinant has a very high driving power, it comes in the group of independent determinants and considered as a key determinant. In this cluster, there are three key determinants which are D6 (Technological Dependence), D8 (Sporadic Event), D9 (Personalization) and D10 (Integrated Supply Chain).

5. Results and Discussion

5.1 TISM Results

Table 3 depicts Interpretive matrix for the 10 identified unique determinants for OAAR. Considering he identified determinants, a structural model for OAAR is developed using TISM approach and the same is presented in Figure 2. Significant transitive links are shown in dotted lines in Figure 2. Table 4 illustrates the notations for links in TISM model. Here it is evident from Interpretive matrix that along with 'what' and 'how', TISM has answered 'why'. In the proposed structural model for OAAR, there are six hierarchical levels comprising of Social Influence (D3), Habit (D4) and Hedonistic motivation (D5) at top level, followed by Improved shopping experience (D1) at second level. The third level has Reduced efforts (D2), followed by Enhanced promotion (D7) at fourth level. Going further Personalization (D9) and Integrated supply chain (D10) are placed at fifth level. Bottom level comprises of Technological development (D6) and Sporadic event (D8). By observing the proposed structural model for OAAR, it appears that the determinants: Technology development and Integrated supply chain are the most critical

determinantsfor OAAR. Covid19 has also driven Indian Customers to prefer omnichannel models over traditional store

5.2 MICMAC Analysis Results

In Figure 3, the MICMAC analysis shows that the 10 determinants can be classified in three clusters. Accordingly, the cluster A refers to autonomous clusters and encompasses of 'Reduced efforts' and 'Enhanced promotion'. These determinants have weak interrelationships with other determinants in the system. Cluster B refers dependent determinants, which has high dependence power and low driving power. This cluster consists of 'Improved shopping experience', 'Social influence', 'Habit', and 'Hedonistic motivation'. These determinants are significant but are dependent on other determinants. Generally, the determinants in linkage clusters are considered sensitive and volatile. As there are no determinants in linkage clusters, the system is stable. Cluster D has high driving power and low dependence power. This cluster includes Technology development, Integrated supply chain, Personalization and Sporadic events. It indicates that if a retailer facilitates, high speed cross channel fulfillment, and use technology capabilities such as customer analytics to offer personalization, retailers will also boost other determinants such as 'improved shopping experience' and 'social influence'. Independent determinants in Cluster D also forms the base levels of the proposed structural model, thus critical for adoption of other determinants as seen in Figure 2. The analysis of the MICMAC results validate structural models developed with TISM approach.

6. Conclusion

This study has identified unique 10 determinants for omnichannel adoption in general, particularly in a developing economy and specifically for apparel industry based on literature review and expert opinion. Based on the analysis of omnichannel literature and to the best of our knowledge, no study has considered all '10' unique determinantsconsidered in this study for omnichannel adoption to find structural relationship amongst determinants. In order to build a theoretical framework, various methods exist from notionally connecting determinants to using ISM and TISM. Our research has focused on "what" and "how" and "why" questions by translating the feebly articulated relationships amongst determinants into a structured, well-defined model using combined TISM-MICMAC technique.

The TISM approach placedthe considered determinants for OAAR in six–tier hierarchical model. The MICMAC analysis has positioned determinants in autonomous, dependent, independent and linkages clusters. The study has classified determinants according to their dependence and driving power; thus, helping decision-makers to understand the relative significance of each determinant.

The hierarchical structural model developed using TISM approach gives a holistic picture about inherent nature and interrelationships amongst determinants for omnichannel retailing from customers perspective and can help retailers in formulating strategies for adoption of omnichannel.Out of different identified determinants for OAAR, the determinants: technological development, improved shopping experience and integrated supply chain are crucial ones according to our TISM – MICMAC analysis.

As, it is impractical for practitioners to focus on all the determinants simultaneously, they can focus more on leading causes. Accordingly, based on the proposed structural model for OAAR and based on the MICMAC analysis the retailers should focus on building integrated supply chain, building cross-channel synergies to enable high speed integrated fulfillment. In addition, retailer should develop technological capabilities such as customer analytics to provide personalized offerings. Finally, retailers should also focus on e-fulfillment because of safety concerns around sporadic events like covid19.

The contextual and hierarchical relationships developed in this study are yet to be statistically validated. To do that a large number of customer data considering different customer groups based on demographics and psychographics is required. Further, the identified determinants are not directly measurable. That is, for each of the determinant'swe need to identify measurement variables to measure each determinant. These are our immediate future research agenda.

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