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Editorial

The current issue of the International Journal of Sales, Retail and Marketing is once more dedicated to the best research papers from the area of retailing, sales and marketing. In this issue we are proud to present six original research papers from the U.S.A., Great Britain, China and Croatia. The contributing authors published an interesting researches from the area of FMCG retailing, steampunk style home furnishings, sales force management, retailer's sustainability, consumers in fashion retailing and European river cruising.

The profile of contributors to the Journal ranges from well-known established professors to young and promising doctoral students whose time is yet to come.

Thank you for taking interest in publishing and reading The International Journal of Sales, Retailing and Marketing. We hope it will be a valuable help in your professional and academic advancement.

Editor,

Professor Mirko Palić, Ph.D.

MODEL FOR OPTIMIZATION OF ASSORTMENT MANAGEMENT IN A RETAIL STORE – OPTAS

Ivan Kovač and Mirko Palić

Abstract:

Main goal of this paper is to provide theoretical conceptualization of a model for optimization of assortment management in a retail store from the viewpoint of a FMCG producer. Acknowledging category management process authors developed a model that would fill the void between category management requirements from the retailers and optimization possibilities that producer or wholesaler can undertake on its behalf in order to improve shelf profitability parameters for its own brands or products. Model proposed in this paper consists of 9 steps and 22 sub steps that encompass all necessary activities and make an applicable algorithm on how to adapt assortment offer to different store formats and locations through application of merchandise standards, trade marketing, in-store promotion, and activities of field sales employees in order to achieve designated performance objectives. OPTAS model has been in development stage for the last five years and is based on business experience authors had in FMCG and retail sector in sales and marketing in the past twenty years as well as on their academic research results in the last five years. The Model represents an efficient tool for the managers that tackle this complex field in a business practice and can help them to achieve superior results in increasing their assortment profitability and sales.

Keywords: assortment management, retail management, OPTAS Model, Croatia

1. Introduction

Product assortment represents one of the core decisions for the retailer as well as for the producer. It is no surprise that this area has been in a research focus for past several decades. Merchandise process has therefore since then often been integrated into a more holistic management approach called category management (Zentes *et al.*, 2011, p. 237). Main task has been to achieve superior profitability of the selling space. According to this, marketing

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strategies of the retailers shifted as well as a store formats and their accompanying assortment sizes. Recent research has shown that FMCG retailers can reduce assortment with little or no loss in sales (Borle *et al.*, 2005). Some researches even showed that sales went up when less popular SKUs were removed from the assortment (Dreze *et al.*, 1994). Bearing large assortment can significantly increase operational costs of producers as well as for retailers. Some of the successful retailers in Europe such as Lidl and Aldi actually carry amazingly small number of SKU's. They have very limited assortment between 1.000 and 3.000 SKUs (Felsted, 2014) while large hypermarkets carry from 30.000 to more than 100.000 SKUs. Incorporated in its' overall suitable marketing strategy smaller assortment did not bear any negative

consequences on profitability. Quite contrary, making assortment "efficient" often means increasing shelf profitability by removing slow selling SKUs. This represents a problem for producers and wholesalers who try to extend their product lines and gain as much as possible shelf space. Increased competition and globalization means that there are more different brands and products competing for the shelf space than ever before in the history. Category management initiative has been aimed at making optimization in assortment within the specific category of products retailer offers. CM benefits have been proven in terms of increased category profitability (Krafft & Mantrala, 2010). Also market leaders have increased shelf space and improved sales results under Category Management regime. However, there are some disadvantages from this process. Category Management practices can have negative effects on weaker brands and there are some proofs on lower consumer welfare that can also be found in a literature (Gajanan et al., 2007). That is the main reason why it is critically important for each supplier/producer to have an elaborate model for assortment optimization in order to enhance profitability of shelf space allocated to him by the retailer as well as to increase its efficiency under the Category Management parameters in order to secure or increase its shelf space in the future.

2. Role of assortment management in contemporary retail

Customers can competitively evaluate trade names with the same sales format against trade names offering different sales formats. The image of a retail outlet is largely shaped from the combination of cognitive and affective factors. Besides, relationship between store image and store patronage, researches focused on identifying the most decisive factors for choosing a retail outlet found that there are several key reasons why customers patronize a store. Price, assortment range, convenient location, perceived product quality and customer service are the most commonly cited factors. Assortment appears in a good place beside price level, quality, services and atmosphere. Store's assortment image is shaped from the perceived assortment at the categories where variety expectations are the strongest. To help retailers allocate shelf space, the choice sensitivity variable can serve to assess consumer expectations and can supplement the financial and economic rations (Amine & Cadenat, 2003). Matching consumer demand with retail shelf supply is a key element for increasing profitability levels in FMCG retail (Hubner &

Kuhn, 2012). Shelf space is the most valued asset retailer has and has to manage it carefully as a fixed resource (Borin at al., 1994). Even though over the years average store has increased, new products multiplied even faster. The average number of items in average store assortments increased by 20% between 1970 and 1980. The increase reached 75% between years 1980 and 1990 (Hubner & Kuhn, 2012).

Assortment selection and dynamic availability management have a high impact on manufacturer's and retailers' sales and profitability. Consumer segments vary in terms of preference for functionality, features, willingness to pay, and price elasticity so manufacturers and retailers increase the assortment variety to attract more customers and win market competition. However, increased assortment also raises the production and inventory cost as well as the complexity of management in manufacturing, logistics and advertising (Wang, 2013). From the perspective of the retail operations, an increasing number of SKUs increases retailing costs. Assortment complexity raises various costs, including those of sales, shelf space, planning, advertising, inventory and logistics (Stassen &Waller, 2002). From the consumer perspective, a large

assortment can lead to confusion, increase shopping time and complexity (Zentes *et al.*, p. 166). It is therefore necessary to adopt an efficient assortment strategy in order to achieve revenue and profitability maximization by removing low-margin or low-sales products. Empirical evidence suggests that reducing variety does not decrease sales or revenue (Ward *et al.* 2010).

Figure 1. Model of a relationship between product volumes and demand variability empirically as an input to measuring the impact of product variety on costs associated with demand variability.

Empirical modeling: volume impact on variability

Demand Variability (std dev. / mean)

Mean Demand Volume (log scale)

Inventory modeling: variability impact on cost

$$E[\text{shortage}] = \sigma\left(f_u(k) - k[1 - F_u(k)]\right)$$

- Lost sales
- Expediting
- Material price premiums

$$E[\text{on hand}] = \sigma\left(f_u(k) + kF_u(k)\right)$$

- Inventory holding
- Component devaluation
- Excess & obsolescence
- Price protection

Notation:
σ = standard deviation of lead time demand
k = critical fractile based on service level target
F_u = unit Normal distribution function
f_u = unit Normal density function

Source: Ward *et al.*, 2010.

Retailers currently use a wide range of methods to choose assortments and allocate selling space. The widespread availability of scanner data and commercial shelf management models allow retailers to quickly detect and eliminate less profitable items in favor of better performing products. Majority of such models use sales data and product and shelf dimensions to optimize shelf allocation. Different models use different parameters such as gross margin contribution or reduction of out-of-stock and similar (Herpen & Pieters, 2002). Researchers has recognized such relationships and incorporated them into the product assortment models and shelf-space allocation models. These models formulate the demand rate as a function of the shelf space allocated to the product and, sometimes, to the shelf space allocated to competing, substitute and/or complementary products. Models are often formulated through the demand rate as a polynomial function of price, advertising and distribution (represented by the number of shelf facings in the empirical application), considering both main and cross elasticities of the marketing variables, and were solved using an iterative search routine (Urban, 1998). Different authors used different mathematical approaches from geometric programming to dynamic programing, simulated annealing, operational programing, knapsack problem, marginal analysis and similar.

The multinomial logit model (MNL) has been commonly used by researchers to represent consumer choice behavior for planning assortments in a product category (Gaur & Honhon, 2006). Marketing researchers assume that products can be described as vectors of attributes and customers have preferences or utility functions defined over those attributes. Consequently, marketing models focus on choosing a product line to maximize the expected utility of a customer by either designing products with desirable attributes or choosing preexisting products that possess such attributes (Rajaram, 2001).

Table 1: Overview of literature on shelf space management

Authors (by year)	Sp[a]	CrSp[a]	Additional demand effects	Costs	Function[b]	Solution method	Items[c]
Hansen and Heinsbroek [43]	X			Restocking, OOS constraints	C	Lagrange, specialized heuristic	6443
Carlotti et al. [22]	X	X		Procurement, inventory, OOS	C	Geometric programming	5
Zufryden [109]	X		Marketing effects	Procurement, inventory, OOS	C	Dynamic programming	40
Bultez et al. [15]	X	X	Promotion, visibility	Restocking	C	Specialized heuristic	4
Borin et al. [11]		X	Assortment		C	Simulated annealing	18
Urban [98]	X	X	Assortment	Order size, inventory	C	GRG, GA	54
Yang [105]	X		Positioning		C	Knapsack algorithm	10
Irion et al. [58]	X	X	Marketing effects	Procurement, inventory, listing	PL	MIP model (LINDO)	6
Lim et al. [73]	X	X		Positioning, procurement, inventory	C	Tabu search, squeaky-wheel	100
Hwang et al. [55]	X		Order quantity, positioning	Procurement, inventory, ordering, display	C	GRG, GA	4
Hariga et al. [44]	X	X	Positioning, order quantity	Ordering, inventory	C	MIP model (CPLEX)	4
Abbott and Palekar [1]	X	X	Shelf depletion	Restocking cycle	C	Upper bound heuristic	4
Gajjar and Adil [35,36]	X		Positioning		PL	Specialized heuristic	200
Ramaseshan [85]	X	X		Procurement, shelf space, backroom	C	GRG	14
Hübner and Kuhn [52,53]	X	X	Substitution	Listing, replenishment, inventory	C	MIP model (CPLEX)	250
Hansen et al. [42]	X	X	Positioning		C	Meta-heuristics, simulations	100
Murray et al. [81]	X	X	Positioning, price		C	MINLP model (BONMIN)	100
Hübner and Kuhn [51]	X	X	Substitution, price	Listing	C	MIP model (CPLEX)	80

[a] Sp=space elasticity; CrSp=cross-space elasticity.
[b] C=continuous, PL=piecewise linear.
[c] Maximum number of items considered in test case.

Sorurce: Hubner & Kuhn (2012)

Some authors even explored vendor managed category management as an outsourcing solution in retailing (Kaipia & Tanskanen, 2007) but smart retailer will try to keep control on his most valuable assets. As seen from the Table 1 there has been numerous approaches to shelf space management based on different solution methods.

However, there are several drawbacks to such shelf and assortments space allocation models (Rusmevichientong & Topaloglu, 2012). All of those models are mathematical models that are quite abstract, sometimes hard to apply but basically none of them holistically encompass all of the activities and processes that a manufacturer/supplier has to undertake in order to increase profitability and revenues using all of the marketing and sales tools at his disposal. There is a need for the development of suitable theoretical model that would cover and provide algorithm for this tasks.

With development of ICT all such narrow pointed efforts are only part of the bigger picture of how to be more efficient along the complete retail supply chain. An array of new concepts has therefore been introduced into the retail such as Quick Response (QR), Efficient Consumer Response (ECR), and Collaborative Planning, Forecasting and Replenishment (CPFR) which have become common techniques. In essence, all aspects of supply chains have been re-examiend and reconsidered. One of the most promising technologies for retailing has been Radio Frequency Identification (RfID) which holds a promise of being a new transforming technology (Fernie & Sparks, 2009). So shelf space and assortment optimization is part of the global picture spanning across many suppliers, distributors, logistic companies and retailers often encircling the globe. Thus new computer and communication technologies offer unprecedented opportunities for dealing with

such large volumes of data (Usrey, 2002) and their classification and optimization on a large scale.

3. Need for development of suitable theoretical model

Producers and wholesalers are under pressure of several strong forces. First of them are customers that are becoming even more sophisticated and demanding. Second pressure comes from private labels. Retailers push their own brands as means of differentiation and they are trying to offer better value for money to the consumers. Third force is shift in the channel power towards retailers. FMCG retail business is becoming more concentrated, globalized and competitive. Large retailers have increased in size and become much more powerful than most of the large FMCG producers. It can be stated that brand power is being replaced with the retail power (Lincoln & Thomassen, 2007). So retail became at the core of all business decisions even for the producers.

Retailers have proven that when consumer is offered the same quality at a lower price, with a name that identifies and assures consistent quality, they will switch brands. If one supplier can provide branding at a lower price, consumers are willing to reconsider their brand loyalties. Retailers have demonstrated that they can through their own private labels take significand market share from the established manufacturer's brands. Once retailers started to compete with manufacturers for consumer trust, manufacturers had to reevaluate their traditional market positioning and marketing strategies. So marketing oriented retailers that compete for consumers mindscape are direct threat to manufacturers. They develop relationships with the consumers and have three advantages over manufacturers because they have (1) direct physical contact with consumers, (2) they control marketing variables at the point-of-purchase, and (3) they have access to data

regarding consumer buying behavior (Corstjens & Corstjens, 2005). Clearly it is of critical importance for manufacturers to maintain and increase allocated shelf space to them. However, shelf position and cooperation with a retailer can only be gained from the position of strength. In order to balance power with retailers and other competing brands, manufacturers have to take into account fundamental shift in power that has taken place. Their response is to adapt in a way to concentrate more resources and effort on trade marketing which is becoming essential for a business where distribution is winning greater and greater influence. This means that manufacturers have to focus not only on the consumer marketing but also on meeting and satisfying demands of retailers. Manufacturers have to maximize value offered to the retailers. Retailers buy products for resale which means that their buying decision is evaluated in terms of economic criteria. This doesn't mean that price is the most important variable but rather overall value provided as a trade-off between benefits and costs. Using trade marketing manufacturer/supplier has to take into account how profitable each retailer is and how that profitability is affected by different value creating, primarily marketing actions. That is why supplier has to demonstrate superior profitability of its assortment to the retailer often using CM framework measures that retailer uses. The ultimate goal would be the achievement of leading market share and rank of a category captain. However, in order to achieve market growth supplier has to know how to allocate optimal assortment on the shelf space it has at disposal and how to use in store marketing and field salesforce as a means to efficiently increase sales of its own brands. There

is a need for a holistic approach to this complex problem. Retailers have a solution based on the Category management model. There is a clear need for manufacturers/suppliers to have similar model that will integrate their own in store assortment management and in-store marketing activities and field sales force activities in order to achieve superior profitability. From twenty years of experience in marketing and sales in FMCG manufacturing and retail and over five years of academic research authors propose a conceptual theoretical model: Model for **Optimization of Assortment Management in a Retail Store** or abbreviated: **OPTAS Model**.

4. Development of OPTAS model

While Category Management model has been overall recognized as a main concept for managing assortment in the FMCG retail there is a void regarding similar tool focused primarily on achieving goals of supplier in managing efficiency of its own assortment within the store environment. Overall, the assortment management process is determined by the retailer's most valuable and limited resource: shelf space. On the other hand, supplier's main goal is to have its entire product line (or as much as possible) included into the store assortment, displayed and selling. However, when restrains of shelf and display space are applied, producer also has to focus on offering the most efficient assortment within the parameters of given space within the store. Achieving increased profitability is then joint goal of both partners. The proposed OPTAS model consists of 9 consecutive steps that are described and explained in the text that follows.

Step 1: Definition of retail outlets for the application of the Model
In this step identification of all existing available retail outlets on targeted geographical market, are made followed by the determination of the scope of analysis. In other words out of actual available number of retail outlets a relevant sample of store location and types are selected in order to perform further analysis.

Step 2: Classification of retail outlets
Second step classifies retail stores (selected in step 1.2) according to a two criteria: store size and microlocation. According to the store size outlets are classified as small, medium and super/hyper. Store size determines assortment size and number of SKUs and additional display opportunities. Micro location is important for determination of the type of assortment depending of profile of nearby consumers, their purchasing power and their brand preferences. According to micro location criteria retail outlets generally can be classified as standard and premium. It is reasonable to assume that standard locations/stores will have price sensitive assortments while premium locations will carry wider assortments of premium brands.

Step 3: Analysis of the current state of assortment
The third step in the OPTAS Model is an analysis of the current state of assortment in previously classified retail outlets according to selected criteria. For each store category (size & micro location) current state of assortment is analyzed according to the 80:20 criteria, turnover ratio and gross margin contribution. Our previous researches showed Parrett principle can be applied in most cases. Criteria 80:20 takes into account 20% of products that generate 80% of revenues of a particular store. This criterion enables better identification and focus on a key product. Turnover ratio is also an important indicator of a product shelf performance and combined with the gross margin determines attractivity and successfulness of a particular SKU. Depending on market and assortments specifics additional analysis criteria can be

introduced. Based on the criteria used as an example in this paper and additional variables that can be introduced assortment is analyzed and if the criteria are not met product or SKU could be eliminated from the assortment except if there is some other important marketing reason for keeping it there.

Step 4: Assignation of the optimal assortment for a retail outlet

In the fourth step optimal assortment is assigned for each store type. It is important to have a quality ICT solution so that data based on algorithm defined in previous steps can be calculated for each store type and for each SKU available. The output represents formulation of optimal assortment. For each type of a retail outlet optimized assortment is allocated.

Step 5: Defining assortment display standards

In this step display standards are defined. Merchandising standards define on which positions particular SKUs can be displayed depending on type of retail outlet earlier classified in Step 2. Positioning of the SKUs is defined for regular shelf space but also for the additional or action displaying. Equally important, sales promotional activities that take place in the store environment should be an integral part of display standards. In order to define merchandising standards IT reporting systems are used so that sales and marketing processes could be monitored and gathering feedback from consumers. Through analysis of such Big data most effective sales and promotional activities are identified and structured into the standards for a specific type (class) of retail outlet.

Step 6: Implementation of operational sales activities

In this step it is necessary to document all sales force activities and to identify key value adding activities. In this way it is possible to optimize operational sales activities by focusing on the key ones. Next, optimal operational sales activities are allocated according to the type (class) of the retail outlet. Field salesforce have to enforce display standards defined in step 5 of this Model.

Step 7: Evaluation and control of the overall retail outlet status in accordance with contract

Model is iterative in its concept and all elements of optimization achieved in first 6 steps are presented with arguments regarding assortment profitability including Category Management principles to retailers. From the argumented win-win position all of the optimization variables are tried to be defined and included in an annual supplier's contracts. Such variables are: definition of assortment, planograms, additional displays, and special (action) offers. This is the point where the Model shows its strength by increasing profitability for all included parties. Model displays synchronization and support for category management practices of a retailer from the aspect of a supplier. Field sales force is responsible for the evaluation and control of the overall retail outlet in accordance with the conditions agreed in the annual contract. Salesforce has to control availability of the assortment, planograms, additional displaying and special (action) offers in the retail outlets,

Figure 2. Conceptual Model for Optimization of Assortment Management in a Retail

1. Definition of retail outlets for the application of the Model

1. Identification of all existing available retail outlets

2. Determination of the scope of analysis

2. Classification of retail outlets

1. Store size (small, medium, super/hyper)

2. Microlocation (standard & premium)

3. Analysis of the current state of assortment

1. Analysis of 80:20 criteria

2. Turnover ratio

3. Gross margin

4. Assignation of the optimal assortment for a retail outlet

1. Processing of data based on the algorithm defined in the previous steps

2. Formulation of optimal assortment

3. Allocation of optimal assortment for each type of retail outlet

5. Defining assortment display standards

1. Promotional and merchandising standards

2. Sales promotion at the point of sale

6. Implementation of operational sales activites

1. Analysis of current operational sales activities

2. Optimization of operation sales activities

3. Allocation of operational sales activities according to the type of retail outlet

4. Application of display standards

7. Evaluation and control of the overall retail outlet status in accordance with the contract

1. Evaluation of assortment avaliability

2. Planogram control

3. Additional displays

4. Contorl of special (action) offers

8. Evaluation of effects of optimization on sales

1. Performance analysis of categorization and operational sales activities according to the KPIs (turnover ratio, brutto margin, sales revenues, etc.)

2. System of incentives and compensations

9. Iterative re-evaluation of the overall model

Source: Authors

Step 8: Evaluation of effects of optimization on sales

The eight step of OPTAS Model is very important because it enables evaluation of effects of sales results with a main goal not only to increase sales volume but also to increase profitability of sales. First sub step is to perform analysis of categorization and operational sales activities according to the KPIs (turnover ratio, gross margin, sales revenues, etc.). If additional KPIs have been introduced they should be included into the analysis. Second sub step represents system of incentives and compensations based on results achieved in the first sub step. Using IT solution sales representatives performance can be rated according to the criteria from the sub step one but also on their performance regarding merchandising and promotional standards that are defined in the annual contracts.

Step 9: Iterative re-evaluation of the overall model

The last step suggests that the OPTAS Model is iterative in its nature what means that all of the steps and sub steps are subjected to cyclic improvements. In this way it is expected that results achieved by using the Model can be further improved. Optimal assortment can be changed depending on changes of market and consumer preferences, introduction of the new products, and by applying new promotional and merchandising activities. This situation is complex and dynamic and Model has to respond accordingly.

5.   Conclusion

In this paper theoretical conceptualization of a new Model for Optimization of Assortment Management in a retail store – OPTAS Model has been presented and described. The need for the OPTAS Model rises from an increased level of competition, increased number of new products, shortening of the products lifecycle, cost control, more demanding customers, and increasing cost of a shelf space. This Model is developed from a supplier's point of view and it connects with the Category Management process of a retailer. Unlike the other models in the literature which are based only on narrow mathematical equations which are abstract and hardly applicable, OPTAS Model is conceptual and broad. It is applicable to different situations and market environment changes. Using the Model enables supplier to integrate its efforts with a goal of creating more profitable assortment for both partners in channel of distribution thus positioning itself better according to the Category Management criteria of a retailer. Due to this fact the OPTAS Model is fully compatible with principles of Category Management but its ambition is to encompass a wider spectrum of interactions in a supply chain. The main strength of the Model is its focus on increasing profitable sales. Model is iterative in its nature which means that it further improves results with each iteration. It accepts changes in market environment and adapts results in order to accommodate the changes.

The OPTAS Model will help FMCG producers and suppliers to increase the profitability and volume of their sales revenues. It will enable suppliers to faster reach a win-win level with retailers within the Category Management framework. Further benefits of the Model include standardization of merchandising and sales activities which in turn offers an efficient tool for sales management.

Next step in the process of development of the OPTAS Model will be a transition from conceptual level to the mathematical model that will be programed to calculate optimization results for a creation of most profitable sales for a specific FMCG companies.

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GEARING UP FOR THE RE-EVOLUTION: FURNISHINGS AND HOME ACCENTS EXHIBIT RETRO-FUTURISM VIA STEAMPUNK STYLE

Jessica Strubel, Annette Burnsed and Lynn Brandon

Abstract

Drawing upon various socio-cultural theories and the concept of vicarious nostalgia, this study examined the presence of the Steampunk aesthetic within the home furnishings market. In doing so, a content analysis of the top 50 websites selling, discussing, and/or displaying home furnishings fashioned in the Steampunk aesthetic was performed. Results identified the most popular product categories and products upon which manufacturers, retailers, and marketers should concentrate in order to reach this under-served subcultural group. Additionally, the findings demonstrated a need to focus on subcultures of consumption as opinion leaders within the home furnishings industry and as lucrative niche markets.

Keywords: *Steampunk, home furnishings, Victoriana, consumption subcultures, nostalgia.*

Introduction

Gears, cogs, whirring motors, the heat of steam… coupled with modern-day technology has enabled a subcultural consumer of both apparel and home furnishing products to re-evolutionize interest in the inspiration of the Victorian and Steam (i.e., Industrial Revolution) Eras. Examples can be seen as individuals create one of a kind items for personal and home use. Steampunk themed home furnishings (i.e.,

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exposed Edison bulb chandeliers, hot air balloon chairs, exposed gear and cog clocks, and valve and coil wall décor) enable consumers to "dress/fashion" their homes with one-of-a-kind furnishings; therefore, allowing them to denote their Steampunk subcultural identity and be unique. Although Steampunk has made a clear impact on the apparel fashion industry with John Galliano and Prada both showcasing Victorian styles in shows as early as 2010, it is unknown whether or not this fringe trend has infiltrated the mainstream home furnishings marketspace. Moreover, it has yet to be determined whether or not the home furnishings industry has met or is meeting this subcultural consumer group's demand for Steampunk inspired home furnishings. Therefore, the present exploratory study will address these questions and contribute to the extant literature by examining how the alternate history subculture of

Steampunk has infiltrated the home furnishings industry. In doing so, Subcultural Leadership Theory, Consumer Culture Theory, and the concept of vicarious nostalgia were utilized as the theoretical foundations for the study. The use of nostalgia as a motivator for consumption behavior, which is simply an example of the propensity for consumers to seek unique, novel products, will subsequently elevate consumer self-perception (Hirschman, 1980; Snyder & Fromkin, 1977; Tian, Bearden, & Hunter, 2001). New and upcoming trends are important to analyze because they rarely gain immediate and widespread acceptance. Generally, they are adopted first by a small number of consumers who then influence later adopters during the process of subcultural commodification (Lynn & Snyder, 2002)

Steampunk History and Aesthetic

The Steampunk movement emerged during the 1980s in the U.S. and U.K. as a science fiction literary genre, fixated on information technology and reconstructing a reality in the near future (Gilsdorf, 2010; Kobayashi, 2008). Steampunk has recently grown in popularity with the release of retro-sci-fi movies such as *Sherlock Holmes* and *The League of Extraordinary Gentleman,* and *The Time Machine,* and has evolved into a performative subculture with its own musical genre and lifestyle dominated by Victorian fantasy.

Steampunk glorifies the scientific advances in technology of the steam-powered Industrial Revolution and the American Wild West by interfacing it with the future. Dedicated Steampunks create an imagined world and alternate past through anachronistically retrofitting their homes with modern appliances and embodying the Victorian character through dress.

The sartorial appearance of Steampunk is achieved by wearing modified clothing and accessories that are a blend of Victorian aesthetic and contemporary technology. Bionic limbs, ray guns, and other steam-powered accouterments are also often used to show a Steampunk's devotion to technology in combination with the quintessential Victorian-style tailcoats, top hats and pocket watches (Strubel, 2014). Steampunk women prefer Art Nouveau designs, parasols, corsets, bustles and other Victorian inflected fashions juxtaposed with tattoos, body-piercings, and other retro-futuristic accessories. Steampunk is not historic reenactment but rather is a performative style subculture that looks at a dystopian past (the Industrial Revolution) and creates an imagined history of Victoriana neither situated in the past nor the future. The goal is not to copy history but to use it as a channel for creating a different interpretation of the future.

Home Furnishings Industry

Home furnishings are typically classified into two categories—furniture and decorative accessories (Bennington, 2004). Each of these categories contains multiple product types that consumers need or desire. The *furniture* category consists of 1) case goods and wood-product items such as chests, tables, shelving, dining room and bedroom furniture, office and entertainment, and casual or outdoor furniture, 2) upholstery and leather stationery and motion furniture, and 3) bedding or sleep systems. The *decorative_accessories* category consists of an abundance of products such as rugs, portable and fixed lighting, wall décor, textile products, table top, cookware, barware, serve ware, window treatments, accent furniture, permanent botanicals, artwork, mirrors, and frames (Bennington, 2004; Green, 2008).

The U.S. home furnishings industry is a complex and fragmented business consisting of small and large companies, family-owned and conglomerates, oppositions to and alliances with off-shore companies, a multitude of wholesale industry markets, and a myriad of consumers all with individual tastes and preferences. In 2012, the home furnishings industry's contribution to

U.S. economic activity totaled $277.9 billion and U.S. personal consumption expenditures were $265 billion (U.S. Bureau of Economic Analysis, 2014). Home furnishings consumers typically want style, quality, and speed of delivery at comparable prices; however, 80.8% are willing to pay more money for higher quality furnishings (Ponder, 2013).

Victoriana and the Industrial Revolution

Although Prince Albert was instrumental in positioning London as the premier venue in which to showcase the world's greatest achievements in machinery, materials, and merchandise at the Crystal Palace Exhibition in 1851, the namesake of the era was his queen, Victoria (Pina, 2003). *Victorian* is an overarching term used to describe architecture, furnishings, and decorative accessories created during the reigning years of Queen Victoria, 1837-1901 (Pina, 2003). The era spanned over six decades and witnessed a myriad of innovations and provided the seeds of modernism. However, one of the most interesting factors about this era was that in its race to the future, it was mired in the past. The architecture, furnishings and decorative accessories created were greatly impacted by technological advancements; conversely, they were also historic revivals.

Early Victorian period British furnishings have been described as "confused", due to the prevalent styles being overlapping attempts at recreating looks from three key historical eras—Greek, Gothic, and Rococo (Miller, 2005). In fact, the design of furniture pieces focused on surface and applied decoration, were basic/standard, and had little basis in the eras they purported to emulate (Miller, 2005). The later years of Victorian period British furnishings, experienced a growing distinction between general "trade" furniture (i.e., created by furniture designers) and "Art Furniture" (i.e., furniture made by firms that retained architects and specialist designers) (Miller, 2005). Additionally, styles were further confused by the incorporation of French and

Japanese influences to existing Victorian designs (Miller, 2005; Pina, 2003). Altogether, creating an amalgamation of styles and designs.

Although furnishings' critics at the time of the Crystal Palace Exhibition of 1851 referred to much of the offerings as displaying "bad taste" (due to a combination of historic styles and desire to achieve modern utopia/euphoria), consumers were delighted by the novelty and eager to own and furnish their homes with the "married" historic styles and unique offerings. Like the consumers of 1851, modern day consumers of Steampunk inspired home furnishings appreciate the novel/eclectic history of the Victorian Era and its "industrial footprint". Therefore, the current Steampunk style draws nostalgic inspiration from the Victorian aesthetic by creating a similar historic futurism just as it once was created during the original Victorian era (Hinchman, 2009; Pina, 2009). Altogether, the Steampunk revolution is an evolution of style and materials that re-imagine the past by introducing a retro-futurism into today's home furnishings culture.

Nostalgia as Purchase Motivation

Nostalgia is a profitable and persistent theme in the marketplace, which reminds consumers of times gone by (Rutherford & Shaw, 2011). Vicarious nostalgia is a specific classification of nostalgia motivated by frustration and complacency with contemporary style and design, and a belief that the past was more "romantic". Vicarious nostalgia is characterized by a preference for objects outside of a person's living memory and experienced through films, books, and images (Goulding, 2002).

Individuals, who have a high level for uniqueness, believe that through the consumption of nostalgic items they can differentiate themselves from others, whom they find tedious and unromantic. Nostalgia acts as a powerful motivation to behavior. When people feel sad and powerless, they experience higher levels of nostalgia; therefore, the

consumption experience, via objects, can provide a short-term escape from the present (Rutherford & Shaw 2011). This notion aligns with the ideology of Steampunks who are discontent with, and reject contemporary lifestyles, social conventions, and mass-produced items in favor of returning to a time of gilded craftsmanship and innovativeness (Goulding, 2002, Strubel, 2014).

The idea of selling nostalgia is not a new concept. For years, retailers have targeted the Baby Boomer demographic, not only for their sheer size and spending power, but also their longing for "the 'golden days' of their youth" (Jones, n.d.: 12). Retro-mania in the marketplace, whether it is fueled by vicarious or traditional nostalgia, appeals to those individuals looking for a fixed theme in a time of stylistic schizophrenia. Nostalgia sells identities that can be purchased, and nostalgic commodities are a simulacrum of better (and more interesting) times and places.

Steampunk is a movement that has quickly been appropriated by retailers who know they have dedicated followers willing to spend money on a creating homes and identities established in an idealized past. According to William Higham (2011), author of the trends handbook, *The Next Big Thing*, Steampunk is especially attractive to the Millennials who have grown up in a world of high-tech gadgets and obscure boundaries. Steampunk and the Victorian aesthetic offer this generation rules and defined boundaries, which for them is appealing and exciting.

Consumption Subcultures

During the 1970s, marketers recognized that the "self" should be at the center of consumer discourse, and that consumers should be addressed by lifestyle choices instead of structural characteristics (e.g., age, socio-economic status, and gender) because loyal customers could be created by establishing brands and products as a valuable part of their self-definition (Arvidsson, 2001). As such,

home furnishings represent personal products through which consumers can express themselves; thereby, allowing them to "dress" their homes, as they do themselves, with fashion and lifestyle brands and products (Csikszentmihalyi & Rochberg-Halton, 1981). Further, globalization has eroded traditional forms of communication, which has left some people longing for a sense of community and cohesiveness. In response to this desire, the formation of lifestyle groups has ensued, where in-group social status is achieved through consumption and "displays of localized cultural capital" (Arnould & Thompson, 2005, p.874).

A consumption subculture is a loosely affiliated, yet distinct, group of individuals with common interests, values and rituals that maintains unity on the basis of a shared commitment to a particular product class, brand, or consumption activity (Arnould & Thompson, 2005; Arvidsson, 2001; Schouten & McAlexander, 1995). Other characteristics of a consumption subculture include a defined, hierarchical social structure, expert knowledge, unique beliefs, special vernacular, and modes of symbolic expression (e.g., a common dress) (Schouten & McAlexander, 1995). Consumption subcultures commonly patronize businesses that cater to their specialized needs because of their devotion to, and ritualistic consumption of, certain products. When marketers and businesses understand the structure and values of a consumption subculture they can create a long-lasting relationship with those members. According to Dick Hebdige (1979), shared activities of consumption are a key component in the construction of group identities, such as Steampunk. Similarly, Christina Goulding (2002) states that vicarious nostalgia is also a social emotion that cannot be separated from the group experience. Sharing a nostalgic feeling and sharing consumption behaviors creates a sense of belonging and affiliation with others. According to the Subcultural Leadership Theory, a subculture's ability to creatively invent new

styles often influences the products we consume (Marshall, Jackson, Stanley, Kefgen, & Touchie-Spect, 2004). The unique styles of subcultures are often admired by the larger population for their artistic qualities or relevance to current lifestyles. This bottom-up movement has been used to describe an upward flow of fashion to the middle and upper social classes from blue-collar workers, ethnic groups, street cultures, and youth. The Steampunk movement not only appropriates the motifs of the Victorian era in the items created today, but they further mimic the Victorians by following the design precedent to produce an amalgamation of various styles, therefore creating their own new aesthetic.

Many people are motivated to purchase products that they feel will elevate or maintain their self-concept and social image (Lynn & Snyder, 2002). As mentioned earlier consumers often pursue uniqueness through the consumption of nostalgic or novel items. According to Tian et al. (2001), select groups of consumers are motivated by a desire for counter-conformity or uniqueness. To appeal to these types of desires, manufacturers will utilize novelty appeals to market their products. Resistance of conformity also transpires through the purchase of emerging fashion trends or novelty goods, antique, or any other product that embodies a sense of uniqueness that will help to increase the buyer's self-image (Hirschman, 1980; Lynn & Snyder, 2002; Snyder & Fromkin, 1970; Tian, et al., 2001).

IBM released a finding that predicted Steampunk would be the next big thing to capture the retail industry (Skarda, 2013). According to an online metric analyses of more than half-million posts, discussions of Steampunk on news sources and message boards increased 11 times from 2009 to 2011 (Skarda, 2013). As a result, more than 20 new retailers and department stores have become acutely aware of the Steampunk trend (Skarda, 2013). This phenomenon that began as low-cost craft production (i.e., modding) is predicted to turn into a high-price mass manufacturing business. Analysts point to Steampunk's influence on high-end fashion as evidence of its rising popularity in the mainstream (Pinchefsky 2013; Skarda 2013).

Apparel is not the only industry where Steampunk has left its mark. Steampunk aficionados are converting apartments into the retro-futuristic world of Jules Verne, while Restoration Hardware embraces gears and other Steampunk-inspired furnishings. In 2013, paint manufacturer Sherwin-Williams color forecast includes a Steampunk palette such as "Earthy Plum Brown" and "Absinthian Bottle Green" (Elejade-Ruiz, 2013).

Due to the insurgence in popularity/interest of Steampunk themes, products, and lifestyles of this consumer subculture, the present study analyzed the top 50 websites (blog, retailer, online community, trade source, craft network, and other [e.g., online magazine] to determine the presence of the Steampunk trend as it relates to home furnishings. Home furnishings products are fashion products, so they often follow or are an expansion of apparel products. Using content analysis, the authors tried to answer the following questions:

RQ1: Where specifically online is the presence of Steampunk home furnishings most salient?

RQ2: How is the Steampunk trend manifested in the home furnishings industry, with regards to product category and specific products?

Altogether, the investigation of the research questions will provide the home furnishings industry with beneficial information, which would allow them to reach the under-served subcultural market of Steampunk enthusiasts and people interested in nostalgic commodities.

Methods

Content Analysis and Coding

This exploratory study is an exploratory qualitative investigation of the presence of Steampunk themed products in the current home furnishings marketplace. The Internet was selected as the only means of examination for content analysis because of its growing popularity in the transfer of information about subcultural commodities, especially those individuals interested in the Steampunk phenomenon (Kobayashi, 2008; Strubel, 2014; Strubel, Pookulangar, & Murray, 2013). Tian et al. (2001) also state that consumers who resist conformity will be more likely to purchase products from nontraditional outlets, such as the Internet.

Content analysis is a term for a variety of techniques for making inferences from texts and is an unobtrusive method of collecting data (Creswell, 2013). The authors chose to use directed content analysis to make inferences from text (e.g. blogs and online discussions), articles, photos, advertisements, and images, based on recurring patterns or themes. This form of content analysis is more structured than conventional content analysis which requires more involved inductive reasoning (Hsieh & Shannon, 2005).

A priori coding was preferred over inductive coding because the home furnishings industry has very clearly defined product categories that are used not only in retail but also in also academia. Based on existing literature, home furnishings categories were identified prior to examining the data (see Table 1) (Neuendorf, 2002). The original five broad categories (case goods, upholstery, accessories, soft goods, and other items) were then further segmented and coded into specific product types.

Table 1. Coding categories and descriptions

Variable	Description	Key words/products
Accessories	Home furnishings items that are typically used as emphasis or decoration in addition to the primary furniture forms and can serve either or both a function and decorative purpose – "jewelry" for the home	Light fixtures, artwork, clocks, decorative lighting, portable lamps, wall accents
Case goods	Furnishings made primarily from wood, wood products, metal or plastic that are used mainly as storage, display, or surfaces	Desks, tables, sofa tables, shelving units, armoires, chests
Soft Goods	Home furnishings items that are primarily constructed of textiles or fabrics	Decorative pillows, rugs, window treatments, bedding, linens
Upholstery	Furniture items that have a frame of wood, metal or plastic that contain a padded seating suspension system and are covered with an attached fabric or textile which provides the decorative surface of the product.	Upholstered sofa, upholstered chair, occasional chairs
Other	A category of items that can include finishes, small kitchen items, accent products that don't specifically fit within one of the above major categories.	Computer accessories, wall coverings, kitchen accessories

Source: Adapted from Bennington, 2004.

After completing a web keyword search for "Steampunk home furnishings", the top fifty websites were selected for analysis. The websites were classified according to definitions of the following types of websites: (1) retailer, (2) blog, (3) craft network, (4) manufacturer, (5)

industry trade source, (6) online community, or (7) other (see Table 2 for detailed descriptions and examples of each type of website). Products from the designated 50 websites were then coded according to the classifications listed in table one. With codes established, the researchers then independently coded the products from the designated 50 websites. Only those products that were labeled or described as Victorian or Steampunk were included in the coding scheme. Finally, frequencies and percentages were calculated based content analysis in order to understand and discuss the study's findings.

Table 2. Description and count of websites

Variable	Description	Examples	Frequency	Percent
Blog	Web site that contains online personal reflections, comments, and often hyperlinks provided by the writer.	The Steampunk home Blogspot Theme rooms blogspot	**16**	**32**
Retailer	A company that sells merchandise to an end-use consumer.	Pottery Barn West Elm Amazon.com Ebay Nextag.com	15	30
Online Community	A virtual community whose members interact with each other primarily via the Internet.	Geekologie Houzz.com Steampunk Costume.com	11	22
Trade source	An industry-specific periodical containing news and information related to an individual field.	Furniture Today Home Furnishings News Home Accents Today Gifts & Decorative Accessories	4	8
Craft-network	An online venue where people connect, buy, buy, and sell can home-made crafts.	Etzy.com Steampunklab.com	3	6
Other	Does not fit into any of the categories above, such as an online magazine (not a trade source; online magazine).	News article	1	2

Because data from content analysis are at times difficult to interpret it was independently coded by the researchers, and inter-scorer reliability was established by calculating the coefficient of reliability using Cohen's Kappa (Cohen, 1960; Krippendorff ,2004; Viera & Garrett, 2005). All coefficients of reliability in this study were within an acceptable range—*good* to *very good* (see Table 3) (Cohen, 1960).

Results

Content analysis for RQ1 revealed that blog sites (32%) were the most popular for the presence/discussion of Steampunk home furnishings (see Table 2). Blogs mentioned other retailers and/or craft-networks, and were overwhelmingly the primary source for those seeking information on Steampunk home furnishings. These results were not surprising, since it has been found that approximately 31% of Internet users reported that blogs and Facebook influence their purchase decisions,

followed by groups/forums (28%) ("2013 Digital Influence", 2013). This data confirms that retailers and marketers can gain a better understanding of their consumers by analyzing online conversations shared on social media.

The fact that retailer websites (30%) followed blog sites, could imply that retailers have embraced Steampunk home furnishings styles within their product assortments and/or could be meeting the demand of Steampunk enthusiasts. Online communities (22%) ranked third; thereby, providing evidence that this consumer subculture has an established online presence via a social gathering place and they are actively discussing Steampunk home furnishings. According to Catterral and Maclaren (2002), to truly understand the nuances of the postmodern consumer and their consumption activities researchers must look to cyberspace. Online sources are especially helpful in dividing the market into relevant and measurable segments based on consumer demand. Market segmentation allows retailers to fit their product offerings to segments that are most lucrative; thereby giving them a competitive advantage over their competitors.

A sharp decrease in percentage occurred following online communities. Trade source websites only represented 8% (four websites), which could suggest that the industry's researchers/reporters of trade magazines have either not fully recognized this subcultural consumer group's desire for Steampunk home furnishings, do not fully understand this group, and/or do not feel they are worthy of further discussion due to their size in numbers and/or total economic impact. The fact that craft networks represented only 6% may be due to a lack of interest in home-made items by consumers or their lack of knowledge of these sites. Altogether, Steampunk aficionados may prefer higher quality home furnishings that only the industry can provide. Finally, only one news article discussing Steampunk home furnishings (other 2%) within the 50 websites was found.

Once again, this could be due to a lack of understanding and/or recognition of this consumer subculture/group.

With regards to RQ2, home accessories (49.58%) were found to be the most prevalent product category presented/discussed on the observed websites (see Table 3; only the top five products are listed for each product category). These results were not surprising, since accessories (e.g., the quintessential Steampunk clockwork items) are relatively inexpensive, do not require a lifetime commitment (i.e., easily replaced), and the purchase process involves a shorter time-horizon.

The popularity of clockwork accessories (9.9%) was also to be expected considering the gears and cogs of industrialization are key visual components of the Steampunk aesthetic. The tinkerers of Steampunk liken themselves to the inventors and craftsman of the Industrial Revolution whose innovative breakthroughs notably changed the lives the Victorians. The gears and cogs of clockwork have also become synonymous with Steampunk, which is only fitting considering their symbolic representation of the passage of and place in time.

Case goods (15.41%), other (13.89%), upholstery (13.86%), and soft goods 7.26%) followed respectively. Within case goods, desks and desk chairs represented a total of 25.1% of the product category, which could suggest the Steampunk enthusiast's association of the home office (i.e., where much work and research takes place) to that of the many ideas/inventions that were born during the Victorian and Steam Eras (e.g., Edison bulb, steam powered engine, etc.). Additionally, many office-related Steampunk furnishings have been depicted in film and print media.

Table four provides frequencies and percentages by product category, product, and website. This table is especially useful, since it provides a breakdown for the further understanding of where particular product categories and products are being discussed/displayed. Based

on table four, it is clear that online communities and blogs are discussing Steampunk home furnishings at a greater rate than retailers are presenting/providing products and information. One could surmise that home furnishings retailers may not actually be addressing/meeting the demands and/or desires of Steampunk consumers. Therefore, it appears that an opportunity exists for the home furnishings industry within this subcultural group.

Table 3. Frequency of observations, interscorer reliability, and percent agreement for product categories and top five observed products

Variable	Frequency	Percent	Cohen's Kappa	Strength of Agreement	Percent Agreement
Accessories	1663	49.58%			
Light Fixtures	254	15.2%	0.993	Very Good	99.82
Artwork	178	10.7%	0.907	Very Good	98.08
Clocks	165	9.9%	1	Very Good	100
Decorative Lighting	142	8.5%	0.885	Very Good	98.02
Portable Lamps	136	8.1%	0.891	Very Good	98.20
Case Goods	517	15.41%			
Desks	89	17.2%	0.967	Very Good	99.03
Dining Tables	70	13.5%	0.900	Very Good	97.49
Sofa Table	59	11.4%	0.954	Very Good	99.03
Desk Chair	41	7.9%	0.903	Very Good	98.45
Headboards/Footboards	27	5.2%	1	Very Good	100
Soft Goods	243	7.26%			
Decorative Pillows	94	38.6%	1	Very Good	100
Machine Made Rugs	35	14.4%	0.936	Very Good	98.35
Oriental Rugs	19	7.8%	0.896	Very Good	98.35
Custom Window Treatments	18	7.4%	0.705	Good	94.49
Bedding Ensembles	16	6.6%	1	Very Good	100
Upholstery	465	13.86%			
Upholstered Chairs	119	25.5%	0.989	Very Good	99.57
Occasional Bar Stools	71	15.2%	1	Very Good	100
Occasional Chairs	51	10.9%	0.889	Very Good	97.63
Leather upholstery	46	9.9%	0.860	Very Good	97.20
Upholstered Sofa	44	9.5%	0.907	Very Good	98.29
Other	466	13.89%			
Kitchen & Bath Appliances	83	17.8%	0.978	Very Good	99.36
Kitchen & Bath Fixtures	59	12.6%	0.868	Very Good	96.78
Computer Accessories	53	11.3%	0.930	Very Good	98.5
Wall Covering	44	9.4%	0.733	Good	94.21
Computers	44	9.4%	1	Very Good	100

Table 4. Frequency (percentage) of observations by product category, product, and website

Product Category/Product	Website					
	Blog	Retailer	Online Community	Trade Source	Craft Network	Other
Accessories	412 (24.8%)	438 (26.3%)	615 (37.0%)	27 (2.0%)	168 (10.1%)	5 (0.3%)
Light Fixtures	52 (20.4%)	52 (20.4%)	122 (48.0%)	5 (2.0%)	23 (9.0%)	0
Artwork	30 (17.1%)	79 (44.3%)	58 (32.6%)	4 (2.2%)	7 (3.9%)	0
Clocks	37 (22.4%)	54 (32.7%)	64 (38.8%)	1 (0.6%)	7 (4.2%)	2 (1.2%)
Decorative Lighting	33 (23.2%)	36 (25.3%)	50 (35.2%)	2 (1.4%)	21 (14.8%)	0
Portable Lamps	31 (22.8%)	35 (25.7%)	37 (27.2%)	0	33 (24.3%)	0
Case Goods	118 (22.8%)	124 (24.0%)	222 (42.9%)	12 (2.3%)	48 (9.3%)	0
Desks	21 (23.6%)	16 (18.0%)	47 (52.8%)	1 (1.1%)	4 (4.5%)	0
Dining Tables	22 (31.4%)	10 (14.3%)	29 (41.4%)	2 (2.9%)	7 (10.0%)	0
Sofa Table	9 (15.3%)	13 (22.0%)	20 (33.9%)	0	17 (28.8%)	0
Desk Chair	3 (7.3%)	11 (26.8%)	24 (58.5%)	2 (4.9%)	1 (2.4%)	0
Headboards/Footboards	12 (44.4%)	7 (25.9%)	6 (22.2%)	1 (3.7%)	1 (3.7%)	0
Soft Goods	58 (23.9%)	67 (27.6%)	113 (46.5%)	1 (0.4%)	1 (0.4%)	1 (0.4%)
Decorative Pillows	17 (18.1%)	29 (30.9%)	45 (47.9%)	1 (1.1%)	0	2 (2.1%)
Machine Made Rugs	14 (40.0%)	7 (20.0%)	14 (40.0%)	0	0	0
Oriental Rugs	2 (10.5%)	12 (63.1%)	5 (26.3%)	0	0	0
Custom Window Treatments	6 (33.3%)	2 (11.1%)	8 (44.4%)	0	1 (5.6%)	0
Bedding Ensembles	3 (18.8%)	7 (43.8%)	6 (38.0%)	0	0	0
Upholstery	132 (28.4%)	112 (24.1%)	172 (37.0%)	14 (3.0%)	14 (3.0%)	21 (4.5%)
Upholstered Chairs	41 (34.5%)	27 (22.7%)	42 (35.3%)	0	1 (0.8%)	8 (6.7%)
Occasional Bar Stools	11 (15.9%)	21 (29.6%)	27 (38.0%)	3 (4.2%)	4 (5.6%)	5 (7.0%)
Occasional Chairs	9 (17.6%)	13 (25.4%)	23 (45.1%)	0	2 (3.9%)	4 (7.8%)
Leather upholstery	16 (34.8%)	15 (32.6%)	8 (17.4%)	2 (4.3%)	4 (8.7%)	1 (2.2%)
Upholstered Sofa	16 (36.4%)	6 (13.6%)	21 (47.7%)	0	1 (2.3%)	1 (2.3%)
Other	143 (30.7%)	59 (12.7%)	259 (55.6%)	0	5 (1.1%)	0
Kitchen & Bath Appliances	28 (33.7%)	19 (22.9%)	36 (43.4%)	0	0	0
Kitchen & Bath Fixtures	24 (40.7%)	6 (10.2%)	29 (49.2%)	0	0	0
Computer Accessories	9 (17.0%)	9 (17.0%)	35 (66.0%)	0	9 (17.0%)	0
Wall Covering	17 (38.6%)	3 (6.8%)	23 (52.3%)	0	1 (2.3%)	0
Computers	9 (20.5%)	7 (15.9%)	27 (61.2%)	0	1 (2.3%)	0

Conclusions

Although exploratory in nature, the purpose of this study was to investigate where the presence of Steampunk home furnishings was most salient online and how the Steampunk trend has manifested in the home furnishings industry (i.e., via product categories and products). Results revealed that blog and online community discussion frequencies of Steampunk home furnishings far outweigh retailer frequencies of product offerings and trade source mentions. Additionally, accessories was the most popular product category via social media and retailer assortments.

While subcultures adopt consumption patterns to affirm their identity, the larger market briefly appropriates their symbols as fashion. In accordance with the subcultural leadership theory, this research demonstrates that companies should look to subcultures or consumption cultures, such as Steampunk, to identify trends, which can influence traditional consumers because they often act as opinion leaders in the marketplace. According to Lisa Ewen (2014) of *Women's Wear Daily*, Steampunk has not quite saturated the marketplace, so as the trend continues to grow there is still time to observe this Victorian phenomenon in other areas of commerce.

Furthermore, this study, in conjunction with research on consumer culture theory and marketplace cultures, demonstrates the need to explore consumer understandings of history and temporality to optimize consumptions experiences involving retro-scapes and retro-branding (Arnould & Thompson, 2005, Arnould & Thompson, 2007). A focus of this nature can only be beneficial to companies that are trying to reach individuals who seek uniqueness, excitement and the comfort of boundaries through nostalgic consumption. Likewise, Holbrook and Hirschman (1982) argue that consumption is an experience directed at the

pursuit of fantasy and fun, hedonistic consumption. They argue that experiential consumption has shifted value considerations from a utilitarian to pleasure seeking perspective (Holbrook & Hirschman, 1982). The presence of Steampunk products within home furnishings retailers confirms a consumer interest in hedonistic consumption.

Altogether, this study provides the home furnishings industry with beneficial information, which could allow them to focus on delivering a personalized and engaging customer experience. When a customer visits a store or website dedicated to particular consumption subcultures or interest groups, the level of trust typically grows because the retailer establishes knowledge of the nuances that appeal to that particular segment. Likewise, when a brand, product or store image matches an individual's self-concept, then he/she is more likely to select it. Individuals are motivated to maintain consistency in the self, and therefore behave in a manner that is consistent with oneself, or which enhances the image consumers have of themselves (Arvidsson, 2001).

Although, this study did not investigate how salient nostalgia was as a motivator of consumption, future research could employ thematic interpretations of blogs and online communities. Furthermore, quantitative research could measure the level of Steampunk consumer assimilation to that of the need/desire to purchase these novel/unique home furnishings.

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ANTECEDENTS TO SALES FORCE JOB MOTIVATION AND PERFORMANCE:
THE CRITICAL ROLE OF EMOTIONAL INTELLIGENCE AND AFFECT-BASED TRUST IN RETAILING MANAGERS

Kyle A. Huggins, Darin W. White and Jessica Stahl

Abstract

Improvements to job motivation and sales performance can result in enormous positive changes in both market share and profitability for most companies. To this end, the authors examine the impact of perceived sales managers' emotional intelligence and affect-based trust on their subordinates' job motivation and performance. Here, an empirical study is conducted based on 247 responses from retail sales associates. Regression results suggest that there are main effects of both predictor variables, but affect-based trust functions as a mediator, intervening for the direct effect of emotional intelligence. These findings suggest in order to maximize sales force motivation and performance, it is crucial that sales managers strive to build strong affect-based trust relationships with their sales representatives. Also, given that our results provide support for the linkage between sales manager emotional intelligence and affect-based trust, companies should consider using an emotional intelligence measure to screen potential sales managers. In addition, companies should implement regular emotional intelligence training programs for their existing sales managers.

Keywords: emotional intelligence, affect based trust, retailing, marketing management, salesforce performance, job motivation

INTRODUCTION

Marketing research has begun to highlight the impact that salespeople's deliberate and intuitive judgments can have on sales outcomes. Deliberate judgments, that is, sales associates' ability to make thoughtful, more methodical analysis of customers' needs after several interactions has been demonstrated to improve sales outcomes and profit goals of the business (Homburg, Weiseke, and Bornemann 2009; Mullins et al. 2014). However, more important to this research, intuitive judgments of sales associates made before the interaction with a customer have also been shown to affect sales outcomes. In fact, salespeople who accurately and intuitively judge customers' communication styles (McFarland, Challagalla, and Shervani 2006) and emotions (Kidwell, McFarland, and Avila 2007) have greater influence on customers, which impacts sales performance. More recently, research studies evaluate both intuitive

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and deliberate information processing together, finding that salespeople who accurately perceive both processing styles more easily adapt to their customers' desires (Locander, Mulki, and Weinberg 2014) and improve sales performance by more than 130% (Hall, Ahearne, and Sujan 2015).

Likewise, the ability to make deliberate and intuitive judgments is not unidirectional. Sales associates not only make informative judgments downstream towards customers, but also have the ability to make these same deliberative and intuitive judgments upstream concerning managers. These judgments can also come deliberately after many interactions or intuitively through observation. However, sales associates' successes in these areas, whether upstream or downstream, are dependent on his or her ability to make accurate judgments. If a salesperson is unable to make deliberate and intuitive processing decisions, then they are not as likely to be successful at either spectrum. We contend this ability is directly tied to emotional intelligence.

Mayer and Salovey (1997) define emotional intelligence (EI) as the "*ability to perceive emotion, integrate emotion to facilitate thought, understand emotion, and to regulate emotion to promote personal growth."* Sales associates who rate high in emotional intelligence have been shown to improve customer interactions, improving both sales revenue and customer retention (Kidwell et al. 2011). This suggests that top-performing sales associates who are high in emotional intelligence can make accurate, deliberate, and intuitive judgments downstream. Additionally, these same employees should also be able to attend to these interpretations upstream as well, making accurate judgments about their sales managers. Kidwell et al. (2011) suggest that emotional intelligence (EI) is a key influencer for sales managers when improving interactions between buyers and sellers and for employee selection and training. The question of how a sales manager can effectively recruit, train and motivate his or her sales force to achieve peak performance is critical to corporate success (Boe 2003). However, sales managers who cannot or refuse to build employee relationships through a learning orientation can often mitigate sales associates' success (Sujan, Weitz, and Kumar 1994).

Previous research on the influence of this ability-based measure of EI typically examines sales associates, not sales managers. An interesting and relevant managerial question for companies might include the impact of emotional intelligence on the success of current sales managers, and their ability to deploy listening techniques that exhibit emotional intelligence. Research suggest that sales associates have come to represent a key competitive advantage for many companies as strategists to their own organization, as they share insight from the sales floor with managers who listen (Wilson 2008). It would reason that as sales associations perceive their sales managers to be emotionally intelligent, they would share these deliberative and intuitive insights, which in turn would increase their own job motivation and sales performance, as they build trust in their manager's leadership abilities. Hence, within this article, we explore the impact of sales associates' perceptions of sales managers' emotional intelligence as a predictor of the sales associates' affect based trust with their manager, and as a predictor of their own job performance and motivation.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Emotional Intelligence

Research has demonstrated that EI is a predictor of managerial effectiveness (e.g., George 2000; Hooijberg, Hunt, Dodge 1997;) as it defines the quality of interpersonal relationships between manager and subordinate. A sales manager with high EI shows openness to new ideas and empathy for subordinates' personal lives,

provides honest and direct feedback on performance appraisals, uses encouragement as a form of motivation, and takes responsibility for department mistakes rather than blaming others. When an employee interprets these behaviors as being supportive and genuine, he is likely to reap psychological benefits including approval, respect, and esteem, which yield stronger commitment and job satisfaction (Hollander 1979; Wong and Law 2002). Sales managers with high levels of EI also exhibit enthusiasm, optimism, curiosity, and responsiveness to others. These behaviors yield positive interpersonal relationships between leaders and subordinates, which we predict will contribute to the overall motivation and success of the subordinate. Thus, the preceding discussion leads to the following hypothesis:

H1: A sales associate's perceptions of their manager's emotional intelligence positively influences their own (a) job motivation and (b) job performance.

Affect Based Trust

Research shows that a vital component in building positive working relationships is trust (Palmatier, Dant, and Grewal 2007). Trust enables us to place our confidence in something or someone and to feel a sense of assured reliance within that connection. More specifically, we contend that affect-based trust develops within the heart and exists within the emotional bonds between individuals. Massey and Dawes (2007) state that when affect-based trust is present in a relationship, managers are more likely to adopt positive, caring behaviors, such as being sensitive to a colleague's personal and work-related needs, and are less likely to engage in harmful behavior such as coercion or intimidation.

Furthermore, leaders who are trusted are more effective in retaining and attracting followers, as well as promoting skill development, change, and innovation in them (Kirkpatrick and Locke 1991). In addition, affect-based trust yields more efficient processes as information is easily exchanged between manager and subordinate (Levin and Cross 2004; Rulke and Rau 2000). Hence, we believe affect-based trust will translate into increased performance outcomes, as stated in our second hypothesis:

H2: A sales associate's perceived level of affect-based trust with their manager positively influences their own (a) job motivation and (b) job performance.

The Mediating Effect of Affect Based Trust

Previously, our discussion in this section indicates that sales managers' emotional intelligence will most likely influence the job motivation and performance of the sales force. Additionally, we argue that the presence of strong affect-based trust in the sales manager/salespeople relationship will positively impact sales force job motivation and performance. Combined together, a particular interest is the possible mediating role of affect-based trust on the relationship between emotional intelligence and both job motivation and sales force performance. Trust based relationships can only be fashioned between individuals exhibiting effective emotional control and understanding (Mehrabian and Epstein 1972; Wispe 1986). Contrarily, the absences of emotional control will almost always lead to significant difficulty in all types of relationships. Therefore, managers who effectively use emotion to enhance cognitive processes and decision making build trusting relationships with subordinates (Cooper and Sawarf 1996).

Additionally, Russell and Stone (2002) directly link openness of new ideas to credibility, which is described as the ability of the manager to elicit belief as a key component of trust. Because we expect salespersons' perceptions of sales managers' emotional intelligence to positively impact a salesperson's perception of affect-based trust between the manager and the subordinate, then we suspect that affect-based trust could intervene in the relationship

between emotional intelligence and both sales force job motivation and performance. Thus, we predict a mediation effect:

H3: A sales associates perceived level of affect-based trust with their manager mediates the *effect of emotional intelligence on their own (a) job motivation and (b) job performance.*

Figure 1: Proposed Models of Mediation
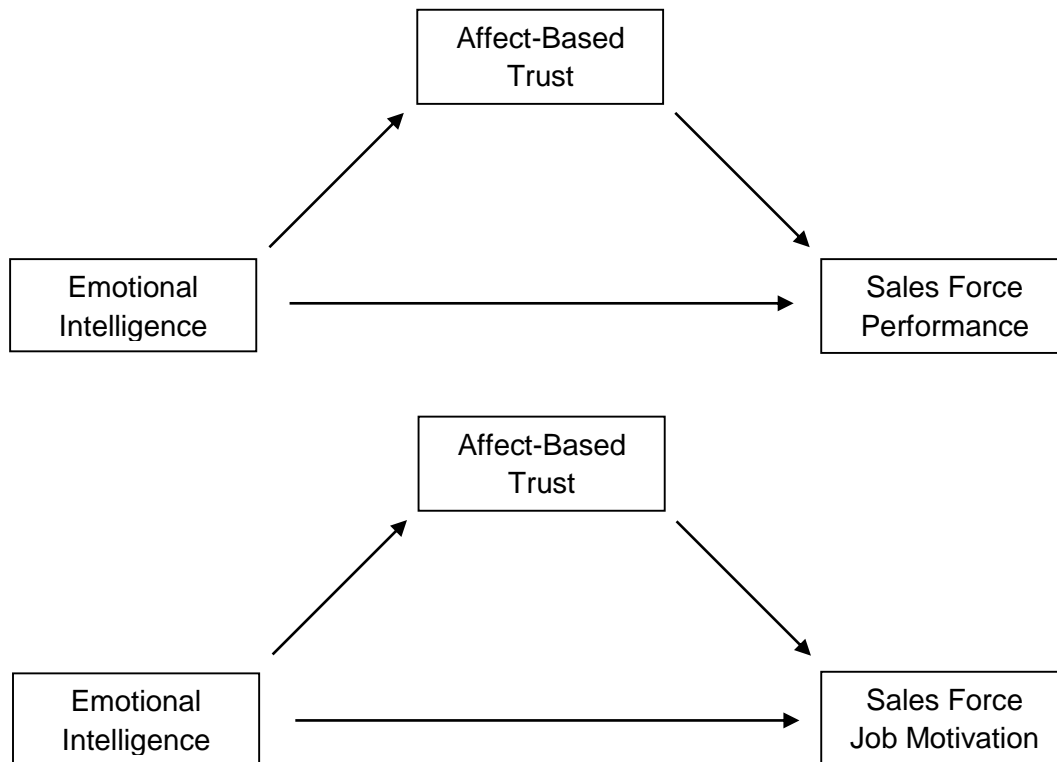
METHODOLOGY & MEASUREMENT

A sample of 274 retail salespeople was surveyed for this research study. The participants included 144 males and 130 females ranging in age from 18 to 76 years with the average age being 27.44, with seventy-five percent of the participants attending at least one year of college. The ethnic makeup includes roughly 16% Asian and Latino, 20.4% African American and 63.6% White. The majority of the participants have never been married.

Data was collected from salespeople in several different southeastern U.S. area malls who worked in a retail sales setting. Because the participants were given the questionnaire at their place of employment, data collectors asked the participants to fill out the survey in private

and place it in a clasped envelope upon completion, where after collectors picked up the enclosed surveys at a later time in the day. Initial contacts agreeing to participate in this study were directed to answer the questions about their direct person of authority that served as their primary sales manager. None of the participants were compensated for their time and the reason for the study was never specifically disclosed due to potential bias from others who had not yet potentially completed the survey.

Affect-Based Trust

The first section of the survey contained five questions on a seven-point Likert scale assessing affect-based trust between the sales

representative and their sales manager. The original scale, developed by McAllister (1995), included both affect- and cognitive-based trust measures and was created based on conclusions drawn from an available measure of interpersonal trust (Cook and Wall 1980; Johnson-George and Swap 1982; Rempel et al. 1985; Rotter 1971), where eleven organizational behavior scholars with knowledge of the definitions of affect- and cognition-based trust categorized a set of 48 items as cognition-based trust, affect-based trust, both forms of trust, or neither form of trust. To further examine the validity of the constructs, an exploratory factor analysis of pretest data from a group of employed M.B.A. and undergraduate business students was run. Only the 11 strongest questions remained with reliability estimates at .91 and .89. Because the current study is only examining affect-based trust, the researcher only included the first four items composing this construct. The reliability for affect-based trust in the current study was .90.

Emotional Intelligence

The next section included questions on the sales representative's perception of his or her manager's emotional intelligence. The four dimensions of emotional intelligence, each containing four questions, were assessed using Wong and Law's (2002) measure. Participants were asked to specify their level of agreement with each statement, using a 7-point Likert scale. The reported reliability for the four factors ranged from alpha=.83 to alpha=.90. This measure was chosen because it directly correlates with this study's operational definition of EI according to Mayer and Salovey (1997). Furthermore Christie, Jordan, Troth, and Lawrence (2007) used this scale to test the link between emotional intelligence and motivation in which a positive and significant correlation was supported. Following the processes of Mayer and Salovey (1997), the four dimensions

were combined to create a global measure of emotional intelligence. The reliability for the combined measure was .84.

Job Motivation

Job motivation measures the degree to which a person wants to work well in his or her job in order to receive job satisfaction (Hui and Lee 2000). Job satisfaction has an emotional dimension as one looks to receive a pleasurable or positive emotional state resulting from the appraisal of one's job or job experience (Locke 1976; Hunter and Goebel 2008). Specifically in this study, the appraisal is of importance, as sales associates are evaluating their own job motivation as a result of the emotional intelligence and affect based trust demonstrated by their sales manager. To measure the sales associate's job motivation, a three-item measure adopted from Hui and Lee (2000) was used. Respondents were asked to indicate on a five-point Likert-type scale the degree of agreeableness to the presented items. The reliability in this study was .83.

Sales Force Performance

Often in achievement-based situations, sales people pursue performance goals that orient themselves to attain a positive evaluation of their current abilities and performance from others considered to be important (Ames and Archer 1988; Dweck and Leggett 1988). It is extrinsic in nature, as they seek favorable opinions of their skillsets from managers and colleagues alike (Meece, Blumenfeld, and Hoyle 1988). Therefore, based on knowledge from previous performance reviews with their managers, respondents were asked to self-report on their current sales performance success. They answered seven questions on a five-point Likert scale designed by Sujan, Weitz, and Kumar (1994). The reliability for this scale was .94.

ANALYSIS AND RESULTS

Summary statistics, including correlations between each of the variables, is presented in Table 1. Multiple regression analyses were used to test both main and mediating effects in our model. The first hypothesis in this study posits that when sales associates perceive their managers to be higher in emotional intelligence, then they will have more job motivation and stronger sales performance. The second hypothesis predicts that relationships between managers and associates that are perceived to be stronger in affect-based trust will also result in greater job motivation and sales performance for sales associates. In the final hypothesis, we suggest that affect-based trust will mediate the direct effect of a manager's perceived emotional intelligence on a sales associate's job motivation and sales performance. Specifically, this hypothesis predicts that the direct effect of emotional intelligence on both job motivation and sales performance is explained away when the model also includes affect-based trust (Baron and Kenny 1986).

Table 1: Summary Statistics (Mean, Standard Deviation, and Correlation with other Variables)

Variable	Mean	Std Dev	2	3	4
1. Affect-Based Trust	4.73	1.60	.726 (.000)	.505 (.000)	.427 (.000)
2. Emotional Intelligence	3.79	0.86	__	.380 (.000)	.378 (.000)
3. Sales Performance	3.74	0.78		__	.633 (.000)
4. Job Motivation	4.48	0.82			__

Table 2: Regression Results

Step	Predictor Variables	Criterion Variable	R^2	F	t
1	EI	Job Motivation	.143	45.2****	6.7****
2	EI	Affect-Based Trust	.527	303.3****	17.4****
3	Affect-Based Trust	Job Motivation	.182	60.4****	7.8****
4	Affect-Based Trust EI	Job Motivation	.192	32.1****	4.1**** 1.8*†

**** $p < .001$, *** $p < .01$, ** $p < .05$, * $p < .10$. All regression coefficients are standardized values (betas).
† Indicates a partially significant test of mediation due to emotional intelligence being significant in predicting sales performance in Step 1, but becomes only partially significant ($p < .10$) when combined with affect-based trust in Step 4.

Table 3: Regression Results

Step	Predictor Variables	Criterion Variable	R^2	F	t
1	EI	Sales Performance	.145	46.0****	6.8****
2	EI	Affect-Based Trust	.527	303.3****	17.4****
3	Affect-Based Trust	Sales Performance	.255	93.1****	9.7****
4	Affect-Based Trust EI	Sales Performance	.255	46.5****	6.4**** .383†

**** $p < .001$, *** $p < .01$, ** $p < .05$, * $p < .10$. All regression coefficients are standardized values (betas).
† Indicates a significant test of full mediation due to emotional intelligence being significant in predicting sales performance in Step 1, but becomes non-significant when combined with affect-based trust in Step 4.

To test both direct and mediating hypotheses on sales force job motivation, a series of four regression models was conducted. First, we predicted a main effect of emotional intelligence on job motivation. In Table 2, results for step 1 indicate a significant positive relationship

(F=45.2, p<.001) between emotional intelligence (t=6.7, p<.001) and job motivation, supporting H_{1a}. Additionally, to set up the mediating hypothesis (H_{3a}), we also had to test the direct effect of emotional intelligence on affect-based trust. Step 2 in the regression analysis confirms that emotional intelligence (t=17.4, p<.001) does strongly predict affect-based trust (F=303.3, p<.001). Again, while this was not stated as a direct hypothesis in our literature review, this significant effect must be present to test affect-based trust as a mediator (Baron and Kenny 1986). Next, our second hypothesis predicted a main effect of affect-based trust on job motivation. Step 3 in our results demonstrates that a significant main effect (F=60.4, p<.001) of affect-based trust (t=7.8, p<.001) is also found, supporting H_{2a}.

Hypothesis 3 tested whether affect-based trust served as a mediator, intervening in the relationship between emotional intelligence and job motivation. In step 4 of our analysis, we regressed job motivation on both emotional intelligence and affect-based trust in the same model. As demonstrated in Table 2, while the model is significant (F=32.1, p<.001), the direct effect of emotional intelligence becomes only partially significant (t=1.8, p<.10) while affect-based trust (t=6.4, p<.001) remains significant. Because emotional intelligence was significant (t=4.1, p<.001) in step 1 and non-significant in step 4 (when entered with affect-based trust), and because emotional intelligence significantly predicts affect-based trust in step 2, then we can conclude that affect-based trust partially mediates the relationship between emotional intelligence and job motivation, partially supporting H_{3a}.

To test both direct and mediating hypotheses on sales force performance, an additional series of four regression models was conducted. First, we predicted a main effect of emotional intelligence on sales performance. In Table 3, results for step 1 indicate a significant positive relationship (F=46.0, p<.001) between emotional intelligence

(t=6.8, p<.001) and sales performance, supporting H_{1b}. Once again, to set up the mediating hypothesis (H_{3b}), we also had to test the direct effect of emotional intelligence on affect-based trust. Results were identical to step 2 for job motivation, demonstrating that emotional intelligence (t=17.4, p<.001) does strongly predict affect-based trust (F=303.3, p<.001). Next, our second hypothesis predicted a main effect of affect-based trust on sales performance. Step 3 in our results demonstrates that a significant main effect (F=93.1, p<.001) of affect-based trust (t=9.7, p<.001) is also found, supporting H_{2b}.

Finally, the last hypothesis tested the mediating effect of affect-based trust. Again, step 4 regressed sales performance on both emotional intelligence and affect-based trust in the same model. As demonstrated in Table 3, while the model is significant (F=46.5, p<.001), the direct effect of emotional intelligence becomes completely non-significant (t=.383, p=n.s.) while affect-based trust (t=6.4, p<.001) remains significant. Likewise, because emotional intelligence was significant (t=6.8, p<.001) in step 1 and non-significant in step 4, and because emotional intelligence significantly predicts affect-based trust in step 2, then we can conclude that affect-based trust does in fact fully mediate the relationship between emotional intelligence and sales performance, completely supporting H_{3b}.

DISCUSSION

Despite the crucial role of trust within business relationships, there has been little empirical research and analysis conducted that critically emphasizes affect-based trust as the primary link between the emotional intelligence of a sales manager and the motivation and performance of his or her sales representatives. As a result, the current study builds on and supports other empirical studies of emotional intelligence conducted by leading psychologists (Mayer and Salovey 1997; Goleman 1998, 2006).

Additionally, this study also builds upon the specific ideas of McAllister's (1995) research on affect-based trust. The results of our study indicate that a sales associate's perceptions of a sales manager's emotional intelligence directly influences their own job motivation and sales performance, as well as the perceived levels of affect-based trust with their manager. However, while there is a direct effect of the manager's perceived emotional intelligence on job motivation and sales performance, our analysis demonstrates that manager's emotional intelligence actually impacts an associate's motivation and performance *through* affect-based trust. These findings suggest that as a sales manager's emotional intelligence increases, their ability to foster a trusting relationship with their sales representatives will also increase, thereby increasing his or her sales representatives' job motivation and sales performance. This study demonstrates the importance of establishing managerial relationships based on trust, specifically affect-based trust, as created by high levels of emotional intelligence by sales managers.

Regarding managerial implications, in order to build a successful work force, our research finds that managers must be adept at building trusting relationships by displaying high levels of emotional intelligence. Being emotionally intelligent instills the "ability to perceive emotion, integrate emotion to facilitate thought, understand emotion, and to regulate emotion to promote personal growth" (Mayer and Salovey 1997). Here, for sales representatives in the workforce, this intellect has been shown to significantly foster the essential growth of affect-based trust between those salespeople and their sales manager. This study supplements the foundation underlying the positive impact of emotional intelligence in the workplace, especially among retailing careers.

Because of the negative media associated with a down economy, more than ever in the business arena, there is a deep-rooted need for trusting relationships within the workplace. Given the simple observation that business is conducted via relationships, research from a variety of fields has concluded that trust must be present as the foundation for any relationship to be effective. By distinctively focusing on improving each part of their own emotional intelligence, sales managers will enable more effective appraisal and expression of emotions, while enhancing cognitive processes and decision-making. When managers can effectively appraise and express the emotions of themselves and others, healthier communication and improved understanding of needs naturally takes place. If a sales manager, professional, or anyone with a leadership role can display a superior management of emotions, activities related to constructive thinking, cooperation, and, most importantly, trust, provide the best possible results. Interestingly, research also supports the idea that higher levels of trust may also be somewhat of a financial aid by decreasing monitoring costs and employee turnover rates (Bachmann and Zaheer 2006). This implication seems crucially important and relevant today, considering today's economic uncertainty.

Other implications involve specific evaluations of prospective employees and current employees. In response to the significance of emotional intelligence and affect-based trust produced within our study, many companies could implement an emotional intelligence scale for better assessment of each sales management applicant during the selection and hiring process. Furthermore, existing sales managers should be involved in continual emotional intelligence training. Additionally, sales managers might be required to conduct regular, self-reflective observations of their own emotional intelligence performance over a period of time. Finally, companies might want to consider implementing yearly 360 reviews of each sales manager's emotional intelligence.

RESEARCH LIMITATIONS

Some limitations within our methodology were present and should be made evident. In completion of this survey, participants answered a self-reported performance scale, which presents limitations concerning the accuracy of those responses since our study lacked actual, physical data on each individual's sales performance. Past research reveals that bottom performers sometime overestimate their job performance while top salespeople underestimate their job performance (Jaramillo, Carrillat, and Locander 2003).

Another limitation within our survey could be that the emotional intelligence scale was perceptually based and not a direct measure of the sales manager's EI. In particular, the EI scale asks sales associates to rate their sales managers' emotional intelligence simply through daily interaction from the workplace. It would have been ideal to match this data with a self-assessment of emotional intelligence conducted by the sales managers' themselves, but that would have required dyadic data which was not able to be collected across the entire dataset. Even though EI has historically been researched as a self-report measure, here, we believe the exploration of this gap in the literature of evaluating one's perception of another's emotional intelligence is a new theoretical and pragmatically interesting perspective.

Finally, social desirability of participants could provide limitations within the scope of our study. More specifically, this limitation would invoke a salesperson to answer questions in a more "socially desirable" way, or in a more positive manner that opposes their true feelings. Even depending on the mood within the retail store, some answers could have limited further research findings to support this study. This study attempted to guard against any influence by others upon participants' responses by requiring isolation when completing the survey as well to guarantee anonymity. In all, the present findings should be interpreted in light of the study's limitations.

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RETAILERS AND SUSTAINABILTY IN THE US

Peter Jones, David Hillier and Daphne Comfort

Abstract

This paper provides a short commentary on the '2015 Retail Sustainability Management Report' published by the US Retail Industry Leaders Association (RILA). The paper begins by outlining the characteristics of the RILA and providing a summary of the report and it then offers some reflections on its findings. The report provides a positive view of the ways the US retail industry is currently addressing a series of sustainability agendas and strikes an optimistic tone in looking to the future. However the authors argue that the RILA report suggests that the approach to sustainability adopted by the retail industry in the US is primarily, though not exclusively, driven by driven by business imperatives. The accent being on making efficiency gains across a wide range of economic, social and environmental issues rather than on maintaining the viability and integrity of natural ecosystems. More critically the authors suggest that the leading US retailers' commitments to sustainability are currently couched within existing business models centred on continuing growth and consumption, which might be seen to be the antithesis of sustainability.

Keywords: *Sustainability; US Retailing; Sustainable Consumption; Economic Growth.*

Introduction

Within Europe the European Retail Round Table (ERRT) has claimed that *'retailers are drivers of sustainable consumption and production'* and that *'sustainability is at the heart of the modern retail sector and mainstreamed in ERRT members companies' operations and* strategies' (ERRT 2015, webpage). Further the ERRT has argued that *'as well as focusing on greening their own internal processes and procedures, ERRT member companies recognise that they are in a unique position to promote more sustainable consumption patterns through their daily contact with consumers and their partnerships with their suppliers'* (ERRT 2015, webpage). The Retailers' Environmental Action Programme's 2014 annual report, produced by the Retail Forum for Sustainability, provides a brief outline of the achievements of 21 leading European retailers and 5 retail federations in pursuing sustainability strategies and agendas. More generally In her *'Foreword'* to the European 'Retailers' Environmental Action Plan' 2014 annual report, Pia Heidenmark Cook, Co-chair of the Retail Forum for Sustainability, applauded *'the progress we have made as REAP members and in collaboration'* and emphasised that its commitment *'to make tomorrow's world a sustainable one'* (Retail Forum for Sustainability 2014, p. 1). In a similar vein Kestutis Sadauskas, the other Co-chair of the Retail Forum for Sustainability argued that the retail sector can *'play a leading role catalysing change towards a sustainable, greener and more competitive economy'* (Retail Forum for Sustainability 2014, p. 2).

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By way of comparison the publication of the *'2015 Retail Sustainability Management Report'* by the US Retail Industry Leaders Association (RILA) provides an opportunity to review, and to reflect upon, *'sustainability activities in the retail industry'* within the US (RILA 2015). The RILA is *'the trade association for the world's largest and most innovative retailers'* (RILA 2015 p.4) and its members include some 200 retailers, manufacturers and service suppliers, which together account for over $1.5 trillion in sales and more than 100,000 stores, distribution centres and manufacturing plants in the US and overseas. The RILA's large retail members include Wal-Mart, Home Depot, Target, Costco, Home Depot, IKEA, 7-Eleven, J.C. Penny, Walgreen, Whole Foods Market and Lowes. As such the RILA's 2015 sustainability report might be seen to reflect cutting edge approaches to sustainability within the retail sector in the US. This paper provides paper short commentary on the *'2015 Retail Sustainability Management Report'* published by the RILA. The paper begins by outlining the characteristics of the RILA and providing a summary of the report and it then offers some reflections on its findings.

Retail Sustainability Management Report

RILA launched its original 'Retail Sustainability Initiative' in 2007, to enable sustainability executives to share best practice, to develop new processes and to communicate sustainability initiatives and achievements. Initially it was principally a collective response to increases in regulatory enforcement actions but in the years since then the initiative has gathered momentum and widened its focus. The 2015 Retail Sustainability Management Report sought to *'help companies understand how they compare to others in the industry and how they may want to progress in the future.'* The report is based on information obtained from the responses to an online questionnaire received from 42 retail companies, representing more than 50,000 locations and $620 billion in global revenue.

The questionnaire initially focused on a number of contextual issues relating to how the respondent companies manged sustainability and the responses suggested that responsibility for managing sustainability varied considerably amongst the large retailers. In some companies a single executive is responsible for sustainability, in others responsibility is shared amongst a team and in the majority of companies' executives have responsibility for sustainability alongside the management of other operational functions. Responsibility for setting sustainability goals also varies and while it is the senior executives that set such goals within some companies, elsewhere this responsibility lies with functional departments and sustainability teams. Retailers reported that sustainability was often seen as a driver for innovation but other benefits claimed for pursuing sustainability strategies included brand enhancement, employee retention, reputation management, customer satisfaction, regulatory compliance, support for entry into new markets and cost savings.

The main body of the report is structured around the RILA's '*Sustainability Management Maturity Model'*, developed jointly by Deloitte and the RILA. While the first version of the model, which underpins the 2015 report, specifically focuses on environmental impacts the RILA suggests that future versions may also look to examine social and community dimensions of sustainability. The model can be used by individual retailers and more widely across the retail industry as a whole. The model enables retailers to

Identify both the maturity of their sustainability programmes and opportunities for improvement
Encourage internal discussions about the development of sustainability programmes
Access increased funding for sustainability programmes
Guide management development and training to support and enhance sustainability programmes

Promote sustainability at all levels across the company and

Evaluate internal and external perceptions of the effectiveness of sustainability programmes.

More specifically the model included seven themes namely: *'strategy and commitment'*, *'people and tools'*, *'visibility'*, *'retail operations'*, *supply chain'*, *'products'* and *'environmental impact.'* These themes are, in turn, divided into a number of dimensions to provide some 27 dimensions in total that are seen *'to define an effective retail sustainability program.'* Retail Operations, for example, includes*' stores and corporate office, warehouses and distribution centers'* and *'data centers and applications'*, People and Tools includes *'shareholder engagement', employee engagement'*, *'funding mechanisms'* and *'business innovation mechanisms'* while Environmental Issues includes *'energy and greenhouse gas emissions'*, *'water and wastewater', 'waste and recycling'* and *'chemicals and toxins.'*

For each dimension the report outlines what is seen to be the current leading practice amongst the responding retailers. In addressing strategy, for example, leading practice was characterised as being when *'sustainability strategy aligns across departments and with overall corporate strategy'*, when a retailer *'incorporates internationally recognized standards into long term strategy'* and has *'balanced scorecard system in place for reviewing strategies and projects.'* In a similar vein leading practice for stakeholder engagement was when the retailer identified a *'comprehensive list of Key Performance Indicators through stakeholder engagement processes'* and *'incorporates feedback from key stakeholders into sustainability strategy.'* For energy and greenhouse gas emissions leading practice was when *'capital expenditure decisions consider energy cost implications'* and when a retailer *'relies on alternative energy for 25% of energy needs through Renewable Energy Certificates and onsite generation.'*

In reviewing the retailers individual responses to its survey/its conclusions to the report RILA suggested that *'retail sustainability programs'* have adopted *'a specific development trajectory'* and that they *'typically begin with a focus on their own operations-with an emphasis on energy and waste reduction in stores and distribution centers- and then turn to addressing the product and supply chain impacts.'* At the same time RILA argued that *'the leading retailers go one step further by engaging consumers and other stakeholders in the company's journey, and help consumers to understand the full impact of their product purchases.'* More generally the report drew attention to the issues of materiality and independent external assurance, both of which are assuming increasing importance in corporate sustainability reporting. Materiality, which is concerned with the identification of those environmental, social and economic issues that matter most to the company and its stakeholders, along with risks identification, is one of the 27 dimensions seen to define sustainability management.. More specifically the report argued *'defining the issues most material to the business critical for all corporate functions, and resources are best directed at those issues with the potential for a significant material impact.'* The report also recognised the importance of independent external assurance, simply defined as a process used to provide confidence as to the degree of reliance that can be placed on information in sustainability reports. Under the reporting and communication dimension in retailers characterised by leading practice *'sustainability statements are independently audited.'*

However there are marked variations in the retailers' responses to the 27 dimensions seen to define sustainability. Thus strategy *'currently ranks as one of the most mature components for the industry'* with metrics and measurement, warehouses and distribution centers, waste and recycling and collaborative involvement all being similarly classified. By way of contrast responses

on a number of dimensions including, materiality, goals, employee engagement, indicate that the retail industry *'plans to make significant improvement'* or *'to grow significantly over the next two years.'* For other dimensions including incentives, marketing campaigns, supply chain transparency and traceability and stakeholder engagement, the retailers' responses indicate that nearly all the companies are just starting on the process of active engagement. On some dimensions, including business innovation mechanisms, stores and corporate offices and product, energy and greenhouse gas emissions and packaging design and development, retailers reported that they will be *'excelling in 2017'* while on other dimensions including point of purchase consumer education and data center and applications, as *'ones that will grow least in the next two years.'*

Nevertheless the RILA concluded in a positive manner arguing *'retail sustainability programs are following the same dynamic as other critical business functions, namely to hone their focus, align business resources and expand their breadth of activities'* and that *'as more retailers build their sustainability strategies and report on their successes , they will further solidify the business case for sustainability.'* Further the RILA claimed that *'the leading companies are already taking advantage of this development dynamic by leveraging the key ingredients for success: engaging executives, investing in people and systems, measuring and tracking progress, setting goals and storytelling, and they are getting a wide range of benefits from it.'*

Reflections

The publication of the RILA's 2015 sustainability management report provides a broad picture of current approaches to sustainability amongst retailers in the US. More generally at a time when concerns are being increasingly voiced about unsustainable patterns of production and consumption it would seem to offer welcome recognition that leading retailers recognise the vital role they play in promoting more sustainable patterns of consumption. That said a number of issues merit discussion and reflection. Firstly while the 27 dimensions identified in the report are deemed to define an effective sustainability programme the report does not offer a definition of sustainability nor recognition that the concept has a number of different and contested meanings.

However defining sustainability is not straightforward. Diesendorf (2000) argued that sustainability can be seen as *'the goal or endpoint of a process called sustainable development.'* The most widely used definition of sustainable development is that provided in *'Our Common Future'* namely *'development that meets the needs of the present without compromising the ability of future generations to meet their own needs'* (World Commission on Environment and Development 1987). More specifically there are sets of definitions that are based around ecological principles which focus on conserving natural resources and protecting fragile ecosystems on which ultimately all human life depends. There are also broader definitions that include social and economic dimensions along with environmental and ecological goals that seek to meet human needs in an equitable manner. Arguably more pointedly Roper (2012) distinguished between *'weak'* and *'strong'* sustainability and while *'weak sustainability prioritises economic development strong sustainability subordinates economies to the natural environment and society, acknowledging ecological limits to growth.'*

However while the RILA does not explicitly offer a definition of sustainability within its 2015 sustainability management report, the authors' reading of the report clearly suggests that the RILA and its members have implicitly constructed a definition of sustainability which is driven more by

commercial, rather than environmental or social, goals. More specifically the dominant, though not exclusive, emphasis is on efficiency gains and cost reductions. Thus while three of the four dimensions included in environmental issues are designed to reduce overall energy and water use and waste, for example, they also serve to reduce costs. In a similar vein a number of individual elements within the transportation and logistics dimensions are focused on cost saving measures such as '*using reusable containerisation for* nearly all products', '*packaging and transportation system designs concurrently occur to optimise flow of goods and minimize space and energy usage'* and *'develops innovative shipping mechanisms to maximize load capacity.'* In some ways this echoes Banerjee's (2008) more general argument that *'despite their emancipator rhetoric, discourses of corporate citizenship, social responsibility and sustainability are defined by narrow business interests and serve to curtail the interests of external stakeholders.'*

While the RILA report identified 27 dimensions contributing to sustainability management programmes and recognised the importance of materiality in identifying the environmental social and economic impacts of their operations there was no information on how the retailers were assessing materiality. In embracing materiality current best practice is focused upon engagement with a wide range of stakeholders, the identification and prioritisation of material issues and target setting. A rigorous approach to materiality that is integrated into a company's core business strategy can be seen to be an appropriate way to publicly demonstrate a company's commitment to sustainability. Within the RILA report there was no attempt to prioritise any of the 27 dimensions or to distinguish between perceived orders of magnitude of importance and impact. Schendler and Toffell (2013), for example, argued that while many of the world's largest companies *'are working to reduce energy use and waste, and*

many have integrated sustainability into strategic planning……such actions don't meaningfully address the primary barrier to sustainability, climate change.'* Schendler and Toffel (2013) further argued that many businesses that claim to be sustainability leaders *'don't recognise the primacy of climate change'* and that such an approach is *'misguided'* in that many businesses include *'climate in a basket of equally weighted issues'* and that such an approach is *'misguided'* in that *'climate vastly trumps those other environmental issues.'* Although the issue of climate change transcends all business sectors large retailers have a significant role to play in influencing the extent to which society can reduce energy use and greenhouse gas emissions.

Thirdly the concept of sustainable consumption described for example, *'the most obdurate challenge for the sustainable development agenda'* (Cohen 2005) or to growing concerns about unsustainable consumption described as *'the mother of all environmental issues'* (European Environment Agency 2012) is conspicuous by its absence from the RILA retail sustainability management report. This is not surprising! On the one hand any moves to encourage more genuinely sustainable patterns of consumption would be a major challenge for retailers and would require a fundamental restructuring of the retailers' existing business models to promote the comprehensive integration of sustainable consumption into a new core business strategy. On the other hand retailers would be clearly concerned about consumer reaction for *'sustainable consumption is seen by some as a reversal of progress towards greater quality of life'* in that *'it would involve a sacrifice of our current, tangible needs and desires in the name of an uncertain future'* (European Environment Agency 2012).

Finally there are more fundamental issues around the underlying tensions between sustainability and economic growth, dependent as it is currently is on continuing consumption of

the earth's natural resources and in the demands it makes on society. On the one hand the mainstream business approach to sustainability is rooted in the general belief that continuing economic growth will be accompanied by the more efficient use of resources. This trend which is seen as either relative or absolute decoupling (relative decoupling refers to using fewer resources per unit of economic growth while absolute decoupling refers to a total reduction in the use of resources) underpins many conventional definitions of sustainability and the vast majority of corporate sustainability strategies and programmes. However Wiedmann et. al. (2015) argued that *'achievements in decoupling in advanced economies are smaller than reported or even non-existent'* and this may be seen to undermine the currently dominant approaches to sustainable development. On the other hand Mansfield (2009) argued that conventional approaches to sustainability fail to recognise *'the political nature of the socio-economic processes that produce environmental degradation poverty and injustice.'* In a similar vein Jackson (2006) has argued that *'it is entirely fanciful to suppose that deep emission and resource cuts can be achieved without confronting the structure of market economies.'* More pointedly Castro (2004) has questioned the very possibility of sustainable development under capitalism and argued that economic growth relies upon the continuing and inevitable exploitation of both natural and social capital.

Conclusion

The RILA 2015 Retail Sustainability Management Report is to be welcomed in that it tries to provide a snapshot of current practice and forward thinking about sustainability within the retail community in the US. The report looks to strike an optimistic note concluding that as increasing numbers of retailers develop their sustainability strategies and report on their sustainability achievements so they will strengthen the business case for sustainability. More generally the authors would argue that the RILA report suggests that the approach to sustainability adopted by the retail industry in the US is primarily, though not exclusively, driven by driven by business imperatives. The accent being on making efficiency gains across a wide range of economic, social and environmental issues rather than on maintaining the viability and integrity of natural ecosystems and on reducing demands on finite natural resources. More critically the authors suggest that the leading US retailers' commitments to sustainability are currently couched within existing business models centred on continuing growth and consumption and that these commitments represent a weak approach to sustainability. As such this echoes Roper's (2012) belief that weak sustainability represents *'a compromise that essentially requires very little change from dominant economic driven practices but effectively works to defuse opposition, increase legitimacy and allow business as usual.'*

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UNDERSTANDING THE CONSUMERS' ATTITUDE TOWARDS TABLET SELF-SERVICE FOR FASHION RETAILING

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Abstract

Looking at the retail market situation nowadays, technology has become an innovative phenomenon that gradually engaged with the fashion retail industry. Many of the fashion retailers had set off to go beyond servicing customer through salespeople by adopting the technology device (i.e. tablet computers) that can provide customer service. In this study, a modified Technology Acceptance Model was use to examine the relationship between perceived consequences on customers' attitude which leads to behavioral intention, with the moderating effect of familiarity on the perceived consequences in using tablet self-service by Millennial Generation. Data of the target respondents were collected through a set of 8 sections questionnaire with non-probability sampling approach and snowball sampling. This empirical study has provides evidence that perceived enjoyment was the key factor that effect the Millennial's attitude which leads to their behavioral intention. The other three perceived consequences – perceived ease of use, perceived usefulness and perceived time saving were all indicate as no direct relationship with users' attitude. Moreover, on the moderating effect on familiarity, it indicates that there were positive relationships on all the perceived consequences. This implies that the familiarity of adopting tablet by the Millennials have strong direct relationship towards the perceived consequences proposed. Hence, the linear relationship between these perceived consequences and customer attitude towards the tablet self-service adoption is verified.

Keywords: Fashion Retailing; Consumer Research; Tablet Technology; Technology Acceptance; Millennial Generation

1. Introduction

Due to the rapid development of technology, the technology innovation continues its gradual shift from PC (personal computer) to mobile devices. Tablet, which is categorized as one of the mobile devices has shown its potential achievement in the market within two years since the first year it was register on the global level. By having 6% penetration and it is estimated to have bigger growth in the future. Since Apple Inc. introduced iPad in 2010, the tablet computer's popularity has grown at a meteoric rate (eBay, 2014). There was massive escalation of tablet ownership showed by iPad, with number of 7.5 million sold in 2010 to 71 million in 2013 (Newman, 2013).

Tablet computer had been implemented in many industries (e.g. fashion retail stores, restaurants and cosmetic stores). Fleming and Artis (2010) mention that consumers become involved in unique shopping experiences by the use of self-

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service technology and that it also stimulates customer satisfaction and retention. By using self-service technology, consumers are able to save time, money and enjoy the benefits that SSTs provide, including a satisfactory shopping experience (Bitner, 2001; Meuter et al., 2000). The advantages of using self-service technology like tablet computers are not just for the consumers but as well as to the retailers. The self-service checkout feature of tablets implemented in-store improves companies service quality, productivity and reduce overall cost of service (Curran and Meuter, 2007). Moreover, Cho (2011) asserted that by adopting the new technologies like SSTs, companies could minimize the overhead costs related to personnel and capital expenditures. By implementing tablets, retailers substitute information in physical forms to digital forms.

There are many companies are finding fresh and unexpected ways to adopt tablets in stores, as it could helps to broaden the boundaries of what a brick-and-mortar store is capable of. As many retailers are started to be aware of the benefit that the tablets could provide for both the customers and themselves, it is essential for the retailers to better understand how the tablet could present a new attractive ways of doing the business. Zmuda (2010) from Advertising Age noted that tablet has huge potential as interactive catalogs, personal shopping assistants and point-of-sale system. By having tablet computers on the sales floor, customers are allowed to perform actions all by themselves. This means the customers can complete tasks quicker without waiting for line and comfortably operate self-service thought the tablets. According to Katz and Martin (1989), consumers consider waiting as wasted or lost opportunity time. Hence, time savings has become a crucial element for the retailers in order to reach the customer satisfaction. Nevertheless, it is very rare to find apparel retailers adopting tablet computers as a tool to

improve customers' shopping experiences. There is limited research found in the study of the productivity of tablets implementation in the brick-and-mortar store. The implementation of tablet computers on sales floor in fashion retailer industry is found to have a lower number compare to those progressive foreign countries. Therefore, it is advantageous to study the young customers' responses towards this new innovative communication platform used in fashion retail store.

As Millennial is the group of youngsters who are substantially exposed to technology innovation, it is lucrative to know their intention of using it. Therefore, this study attempts to figure out the potential adoption of implementing tablets in fashion retail market as to provide customer service with a more portable way in the brick-a-mortar store.

In recent years, young adults have become the most targeted customer of many fashion retailers. The young adults who are categorized as the generation Y, also known as the Millennials. Howe and Strauss's (2000) study, they accurately claim that Millennials are the people who born between the early of 1980 and 2000. This means that in the present time, the age range of Millennials is between 15 and 35. They were born during and after the introduction of digital technologies which denotes that they've been exposed to technology since the early age (Banks, 2013). Moreover, due to the tendency of late marriages in some countries, there are lower chance of getting married and having children. Hence, there is less cost for them to endure upon raising the child and daily needs necessity. This interprets that they are having more proportions to spend on. The generation of Millenials is also known to be very fond of using innovative technologies. Based on all these reasons, Millenials in have become the important group for fashion retailers to investigate how this

group of consumers responds with the implementation of tablet computers in the brick-and-mortar store.

2. The theoretical framework

2.1 Defining of Tablet Computer

Tablets also called as tablet computer which is defined by TechTerget as "a wireless, portable personal computer with a touch screen interface, and its form is smaller than a notebook but larger than smart-phone". The tablet computers implemented in-store now days has the characteristics such as touch-screen; wireless adapters to Internet connection; a communication system and sharing services; point-of-sales system; and self-service checkout platform, which could be characterized as one of the self-service technologies (SST). The technology that customers use independently without the interaction with sales associates has been termed as self-service technology (SST) (Meuter et al., 2000).

The rapid change of retail industry makes retailers to be obligated to provide a better in-store service and experience to retain the customers from turning away. By the development of advanced technologies like computers, Internet, voice recognition and virtual reality, many technology-based self-service alternative have been introduced to retail industry (Dabholkar, 1994; Griffith and Krampf, 1998; Burke, 1999; Dabholka et al., 2003). Many firms are adopting technology-based self-service rather than interpersonal interfaces to enhance the customer interactions, which result to reduce cost and increase productivity (Barrett, 1997).

With the implementation of tablet computers in a brick-and-mortar store, its role is soon performing as a device that can provide customers a self-service experience in browsing, ordering or even checkouts. The tablets implemented in JC Penney's stores allow customers to check details of the jewelry features. Likewise, Puma and Converse allow the customers to design their own shoes by the intermediary of the tablets which they adopted in-store.

Aware of the popularity and the user-friendly benefit of the tablets, fashion retailers had started to implement the tablets in the retail store. Since 2011, retailers like Nordstrom Inc.; Puma; Converse; and Burberry, have rolled out tablets testing on selected stores around United States. Tablet computers in-store provides the customer information about product (e.g. Burberry, Issey Miyake and Kate Spade); a customization platform of the product (e.g. Puma and Converse); collect customer information (e.g. Adidas, JC Penney); as a tool to request assistance of a sales associate in the fitting room (e.g. Bloomingdale's); perform as mobile POS (point-of-sale) platform in-store (e.g. Adidas and Barneys) and permit mobile check-out (e.g. JCPenney, Nordstrom). It is envisioned that by the adoption of tablet, it benefits both customers and retailers, as the line and clutter situation in store will decrease. Supported by Christopher (2009), that the business implementing self-checkouts are reported to have 40% reduction in line queue. By using the self-service technologies, customers are involved in unique shopping experiences as it could help customers to save time, money and enjoy the benefits that the technologies provide, in which it promotes customers satisfaction (Fleming and Artis, 2010; Bitner, 2001).

Compare to the checkouts at the traditional cashier counters, adopting tablets in fashion retail store could provide the customers unique value, such as detailed products information, products availability, faster customer services and checkouts. These features give customers a more convenient shopping environment. Regarding to the fast paced society now a days,

where consumers craved for mobility that allows them to stay updated, the adoption of tablets to meet customers' demand is potentially high. Hence, with the foreseeable potential use of tablets in apparel retail industry, understanding the consumers' attitude and behavioral intention towards the adoption of tablets in retail market is crucial.

It is important to assess the consumer attitude in regard to the self-service technology. Attitude is considered as one of the most important aspect that the businesses used to interpret consumers (Trafimow and Finlay, 1996). They also point out that consumers' attitude is one of the best predictor of behavioral intention. Moreover, Fishbein and Ajzen (1975) explain that attitude leads to intention that in turn leads to behavior in their theory of reasoned action. According to Schiffman and Kanuk (2004), they noted that attitude is the expression of inner feeling that reflects a person's level of favorability towards an object. Supported by Cho's (2011) description of attitude as customers' positive or negative feeling towards the object (i.e. tablet computers and other technology devices) which leads them to either against or toward a particular behavior. It is important to explore the responses of consumers in order to figure out the urge of adoption. Customers adopt the SSTs by reason of the desire of trying new products and services (Khare et al., 2010) and experiencing the innovation (Venkatraman, 1991). Based on the past studies, some focal points that influence the adoption of SSTs including customers' perceive of satisfaction (Shamdasani et al., 2008) and usefulness (Kim and Forsythe, 2010). Elliot and Hall (2005) examined the likelihood of using self-service technology influenced by the consumer characteristics. Different customers have different level of responses toward SSTs, not all customers are fascinated in adopting the technology. Bobbitt and Dabholkar (2001). However, the innovative self-service technologies have not yet been widely adopted in fashion retail industry. Thence, in this study, a better understanding of consumers' attitudes and behavioral intentions on computer tablets used in the brick-and-mortar apparel retail stores will be further addressed. To understand more and predict the consumer behavior, there are three major theories are commonly used, such as – Theory of Reasoned Action (Fishbein and Ajzen, 1975), Theory of Planned Behavior (Ajzen, 1985) and Technology Acceptance Model (Davis, 1986)

2.2 Theoretical Foundation

There are numerous models explained the attitude and behavioral intention of an individual of adopting technology including Theory of Reasoned Action (Fishbein and Ajzen, 1975), Theory of Planned Behavior (Ajzen, 1991) and Technology Acceptance Model (Davis, 1986).

2.3 Theory of Reasoned Action

Fishbein and Ajzen first introduced Theory of Reason Action (TRA) in 1975, which is an extended and modified model of Fishbein's multi-attribute model about the consumer's belief and attitudes to theirs behavioral intentions (Peter and Olson, 2005). Theory of Reasoned Action is based on the premise that an individual's behavior is determined by the intention to perform the behavior (Moore and Benbasat, 1996). Attitude towards behavior is defined as the individual's general feeling of favorableness and unfavorableness for that behavior (Ajzen and Fishbein, 1980). According to Ajzen and Fishbein (1980), the model presumes that consumers intentionally consider the consequences of the alternative behaviors and choose the alternative that leads to the most desirable consequences. The result of this reasoned selection process is an intention to engage in the selected behavior, in which that the behavioral intention is considered as the best predictor of the authentic behavior (Peter and Oslon, 2005).

The model of Theory of Reasoned Action does not determine the beliefs that are operative for a particular behavior (Cho, 2011). It is necessary to identify the beliefs that are prominent for subjects regarding the behavior under investigation (Davis et al., 1989). Schiffman and Kanuk (2004) point out that the Theory of Reasoned Action must be determined and assessed under the specific factors such as particular object that directs the action or the situation that lead the behavior to take place. This means that the behavioral intentions are generally planned to be conduct. Cho (2011) noted that the behavior such as using the self-service technology to purchase apparel garments reflects the consumers' overall interpretation about performing the particular behavior. Dabholkar and Bagozzi (2002) supported that the consumers' attitude towards the adoption of SST has a direct and positive effect on their intention in adopting the devices.

2.4 Theory of Planned Behavior

The Theory of Planned Behavior (TPB) has extended the boundary of the Theory of Reasoned Action by including the perceived behavioral control as the determinant of both behavior intentions and behaviors (Amitage and Christian, 2003). As stated by Ajzen (1991), perceived behavioral control refers to the people's perception of difficulty of an action is to perform the behavior of interest; and it is hypothesized that remarkable perceived behavior control has more positive behavioral intention and probability of perform a behavior. The perception of whether they have the resources will affect their intentions of carrying out the behavior, along with the effectual performance of behavior (Chang, 2012). According to Madden, Ellen and Ajzen (1992) the more resources and opportunities that an individual thinks that they possess, the greater should be the perceived behavioral control over their behavior.

The perceived of behavioral control in the TPB is included the variable that has both direct and indirect effect on behavior over the intentions. Ajzen and Madden (1986) noted that the direct path from perceived behavior is assumed to occur if the perceived behavior control is a valuable representative of actual control. Besides, the indirect effect is based on the assumption of that perceived of behavioral control has motivation implication for behavioral intention. Researchers (Bandura et al., 1980) provided the evidence that an individual's behavior is strongly influenced by the confidence in the ability of performing the behavior. Nevertheless, other researchers (Leone et al., 1999) indicated that the direct path from perceived behavior control is unnecessary to behavior in all cases. The direct path is added as to speculate to occur only if the perceived behavior control is a good delegator of actual control (Ajzen and Madden, 1986). Thereof, it will be excluded if the behavior is new to the individual. It is found that the theory of planned behavior is better in predicting behavior compared to theory of reasoned action (Madden et al., 1992). Overall, from the theory of planned behavior, it is expected that the effect of perceived behavioral control has significant impact on intention, but the impact does not need to be related to the degree of how people have control over the behavior in question (Madden et al., 1992).

2.5 Technology Acceptance Model

Parboteeah et al., (2009) point out that the interaction of an individual with information technology invariably directs to cognitive reaction. To assess the cognitive reactions, perceived of usefulness and perceived ease of use are generally used, which are two fundamental divisions of Davis's (1989) Technology Acceptance Model (TAM) that influence the attitude and intention of an individual to adopt the technology. TAM is a model of information system that figures the

acceptance and use of a specific technology by the users (Cho, 2011). According to Davis et al. (1989), the main purpose of TAM is to better understand the impact of external factors on internal beliefs, attitudes and intentions. TAM is an alteration of TRA model, which employ the concatenation of beliefs → attitudes → intentions → behavior (Cho, 2011). The evidence of individual's attitude towards a technology will eventually influence his/her intention to adopt the technology was also presented by TAM (Davis, 1989). The two constructs (perceived usefulness (PU) and perceived ease of use (PEOU)) are contemplating as the fundamental elements of system use, thus Davis (1989) expanded new scale to measure them accordingly. According to Ke, Sun and Yang (2012) these two constructs are determined directly by the external variables such as user characteristics and system characteristics

According to Davis (1986), the perceived usefulness (PU) refers to the degree where an individual believes that by implementing particular technology or system would help them to enhance job performance. A system with high-perceived usefulness intensifies good performance and leads to a positive use-performance relationship. Another component which is perceived ease of use (PEOU), is referred to "the degree to which an individual believes that adopting particular systems would be free of effort" (Davis, 1986). It is stated that if the system of the technology is too difficult for the user to operate, the user tends not to adopt the system even they perceive it as propitious. The construct of these two components is used to predict the attitudinal aspect of intention to use. Ajzen and Fishbein (1980) determine that the actual behavior can be effectively predicted by the intention to perform a behavior. Efficiency and time-savings could increase consumer's perception of technology's ease of use (Davis, 1989). For the self-service technology, this could mean as easy order

placement, a convenient payment system and short processing time (Cho, 2011). According to Cho (2011) enjoyment and playfulness could be two elements that associated with consumer's perception of ease of use. Lazarus (1991) identified that, if users perceive the technology as easy to use and potentially useful to conduct their job, positive emotions such happiness and enjoyment will be produced in respect to the technology used. Cognitive reaction, which refers to perceived of usefulness and perceived ease of use, is interactive with affective reaction (i.e. emotion response) (Shiv and Fedorikhin, 1999).

As Fishbein and Ajzen's (1975) Theory of Reasoned Action is essentially determining users' attitudes and intention, as well as the factitive correlation between perceived of usefulness and perceived ease of use, Davis' (1989) Technology Acceptance Model places reliance in part of it. According to Davis, Bagozzi and Warshaw (1989) TRA was designed to account human behavior broadly, while TAM defines the computer usage related to human behavior. In accordance with the theories, similar to TRA, TAM which suggests that the consumption of computer is determined by behavioral intention (BI), which is slightly different. The TAM's behavioral intention is specified by an individual's attitude to adopting the system (A) and its perceived of usefulness (PU), with relative weights predicted by regression. Hence, A + PU = BI (Davis et al., 1989). Moreover, TAM does not include the Subjective Norm (SU) as the determinant of BI. This is because through attitude (A), it is hard to decipher the direct effect of SN on BI on indirect effects. Davis' (1986, 1989) confutes that PU and PEOU are determinant factors of attitude (A), with relative weights statistically predicted by linear regression as A = PU + PEOU. Davis hypothesized PU as having positive impact on A. He also suggested that PEOU has influences on PU and A, so PU can be specified by PEOU and

other external variables accordingly, PU = PEOU + External Variables (Davis et al., 1989). In this study, TAM will be used to investigate the correlation of attitudes and its behavioral intention towards the application of SSTs (i.e. tablet computers) in fashion retail industry. In addition, the familiarity which acts as the moderating effect will be included in this research in order to strengthen the connection between perceived factors and consumers' attitude and behavioral intention of adopting tablet computers in apparel retail stores.

2.6 Hypothesis Development

Based on the reviewed literatures and the theoretical foundation above, several hypotheses were developed to investigate the relationship between perceived factors of the implementation of tablet computers in apparel retail setting in Hong Kong.

H1: *The perceived ease of use will have direct relationship on consumers' attitude toward using tablet computer in apparel retail shop.*

H2: *The perceived usefulness will have direct relationship on consumers' attitude toward using tablet computer in apparel retail shop.*

H3: *The perceived enjoyment will have direct relationship on consumers' attitude toward using tablet computer in apparel retail shop.*

H4: *The perceived time saving will have direct relationship on consumers' attitude toward using tablet computer in apparel retail shop.*

H5: *There will be moderating effect of familiarity on the relationship between perceived ease of use and consumers' attitude.*

H6: *There will be moderating effect of familiarity on the relationship between perceived usefulness and consumers' attitude.*

H7: *There will be moderating effect of familiarity on the relationship between perceived enjoyment and consumers' attitude.*

H8: *There will be moderating effect of familiarity on the relationship between perceived time saving and consumers' attitude.*

H9: *The consumers' intention of using tablet computer is positively affected by their attitude.*

2.7 Conceptual Framework

Based on the review of past literature review, the attitude and behavioral intention are studied in this research. The consumer's attitudes and behavioral intention are addressed with the bases of three theories namely TRA, TPB and TAM. The aim of this study is to investigate how the consumers' attitudes and intentions of adopting tablets are influences by different factors and how the familiarity with the technology device influence the relationship among the factors and the attitudes towards it. As to strengthen the connection between factors and consumers' attitudes toward the adopting of technology, familiarity which act as the moderating effect is used (Cho, 2011).

To the extent of the literature, the research framework proposed that four factors (i.e. perceived ease of use, perceived usefulness, perceived enjoyment and perceived time saving) influence consumers' attitudes and subsequently influence their intentions towards tablet computers implement in apparel retail setting. While, the familiarity aspect is applied as the moderator of the correlation between factors and consumers' attitudes. A modified framework was developed in order to adapt to the research purposes of this research (see Figure 1). In this study, four perceived factors would be used; threat the other factors are neglected.

Figure 1. The Purposed Research Framework

3. Research Methodology

In this study, quantitative method was adopted to collect the primary data. Data of the target respondents were collected through a set of questionnaire. In order to enhance it reliability and accuracy to the test, pilot test was also conducted. The target participants of this study were mainly university students and people who are grouped as Millennials (aged 15-35 years old). This group of people is more exposed to the technology devices in their daily life, as well as their high purchasing power of apparel. A non-probability sampling approach, snowball sampling was adopted in this research. The questionnaire was mostly distributed to university students. The questionnaire is consisted of 8 sections, where most of the questions are extracted from different studies, and a total of 29 questions were presented. In order to motivate the participants to complete the survey, it is important for the researcher to not make the participants to feel unwilling in taking the survey (Malhotra, 2004). Thus, the

questionnaire was design as simple and brief as it can be to facilitate participants from reading too much text.

According to the situation in the market that most of the apparel retail stores do not provide tablet-service for the customers yet, a figure of tablet self-service and scenario picturing a situation that the respondent was adopting the tablet in the apparel retail store was provided for their references.

4. Findings & Data Analysis

A total number of 213 data were collected. There were 5 incomplete and invalid questionnaire were eliminated. All data were inputted to Microsoft Excel version 14.2.0 for data screening. The final sample size included 207 respondents, representing 97.7% of the original data set. The final outputted data from excel was further inputted into SPSS 22.0 for

statistical test and analysis. Table 1 presents the   demographic profile of the respondents.

Demographic	N	Percentage (%)
Gender		
Female	145	70.05
Male	62	29.95
Age		
15-19	52	25.12
20-24	142	68.60
25-29	10	4.83
30-35	3	1.45
Education Level		
Secondary School	2	0.97
Higher Diploma/ Associate Degree	7	3.38
Undergraduate	186	89.86
Postgraduate or Above	12	5.80
Occupation		
Management/ Executive	1	0.48
Clerk	3	1.45
Professionals	7	3.38
Servicing/ Sales people	2	0.97
Self-employed	1	0.48
Student	184	88.89
Unemployed	2	0.97
Others	7	3.38
Income Level		
Below $10000	188	90.82
$10001-$20000	16	7.73
$20001-$30000	2	0.97
$40001 or above	1	0.48

Table 1. Demographic data

4.1 Frequency of Familiarity

Each item of the variable familiarity was computed into frequency table accordingly, which shows that the majority of respondents (168 out of 207) are familiar with tablets. However, there were only 88 of them shows that they are familiar with self-checkouts using tablets.

4.2 Descriptive Statistics on Key Variables

Data were all inputted to SPSS 22.0, where Mean and standard deviation of the variables were computed in the table 2. On the table below, all the variables scored above the neutral point 4 indicates that respondents have more positive ratings towards the perceived factors, attitude and behavioral intention in adopting tablets in the apparel retail store.

Descriptive Statistics

	Mean	Std. Deviation	N
PERCEIVED EASE OF USE	4.95	1.042	207
PERCEIVED USEFULNESS	4.47	1.242	207
PERCEIVED ENJOYMENT	4.78	1.225	207
PERCEIVED TIME SAVING	4.74	1.261	207
ATTITUDE	4.84	1.164	207
BEHAVIOR INTENTION	4.40	1.321	207

Table 2. Descriptive Statistic

4.3 Reliability Test

In order to examine the reliability and internal consistency level among items of each variable, reliability test was used. The variable is reliable if the Cronbach's alpha is >0.70, which means that the tested items are highly consistent within a variable. Results of reliability test of all variables are shown on table 3. The results show that all the variables have reached an acceptable value of Cronbach's alpha, which is a satisfactory estimation of the consistent internal reliability.

	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Perceived Ease of Use	.852	.856	3
Perceived Usefulness	.919	.919	4
Perceived Enjoyment	.947	.947	4
Perceived Time Saving	.885	.890	3
Attitude	.921	.921	4
Behavioral Intention	.938	.938	3

Table 3. Summary of Reliability Tests

4.4 Linear Regression Analysis

Linear regression was employed to examine the relationship between all variables. Simple regression was conducted between familiarity variable and four perceived variables, and multiple regression was used to examine the relationship between the attitude variable and four perceived variables.

Simple Regression - Relationship between F with PEOU, PU, PE and PTS

Simple regression analysis is used to examine the effect of an independent variable on a dependent variable. As shown on table 4, the adjusted R square of four dependent variables (i.e. perceived ease of use, perceived usefulness, perceived enjoyment and perceived time saving) were 0.223; 0.159; 0.112 and 0.124 respectively, which means that 22.3%; 15.9%; 11.2% and 12.4% of the variance in each perceived consequences could be explained by familiarity respectively. Further, on the table 5, the *t*-value of familiarity are 7.750; 6.328; 5.205 and 5.489 respectively at the significant level of 0.000 (p<0.05), which indicates that there is significant linear positive relationship between F and each of the P variables. Thereby, familiarity has significant effect on user's four perceived consequences on tablets.

Model Summary[b]

Dependent Variables	Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
PEOU	1	.476[a]	.227	.223	.919
PU	1	.404[a]	.163	.159	1.139
PE	1	.342[a]	.117	.112	1.154
PTS	1	.358[a]	.128	.124	1.181

Table 4. Model Summary[b] of the Relationship between Familiarity and 4 Perceived Variables

Coefficients[a]

Dependent Variables	Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
PEOU	1	(Constant)	2.624	.306		8.564	.000
		F	1.380	.178	.476	7.750	.000
PU		(Constant)	2.120	.380		5.582	.000
		F	1.397	.221	.404	6.328	.000
PE		(Constant)	2.817	.385		7.317	.000
		F	1.165	.224	.342	5.205	.000
PTS		(Constant)	2.622	.394		6.658	.000
		F	1.256	.229	.358	5.489	.000

Table 5. Coefficients[a] of the Relationship between Familiarity and 4 Perceived Variables

Multiple Regression – Relationship between PEOU, PU, PE, PTS with A

Multiple linear regression analysis was employed to examine the relationship between two or more independent variables – four perceived consequences on the dependent variable – user attitude. According Mujis (2004), if the adjusted R square lied between 0.11-0.30, it would be 'modest fit', 0.31-0.50 as 'moderate fit, and 'strongly fit' if the adjusted R square lied above 0.50. As shown in the model summary table 6, the R square is 0.430 and the adjusted R square is 0.419, which indicates a moderate fit in regression model. This means that 41.9% of the variation in user's attitude could be explained by the variables of perceived ease of use, perceived usefulness, perceived enjoyment and perceived time saving. In other words, as the sample size was only 207, the model has developed a moderate fit which is high enough in its percentage.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.656[a]	.430	.419	.888

a. Predictors: (Constant), PTS, PE, PEOU, PU

b. Dependent Variable: A

Table 6. Model Summary[b] of the Relationship between Four Perceived with Attitude

The result of F test on table 7 proposes that the relationship between the four perceived consequences variables and attitude was significant with its significant level of 0.000. The p-value of the F test is 0.000, which is less than 0.05, where null hypothesis is rejected. Thereby, the regression model has a significant linear relationship between the four perceived variables and user's attitude at a significant level of 0.05.

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	119.979	4	29.995	38.074	.000[b]
	Residual	159.135	202	.788		
	Total	279.114	206			

a. Dependent Variable: A

b. Predictors: (Constant), PTS, PE, PEOU, PU

Table 7. ANOVA[a] of the Relationship between Four Perceived with Attitude

From the Coefficient table 8, the p-values of t test for each regression coefficients are 0.103, 0.341, 0.000, 0.057, respectively. As p1, p2 and p4>0.05, PEOU, PU and PTS does not have a significant linear relationship with user's attitude at a significance level of 0.05. Since p3<0.05, only perceived enjoyment has a significant linear relationship with user's attitude towards tablet used in retail store at a significant level of 0.05.

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.278	.315		4.058	.000
	PEOU	.142	.087	.127	1.636	.103
	PU	.077	.081	.082	.955	.341
	PE	.385	.067	.405	5.773	.000
	PTS	.142	.074	.154	1.915	.057

a. Dependent Variable: A

Table 8. Coefficients[a] of the Relationship between Four Perceived with Attitude

Therefore, variable 1, 2 and 4 had no significant linear relationship with user's attitude towards tablet implementation in apparel retail store. Over the four variables, perceived enjoyment was the only factor that showed an effective contribution towards linear relationship. Therefore, only the variable of perceived enjoyment has significant linear relationship with attitude. While the other 3 variables should be dropped from the model.

Re-calculate the Regression
As the three perceived variables are dropped from the model, the analysis was re-calculated by just considering the significant independent variable – perceived enjoyment. After the re-calculation, the R square is 0.368 and adjusted R

square is 0.365, with moderate fit in the regression model. It means that there are 36.5% of the variation on user's attitude could be explain by the variable perceived enjoyment. The re-calculated ANOVA table 9, the p-value of F test is 0.000, which indicates that there was significant relationship between perceived enjoyment and user's attitude. As the p-value is less than 0.05, it rejects null hypothesis. On the Coefficient table 10, the intercept (a= 2.088) and regression coefficients (b1=0.576). While, the p-value of t test of regression coefficient is 0.000. As p>0.05, PE has a significant linear relationship with user's attitude in implementing tablet in retail store in Hong Kong.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	102.679	1	102.679	119.303	.000[b]
	Residual	176.435	205	.861		
	Total	279.114	206			

a. Dependent Variable: A

b. Predictors: (Constant), PE

Table 9. ANOVA[a] of the Relationship between Perceived Enjoyment with Attitude

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.088	.260		8.028	.000
	PE	.576	.053	.607	10.923	.000

a. Dependent Variable: A

Table 10. Coefficients[a] of the Relationship between Perceived Enjoyment with Attitude

Simple Regression - Relationship between A with B. The adjusted R square was 0.283, which means that 28.3% of the variance in BI could be explained by attitudes. The *t*-value of A on table 28 is 9.065 at the significant level of 0.000 (p<0.05), which indicates that there is significant linear positive relationship between A and BI. Thereby, attitudes have a significant effect on individuals' behavioral intention of tablets.

4.5 Hypothesis Testing

Using the regression analysis, nine sets of hypotheses were tested. The result shows that six of the hypotheses were supported and three were rejected (figure 2). According to the result of regression on table 8, PEOU, PU and PTS are the weak factors excluding from the model. As the p-value of the three perceived consequences are >0.05, it does not have significant linear relationship with the user's attitude at a significance level of 0.05. This indicated that PEOU, PU and PTS have no direct contribution of the factor. As there were no significant positive influence of the three Ps on A, thus H1, H2 and H4 are rejected.
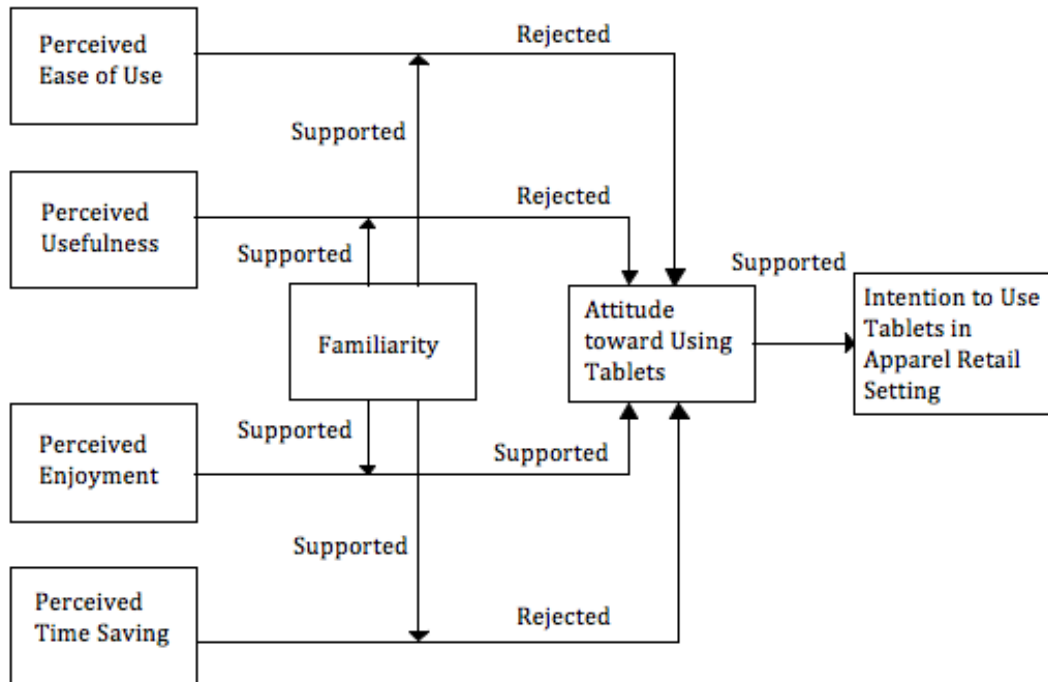
Figure 2. Validity of Research Framework

From the result of regression analysis, the p-value of familiarity with four Ps are at significant level of 0.000 (p<0.05), this indicated that there are significant linear positive relationship between F and four Ps. There were significant positive influence of F on four Ps, thus H5-H8 are supported. Moreover, the p-value of t test of relationship between attitudes with behavioral intention is 9.065 (table 11) at significant level of 0.000 (p<0.05), where there is significant linear positive relationship between A and BI. The A have significant effect on BI towards tablet, therefore H9 is supported.

		Coefficients\u00aa				
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.461	.333		4.383	.000
	A	.607	.067	.535	9.065	.000

a. Dependent Variable: A

Table 11. Coefficients\u00aa of the Relationship between Attitude with Behavioral Intention

5. Conclusion

Due to the reason of apparel retail store is currently on the early stage of tablet self-service, there are little research have insight of tablet self-service. However, there are highly exposure of people with technology advancement. A modified conceptual model based on the Technology Acceptance Model was developed to test the proposed hypotheses. It is important for the retailers to better understand the customers' attitudes and their intentions toward the implementation of technologies. In addition, customers' familiarity effect in the perceived

consequences and how customers perceived on the implementation of tablet self-service as well as the perceived consequence which influence their attitude and leads to behavioral intention at the later stage are investigated in this study.

This study has several findings to be concluded. Firstly, the results showed that people are familiar with tablet and have experiences of using it. However, large percentage of people indicated that they are not familiar with self-checkouts using tablet. Secondly, the relationship between most of the perceived consequences and user's attitudes are mainly rejected in this study. Only the relationship of perceived enjoyment and attitudes is supported. Thirdly, the moderating effects of familiarity on relationship between perceived consequences and attitudes are all consistently supported. Lastly, the finding of user's attitude on behavioral intention is also strongly supported. These finding provides apparel retailers the insight of the potential adoption of tablet self-service in Hong Kong retail stores.

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EUROPEAN RIVER CRUISING AND SUSTAINABILITY

Peter Jones, Daphne Comfort and David Hillier

Abstract

The aims of this paper are to offer an exploratory review of the extent to which the leading European river cruise companies are publicly addressing their environmental, social and economic impacts and reporting on their sustainability strategies and achievements and to offer some reflections on sustainability within the European river cruise industry. The paper begins with brief outline of river cruising and of the characteristics of sustainability. The information on which the paper is based is drawn from the river cruise associations' and the leading European river cruise companies' corporate web sites. The findings of the paper reveal that the leading European river cruise companies have done little to publicly address the sustainability of their operations. More critically the authors argued that the European river cruise companies' commitments to sustainability are driven by the search for efficiency gains and are couched within existing business models centred on continuing growth rather than on maintaining the viability of natural ecosystems and communities. As such the leading European river cruise companies are, at best, currently pursuing a 'weak' rather than a 'strong' model of sustainability. The paper provides an accessible exploratory review of sustainability reporting in the European river cruise industry and as such it will interest professional working in the river cruise industry and more generally in the hospitality industry as well as academics and students interested in tourism and sustainability.

Keywords: *River cruising; sustainability; environment; economic growth; Europe*

Introduction

River cruising has grown rapidly in popularity in recent years to become a high profile niche element within the leisure tourism market. Geographically river cruising is concentrated in the major river systems of Western Europe but river cruising itineraries are also now available in Russia, China, Cambodia, Vietnam, and Myanmar. Given its rapid growth and expanding geographical coverage the environmental and social impacts of cruising are growing in scale and complexity. While the environmental, social and economic impact of ocean cruising and the cruising companies' approaches to reporting their management of these impacts have received some attention in the academic literature (e.g. Johnson 2002; Brida and Zapata 2010; Klein 2011: De Grosbois 2015; Font et. al 2016) to date work on the impacts of river cruising have been conspicuous by its absence from the literature.With this in mind the aim of this paper is to offer an exploratory review of the extent to which the leading European river cruise companies are publicly addressing their environmental, social and economic impacts and

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reporting on their sustainability strategies and achievements.

River Cruising

While the world's oceans and major rivers have long provided vitally important methods of transport the modern origins of ocean cruising as a holiday and leisure activity have been traced back to the late 1960's and early 1970's (World Tourism Organization 2010). Cruising grew moderately during the 1970's and 1980's but in the decades since then it has consistently grown rapidly and it has become an iconic and a dynamic niche within the leisure tourism market, continually extending and enhancing its product and service offer and developing new markets. River cruising within Europe has developed much more recently and in many ways its emergence as a new element in the tourism market can be traced to 1992 with the opening of the 170 kilometre Main-Danube Canal which effectively connected Europe's main river arteries. Across much of Europe the tributaries and smaller rivers that flow into the main rivers provide additional opportunities to travel to the heart of the continent and also to explore a number of its more remote regions. Within Europe river cruise routes include the Rhine, Danube, Seine, Rhone, Moselle, Elbe, Oder, Douro, Volga, Dnieper and Po rivers. More generally river cruising itineraries now include the Yangtze in China, the Irrawaddy in Myanmar, the Mekong in Cambodia and Vietnam, the Nile in Egypt, the Chobe in Namibia and Botswana and the Murray in Australia.

The number of passengers taking river cruises within Europe grew from 75,000 in 2010 to 120,000 in 2014. While the number of passengers taking river cruises in the rest of world declined from 67,000 to 19,000 during the same time period this was more than accounted for by the political situation in Egypt which reduced the number of passengers by 85% (Cruise Line International Association 2015). In 2014 Europe accounted for 86% of all river cruise passengers and the cruises on the Rhine, Danube and Moselle rivers accounted for 57% of all European river cruise passengers (Cruise Line International Association 2015). The river cruise operators offer a variety of packages generally varying in length from 7 to 14 nights with integral flights to and from the points of departure. Some companies offer themed cruises focusing, for example on wine appreciation, beer tasting, jazz, opera, impressionist art, golf, First World War history, Jewish heritage and Christmas markets.

River cruise boats are much smaller than their ocean going counterparts and must necessarily conform to water level and bridge height restrictions. A typical river cruise boat, for example, would be 130 metres in length and 11 metres in breadth and would accommodate up to 200 passengers while the typical corresponding figures for ocean going cruise vessels are 200 metres, 26 metres and 1,300 passengers. Typically a river cruise vessel would have three decks, 100 suites encompassing a bedroom and a lounge with a veranda off the lounge and a balcony off the bedroom; a sun deck; a lounge and bar and restaurant both with floor to ceiling glass doors; television with information systems, satellite channels; and films on demand; free internet wireless service and some boats have heated swimming pools. While the river cruises operating companies emphasise style and attentive and personalized service in their brochures and marketing material river cruise vessels do not have the wide range of leisure and entertainment facilities available on ocean going cruise ships and generally more emphasis is placed on itineraries than on the ships themselves. Passengers are almost always in sight of land and sightseeing is an important element in the river cruising experience. River cruise boats stop at large cities and small towns and villages and river cruising packages normally offer, or can include, a range of land based excursions at many of their stopovers.

In extolling promoting the benefits of river cruising the operating companies draw attention to the relaxed pace of travel, views of a variety of landscapes and the opportunity to go ashore to visit a wide range of places and historic sites. A few illustrative examples posted on the Internet by the World of Cruising (2016) provide a little of the flavour of the way that the cruising experience is marketed. *'Travelling through six countries and meandering for 766 miles, the legendary Rhine is considered one of the most romantic rivers in the world. Iconic Dutch windmills and enchanting German castles adorn the riverbanks alongside, as you wind your way past on route through Holland and Germany. Eventually you will reach the narrow Rhine Gorge, a UNESCO World Heritage Site set amidst the lush greenery of the Black Forest region. The Swiss city of Basel awaits, sitting at the point where the French, German and Swiss borders meet and marking the gateway to the Swiss Rhineland.' '. Divided into upper, middle and lower basins, the Danube is breathtaking throughout its length, unveiling a world of architecture, heritage and culture along its banks. Indulge a love of classical arts in Vienna, pass castle ruins teetering on the banks of Durnstein and explore Passau.' 'A Mekong river cruise opens up a continent rich in culture and history, as the vast waterway winds through thriving cities, rural communities, floating villages and markets, and endless rice paddies, pagodas and temples. In Cambodia, the Mekong River provides the gateway for exploration of the Angkor Archaeological Park; a UNESCO World Heritage Site that is home to the magnificent Khmer temple ruins of Angkor. Built in the jungle of Siem Reap, Angkor Wat boasts an extensive array of ornate 12th century stone structures and is one of Asia's most important archaeological sites.'*

A number of companies currently operate river cruises and the market is far less concentrated than in ocean cruising where the two largest operators, The Carnival Corporation and Royal Caribbean Cruises, accounted for some 70% of cruise passengers (Market Realist 2015, webpage). The larger operators include Tauck River Cruises, AMA Waterways, APT River Cruises, Arose, Avalon Waterways and Emerald Waterways. Viking River Cruises, the world's largest river cruise company, was initially founded in 1997 by a Dutch and Scandinavian consortium and expanded its activities into the US market in 2000. By` 2015 the company had a fleet of some 65 boats operating on many European rivers and on rivers in Egypt, China, Vietnam, Cambodia and Myanmar. Tauck, which entered the European river cruising market in 2006, is a US based family business founded in 1925 which offers guided tours, small ship ocean cruises, safaris and family travel experiences in over 70 countries. Avalon Waterways is a wholly owned subsidiary of Globus, a Swiss based company which consists of some 30 tourism and aviation businesses and carries some 500,000 passengers per annum across 65 countries. Avalon's river cruise operations are relatively small, in 2015 its river cruising fleet consisted of some 22 vessels and its operations were concentrated in Europe, Cambodia, China and Egypt.

Sustainability

The ideas underpinning sustainability are not new (Gruber 2012) but the concept began to attract increasing attention from the 1980's onwards following the publication of the *'World Conservation Strategy'* (International Union for Conservation of Nature and Natural Resources 1980) and *'Our Common Future'* (World Commission on Environment and Development 1987). In the following decades the term sustainability has become increasingly seen as offering a potential solution for a wide range of challenges and problems from the global to the local scale across seemingly all walks of life. Diesendorf (2000) argued that sustainability can be seen as *'the goal or endpoint of a process called sustainable development.'* Arguably the

most widely used definition of sustainable development is that provided in *'Our Common Future'* namely *'development that meets the needs of the present without compromising the ability of future generations to meet their own needs'* (World Commission on Environment and Development 1987).

However defining sustainability is not straightforward and there are a number of contrasting and contested meanings and no obvious consensus in providing an operational definition. There is a family of definitions' essentially based in and around ecological principles and there are definitions which include social and economic development as well as environmental goals and which look to embrace equity in meeting human needs. At the same time a distinction is often made between 'weak' and 'strong' sustainability with the former being used to describe sustainability initiatives and programmes developed within the existing prevailing economic and social system while the latter is associated with much more radical changes for both economy and society. Roper (2012) for example, suggested that *'weak sustainability prioritizes economic development, while strong sustainability subordinates economies to the natural environment and society, acknowledging ecological limits to growth.'*

As the scale and geographical reach of river cruising has grown so has its environmental, social and economic impacts and there is growing interest amongst investors, environmental pressure groups, media and tourists about such impacts and about how the river cruise companies are managing these impacts. Such interest is part of much wider corporate concerns that *'the transition to more sustainable patterns of production and personal consumption is not optional'* and reflects the belief that *'leading business recognise this as an opportunity and want to be part of the solution rather than part of the problem, as more and*

more consumers look to be smart and will increasingly establish new norms for socially acceptable behaviour' (Deloitte 2012, p1). In a similar vein Lubin and Esty (2010, p.3) have argued that *'customers in many countries are seeking out sustainable products and services or leaning on companies to improve the sustainability of traditional ones'* and that *'managements can no longer ignore sustainability as a central factor in their companies' long-term competitiveness.'*

Method of Enquiry

In an attempt to undertake an exploratory examination of the extent to which Europe's river cruise companies are publicly recognising the environmental, social and economic impacts of their operations and addressing and reporting on their sustainability strategies and achievements the authors adopted a bilateral approach focused on the cruise operators' associations and on the individual river cruise operating companies. Firstly the authors undertook a general Internet search using the terms 'river cruising' and 'sustainability' and a more specific search of each of the river cruising associations', namely the Cruise lines International Association (CLIA) and IG River Cruise, the European River Cruise Association, using the key word 'sustainability' and employing Google as the search engine. The aim here was to locate some general information on the river cruising industry and to ascertain if there were any collective approaches to sustainability within the industry and to and to identify the leading river cruise operating companies within Europe. The authors then undertook a more specific Internet search using the key words 'sustainability' and the name of each of the leading European river cruise operators as identified by the cruising associations. This second search also employed Google as the search engine. The aim here was to discover if, and to what extent, the leading river cruise operating companies were publicly

addressing and formally reporting on their environmental, social and economic impacts and on their individual approaches to sustainability. The first and second searches were undertaken in November 2015 and December 2015 respectively and the most recent information posted on the various websites formed the empirical material for this paper.

Both the major cruising associations and the leading river cruising operating companies might be seen to reflect contemporary approaches to sustainability within the sector and also to be keen to publicise their sustainability initiatives to a wide audience. A number of authors (e.g. Holcomb et. al.2007) have used content analysis to systematically identify features within reports and on corporate websites but in conducting the current preliminary examination the authors deliberately chose to identify and review the selected companies' published approaches to sustainability employing a close inspection of the available commentary. The authors believe this simple approach was justified given, as revealed in the findings below, the limited material available on sustainability posted on the websites. As this information is in the public domain the authors took the view that they did not need to contact the selected associations and companies to obtain formal permission prior to conducting their research. At the same time the authors recognise that the approach chosen has its limitations in that there are issues in the extent to which a company's public statements fulsomely, and in detail, reflect strategic corporate thinking and whether or not such pronouncements might be considered little more than carefully constructed public relation exercises. However the authors believe that their approach offers an accessible portal and an appropriate approach for the present exploratory study.

Findings

The findings revealed that specific information about, and guidance on, environmental sustainability for river cruising has been produced within the industry by IG RiverCruise, the European River Cruising Association, and the Travel Foundation, an independent charity that works with the travel and tourism industry in shaping a sustainable future. Under the banner *'Greening Measures and Ecological Aspects of River Cruises'* Grammerstorf (2013), a Director of IG RiverCruise, identified four elements of *'responsible river cruising'* namely air outputs, land outputs, water outputs and safety and offered some general guidance on the management of these elements. Much more extensively the Travel Foundation (2013) published *'Environmental Sustainability for River Cruising'* as a guide to best practice.

The guide, described *'as the first of its kind in the public domain',* is *'designed to support the adoption of better environmental practices for river cruising'* (Travel Foundation 2013). By way of an introduction the guide, which is addressed to river cruise companies, suggested that *'the business benefits for improving the sustainability of your operations are clear'* and outlined six benefits. These benefits were seen to relate to reductions in costs and improvements in energy efficiency; risk management and legislative compliance; greater staff engagement; maintaining and enhancing competitive advantage; meeting emerging consumer expectations; and protecting the tourism environment. In addressing cost reductions and improvements in resource efficiency, for example, the guide stressed that improvements in environmental performance can also generate significant cost savings in operational budgets. In terms of competitive advantage the guide highlighted the importance of offering more sustainable forms of tourism in that they can be seen to offer customers a prized experience while enabling operating companies a competitive edge within the increasingly crowded river cruise marketplace.

The guide covers seven themes namely energy; water; wastewater; solid waste; monitoring;

environmental management systems; and communications. In addressing energy, for example, the principal issues are identified as the contribution greenhouse gas emissions make globally to climate change and locally and regionally to air quality and the fuel consumption associated with propulsion. A number of energy saving procedures are suggested including investment in innovative technology and engines, staff training on energy saving procedures, promoting greater passenger awareness, regular maintenance of propulsion equipment and the employment, where itineraries permit, of an efficient cruising style and the use of shore-based power wherever possible. Clean water is identified as a precious resource, which should be used sparingly, while contaminated water has the potential to pollute the local environment. In looking to manage water resources the guide recommends a number of water-saving techniques including the installation of water sub-meters to allow a detailed picture of water consumption on board to be built up, the fitting of low flush toilets with low capacity cisterns and the installation of taps and showers with flow controllers. Similar types of operational measures are recommended for wastewater and solid waste with the accent being on reduction, recycling and reuse whenever possible.

The guide also emphasised the importance of communication, monitoring and a management system (EMS). The establishment of a comprehensive monitoring system was seen to be vitally important, for example, in establishing a performance baseline of water and energy use and waste production, in determining trends in resource consumption, in setting targets and assessing performance against such targets and in identifying problems at an early stage. A communications strategy is also seen to be important if staff are to be aware of the operational procedures to reduce and monitor energy and water consumption and waste disposal and to develop their appreciation and

understanding of the benefits that the pursuit of a more sustainable approach will bring for the company and its customers. In recommending such a strategy the guide stressed that sustainability should not be seen to be confined to individual actions rather that it is a philosophy underpinning all a company's activities and decision making and that senior management have a vital role to play in consistently promoting and disseminating the sustainability message. Finally the guide recommends the introduction of an EMS to continuously record and minimise environmental impacts and measure performance against resource efficiency targets, on legal compliance and on policy awareness levels amongst staff.

While the guide's principal focus was on the environmental impacts of river cruising boats it also included some wider guidance on the relationships between the cruise operating companies and their suppliers, ports, local authorities, booking agents and competing cruise companies. River cruise companies are advised to include a thorough analysis of their supply chain as an integral part of a comprehensive sustainability strategy. This analysis should embrace the products purchased and any packaging as well as the logistics necessary to deliver these products onboard. The cruise operating companies are advised to source food locally, to reduce transport costs and emissions, all with sustainability in mind. The river cruise companies are also advised to work closely with port authorities to establish waste management facilities for food waste, glass, metal cans, plastics and paper as well as hazardous wastes. At the same time river cruise companies are also advised of the potentially positive economic and social impacts they may have in the destinations they visit. Such impacts can include employment, income generation, increased trade for shops, local restaurants, handicraft markets and cultural facilities.

The findings of the examination of the river cruise companies' web sites revealed that none

of the leading European river cruise operators published a dedicated sustainability report. A small *number* of the selected operators namely Amadeus, Grand Circle, Delphin, Avalon Waterways, Uniworld and AMA Waterways posted some limited information on their approach to sustainability while the other selected companies published no information on sustainability. Uniworld River Cruises, for example, claimed *'we believe sustainability is the key to a better world'* and argued that *'In the course of travelling the great rivers of the world and meeting people from all over the globe, it's nearly impossible not to stand in awe of the beauty and power of the natural environment, and the cultures that call it home.'* More specifically Uniworld suggested that its approach to making *'a positive difference in the world'* is focused on its environmental, social and economic responsibility.

In addressing environmental responsibility, for example, Uniworld reported its contribution to the Travel Foundation's environmental guide to river cruising mentioned earlier and its partnership with Whole World Water, a Canadian charity, *'to help to provide drinking water where it is needed most.'* The company claimed its *'dedication to social responsibility'* took many forms including *'providing excursions that immerse travellers in local cultures'* and supporting local charities and helping *'to develop programs focused on preserving local communities and cultures.'* Economically the company emphasised that its work with organic wineries and small family businesses epitomised its commitment to environmentally conscious businesses in all its river cruise destinations. Further the company argued that *'by introducing our guests to these local, sustainable ventures, we are able to provide truly unique experiences to travellers while bringing economic opportunity to the region.'*

Under the banner *'Sustainable Travel'* Avalon Waterways stressed its commitment *'to minimising its impact on the environment and to*

reducing its dependence on non-renewable resources' and claimed to *'have implemented policies to support this mission and are working carefully to enhance our products with this mission and our values combined.'* Further Avalon Waterways claimed it maintained *'a policy of "Leave Only Footprints and Take Only Photos"* and *'our staff and major service providers strive to ensure no removal of any natural or cultural artefacts or materials to ensure our environment looks and functions the same before and after our visit.'* The company also provided some information on its partnership with the charity Tourism Cares in supporting the ChildSafe Network in the Siem Reap region of Cambodia.

In outlining it's *'Environmental Policy'* Grand Circle Cruise Line, for example, claimed to be *'committed to lessening our impact on the planet while encouraging our suppliers and customers to do the same.'* Grand Circle further claimed *'We strive to be stewards of the environment ….. through the efficient and sustainable use of natural and economic resources, and practices such as energy conservation and the preservation of biodiversity'* and that *'By doing this we'll help preserve the world we travel not only for our customers but for generations to come.'* However although Grand Circle posted some information on the company's *'environmental policy'* this was focused singularly on recycling and on reducing pollution and waste in the company's headquarters rather than on its river cruising operations' approach to sustainability.

Discussion

Although more and more large companies are employing the Internet to report on their sustainability strategies and achievements, the findings of the current study reveal that there is only limited information on the environmental, social and economic impacts of river boat cruising or on how the operating companies are currently developing their

approaches to sustainability. On the one hand at the sector level, the Travel Foundation, with support from one of the river cruise operators, published a best practice guide focused largely, but not exclusively, on the environmental dimensions of sustainability and IG River Cruise, the European River Cruising Association, posted some limited descriptive material on introducing green operational practices. On the other hand none of the leading river cruise operators produced a sustainability report though a small number of them published some limited information on environmental policy and on their approach to sustainability. This is not a problem per se in that companies have no statutory obligation to report on sustainability. As such this may reflect the reality that collectively the leading river cruise companies are at the beginning of what may well be a long and difficult journey towards sustainability and a number of issues merit discussion and reflection. Firstly if *'developing a sustainable brand can help to manage reputational risks, enhance relationships with key stakeholders, and meet the requirements of a growing segment of consumers that place value on sustainability'* (European Union et. al. 2013) within the industry then the majority of the river cruise operating companies are currently falling well short of the mark. More specifically reporting on sustainability may be important in helping to counter increasingly critical media and pressure group commentary. At a time when the Secretary General of the Cruise Line International Association recognised *'an increase in the level of public scrutiny that the cruise industry faces'* (Cruise Line International Association 2015), how the river cruise companies publicly address sustainability issues seems likely to become increasingly important. Fostering and disseminating a positive commitment to, and engagement with, a range of sustainability issues and publicly providing evidence of this commitment through a transparent sustainability reporting process may

serve European river cruise companies increasingly well in the future.

Secondly there are issues about the way that both the sector and the individual cruise operating companies look to define and operationalise sustainability. Such definitions can be seen as being dominantly, but not exclusively, built around efficiency gains and the search for competitive advantage and are driven as much, and arguably more, by business continuity goals as by concerns for the environmental, social and economic impacts of their operations. At the operational level while many of the environmental initiatives reported by the river cruise companies are designed to reduce energy and water use and waste generation they also reduce the river cruise companies' operating costs. The Travel Foundation (2013), for example, argued that *'by safeguarding destinations, companies have the opportunity to protect the natural assets they rely on to be able to offer an enjoyable holiday, enhance brand value, increase profits, save costs and improve competitive positioning, both for attracting and retaining cruise guests and recruiting the best staff talent.'* More generally and more critically this echoes Banerjee's (2008,) argument that *'despite their emancipatory rhetoric, discourses of corporate citizenship, social responsibility and sustainability are defined by narrow business interests and serve to curtail the interests of external stakeholders.'*

Thirdly there are issues around the underlying tensions between sustainability and economic growth. In recent years the river cruising industry within Europe has experienced significant growth. The river cruise operating companies do not offer a definition of growth per se but their approach is rooted in the general belief that continuing economic growth will be accompanied by the more efficient use of resources. This trend which is seen as either relative or absolute decoupling (relative decoupling refers to using fewer resources per unit of economic growth while absolute

decoupling refers to a total reduction in the use of resources) underpins many conventional definitions of sustainability and the vast majority of current corporate sustainability strategies and programmes. However Wiedmann et. al. (2015) argued that *'achievements in decoupling in advanced economies are smaller than reported or even non-existent'* and this, in turn, may be seen to undermine the concept of responsible growth.

More specifically the concept of sustainable consumption which Cohen (2005, webpage) has described as *'the most obdurate challenge for the sustainable development agenda'* might be seen to be a thorny issue for the leading river cruise companies. In many ways both the concept and the practice of cruising, with its aim, for example, to *'enrich the guest experience through culinary, entertainment and technology enhancements'* can be seen as the very antithesis of sustainable consumption. That said the continuing popularity of cruising suggests little consumer appetite for sustainable consumption and here the European Environment Agency's (2012) recognition that *'sustainable consumption is seen by some as a reversal of progress towards greater quality of life'* in that *'it would involve a sacrifice of our current, tangible needs and desires in the name of an uncertain future'* resonates.

Finally there are criticisms of the sustainability of river cruising within Europe from a political economy perspective. Sprague (2014) argued that *'the major companies in the cruise industry have come to embody what it means to be transnational- circumventing borders and manipulating local economies in order to enrich the very few and sell exotic experiences to privileged sectors while at the same time generating very little benefit for those they exploit to achieve these ends.'* More generally Mansfield (2009), argued that conventional approaches to sustainability fail to recognise *'the political nature of the socio-economic processes that produce environmental degradation poverty and injustice.'* Jackson (2006) has argued that *'it is entirely fanciful to suppose that deep emission and resource cuts can be achieved without confronting the structure of market economies.'* In a similar vein Castro (2004) has questioned the very possibility of sustainable development under capitalism and argued that economic growth relies upon the continuing and inevitable exploitation of both natural and social capital.

Conclusions

This exploratory review suggests that, to date, the leading European river cruise companies have done little to publicly address the sustainability of their operations. As sustainability becomes increasingly important in managing risk and reputation then all the leading European river cruise companies may need to reconsider their current approach to sustainability reporting if they are to retain, and ideally enhance, their position within the competitive and dynamic market for the leisure pound. More generally the authors would argue that relatively limited current commitments to sustainability within the river cruise industry can be interpreted as being primarily driven by business imperatives. The accent being on making efficiency gains across a wide range of economic, social and environmental issues rather than on maintaining the viability and integrity of natural ecosystems and on reducing demands on finite natural resources. More critically the authors suggest that the leading European river cruise companies' commitments to sustainability are couched within existing business models centred on continuing growth and consumption and that, at best, these commitments represent a weak approach to sustainability.

A number of potential future research agendas can be identified across a range of disciplines within tourism sector. Marketing research would be valuable, for example to explore how cruise customers, travel agents and consultants decode the concept of sustainability
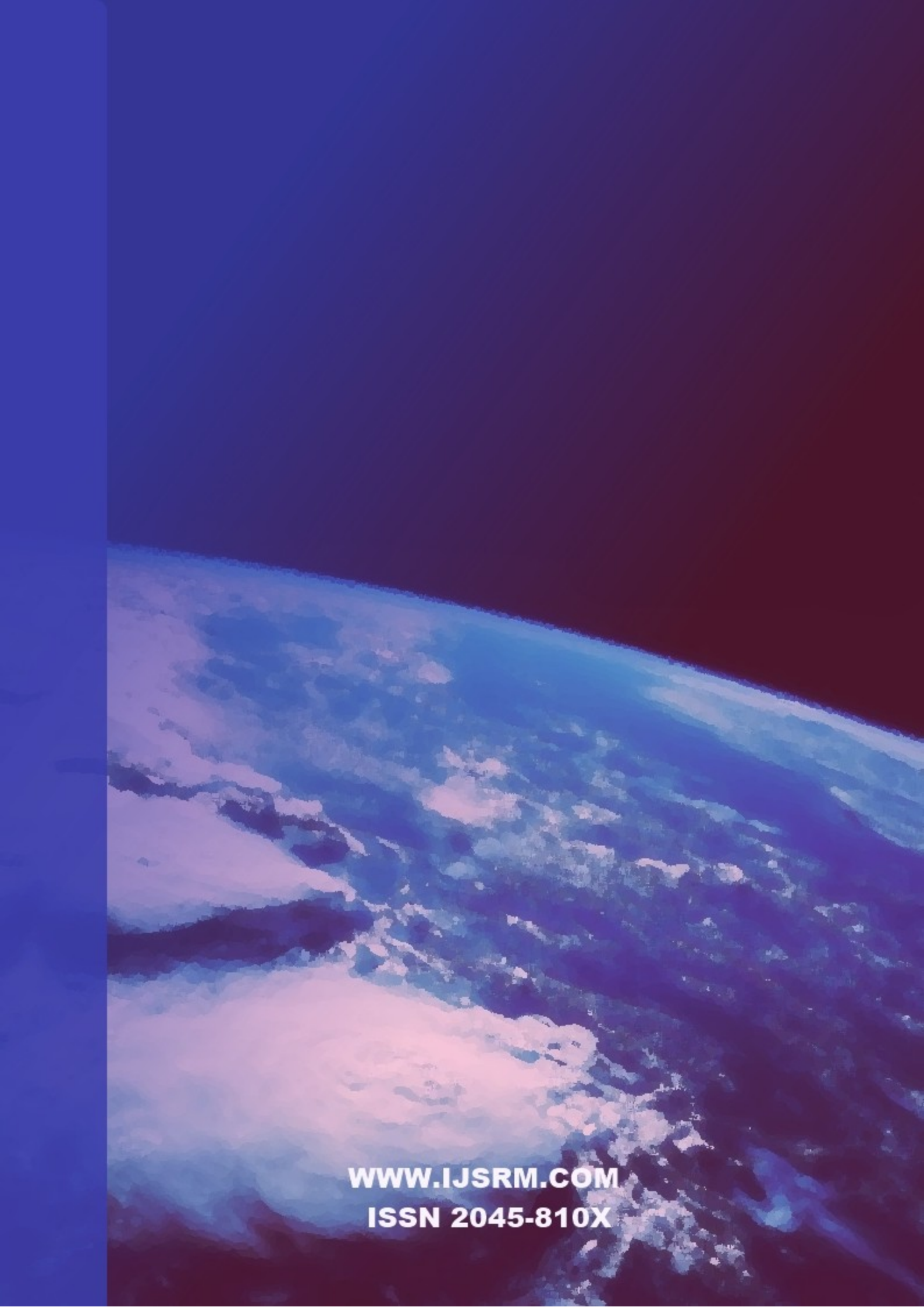
and on the extent to which customers are prepared to change their river cruise purchasing behaviour and cruise company patronage in the light of companies' sustainability strategies and achievements. The management of sustainability issues between the river cruise companies and local suppliers also merits greater research attention. Research might also be profitably pursued to examine how river cruise companies look to manage the environmental, social and economic impacts in a range of European river locations. Research into information system developments to integrate the continuous automatic recording, transmission and aggregation of sustainability performance data would also help to facilitate the development and dissemination of the sustainability reporting process. On the finance side research designed to examine how commitments to sustainability are reflected in profit margins and stock market performance also seems likely to become increasingly important.

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