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STUDY OF A LARGE OFFICE SUPPLY RETAIL ORGANIZATION: HOW GOOD COMPANIES SLOWLY GO OUT OF BUSINESS

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Abstract

This study demonstrates the importance of long-term planning though innovation. The organization for this article is a large business in the United States, an office supply retailer. The authors evaluate the company based on the organizational theories developed by W. Edwards Deming. The researchers find that XYZ, Inc. uses short-term planning that leads to loss of customers. The authors recommend long-term planning through innovation of new products and services. Focus and implementation of this new policy would lead to company success.

Key Words: Innovation, Short/Long-term Planning, W. Edwards Deming, Leadership

Introduction

Evaluation of XYZ, Inc. is based on one of the author's working experience and knowledge of the company's culture, structure, focus, and operations, as well as, surveys with current employees. The authors apply organizational theories developed by W. Edwards Deming (1992, 1993) to break down how XYZ, Inc. is currently planning for its future. The authors evaluate the best practices to approach planning and organizational development for XYZ, Inc.'s survival as a company in the long-term.

One of the authors was employed by XYZ, Inc. from 2009 through 2013, and held positions from entry-level, to supervisory, to management roles. The author worked in four different stores in two different regions. During this time, the researcher worked under four

different Regional Managers, three different District Managers, four different General Managers, and ten different Assistant Managers.

The researcher had detailed conversations with many employees regarding the company, and has been able to discern company goals from others through their daily actions and communications. The author also had a lengthy and detailed conversation with the (now former) President of North American Operations. The researcher also met the current CEO on two occasions, whom she surveyed briefly. The author, additionally, obtained this year's company demographic and ranking information from a current XYZ, Inc. Assistant Manager.

Company Overview

XYZ, Inc. is a Fortune 500 company with around 1600 stores and 44,000 employees. The founder of the company realized that office supplies were only mail order and often not available in stores. He structured XYZ, Inc. to continue the mail order business, but established stores where business customers could come and buy the products that they needed immediately.

The President of North American Operations has four Division Managers answering to her. They have thirteen Regional Managers with eighty-five districts divided among them. Each store has a General Manager and one to two Assistant Managers depending on the sales volume of that store.

What XYZ, Inc. Does Well

XYZ, Inc. has a good set of core competencies that gives it a competitive advantage. First, XYZ, Inc. has a large network of reginal warehouses. It is able to keep its stores stocked at optimum levels with just-in-time inventory management. It has low out of stock numbers and usually is able to fill the out of stock item within two days. Most of the time the just-in-time plan works out and the items are received just as the last item is purchased. The General Manager of the store is able to adjust the inventory on hand levels to keep popular items in stock.

Second, XYZ, Inc.' website carries a wide variety of goods for various types of companies and customers including industrial cleaning supplies, medical supplies, office supplies, electronics and home goods. This has made XYZ, Inc. competitive in the e-commerce space.

Finally, stores have been trimmed down to smaller locations that are more efficiently stocked. The stores themselves are in peak areas for the customer base ensuring optimum access for local business customers.

While XYZ, Inc. has some strong core competencies, there is room for improvement. This paper focuses on three problem areas: short-term planning and a reactionary environment, performance based pay and incentives, and customer retention through service innovation.

Where XYZ, Inc. Needs Improvement

Short-Term Planning and a Reactionary Environment

In my time at XYZ, Inc., it became very apparent that the company focuses on short-term goals and reactionary efforts to external business changes. I have seen through my various conversations with current employees that nothing has changed in this respect.

The company focuses on sales for this week, or month, or quarter. It focuses on product pushes that change at least once a year. There are even product of the month and product of the week pushes for the cashiers at the register. The focus on boosting these sales to bring in a few extra margin dollars does nothing for the company in the long-term. In fact, it hurts the company's reputation as customers find that they are being force fed inferior products by pushy sales people.

Another major issue in short-term thinking for the company is its constant reactions to external business environment changes. There is constantly a new focus based on a change in perceived business customer wants. So, paper and ink are the future! Sell paper and ink, it will keep the company going! Then in a year, paper and ink are the past, we cannot use it to keep the company going! The future is in PDA's, we must push the Blackberry – it is the future of the company. Now, it is cell phones are the future, we must push cell phones!

In each one of these changes, money is wasted in remodeling to focus on the newest product or service only to remodel the same section again a few months later. How will the company survive if it keeps thinking so short-term that it can only react to outside changes after they have already happened and when the customer has already started to move on to the next new thing? It cannot.

XYZ, Inc. needs to stop thinking short-term and reacting to outside changes. It needs to ask itself what the next new thing is in business supplies or technology. There needs to be a culture of innovation of new products and services for the business customers.

XYZ, Inc. should be the one to create the next new product or service. XYZ, Inc. needs to create an R&D department, and its employees should be involved. There should be an atmosphere that encourages new ideas for products and services with a way to easily submit them. This is the best way that the company could continue for many more years. If it does not do this, it may go out of business.

Performance Based Pay and Incentives

XYZ, Inc. focuses too much effort on ranking regions, districts, stores, and employees in order to rank from best to worst to decide who gets rewarded and who gets punished. The company has lost sight of what this really means and results. When the whole company is ranked in this manner, then the entire organization competes against itself, and the organization loses (Deming, 1992, 1993), (Ivanov, 2011, 2012, 2013, 2014, 2015).

Giving bonuses only to the highest performing employees, and sometimes only to management regardless of the fact that the non-managers were the ones who drove the results, fosters

an environment of jealously and exclusion. Employees should not have the idea that they are only working to achieve bonuses for their managers. In this system, the employees are left demoralized and none of the systems components, from stores to workers, feel that they can work together or trust one another, a necessary ingredient for organizational success (Ivanov, 2015).

This system is set up for a total failure of the company by its very nature. If there are top performers, then there must be bottom performers. Ranking them causes systemic failure. The top performers are rewarded with more hours and more money for improvement, while the bottom performers are punished by taking away their hours and their maintenance budgets.

The bottom performers then get worse, and the top performers get better. The top and bottom performers won't work with one another lest the bottom performers bring the top ones down. The bottom performers then get fired, and that is expected to fix the system. But, the middle performers then suddenly become the bottom performers, the high performers are no longer adequate, and only the very top performers are now doing well.

The cycle continues. So, if the bottom continues to fired, the top performers just keep becoming the bottom performers, and eventually get fired too. Everyone loses from the employee to the customer to the company itself.

The *Deming* solution is to throw out the ranking system and the pay incentives behind it (1992, 1993). Instead, implement a profit sharing percentage that is the same for everyone, and would be paid to everyone. If there is no profit, then nobody should be getting extra pay because the company is not succeeding. With the ranking system removed, the internal competitive environment would disappear, and most employees would see each other as equally capable and willing to collaborate.

The regions, districts, stores, and employees will then be able to work together as a whole towards the company's profit objectives. They would naturally want to lift each other up as together they could achieve the goals. Employee morale would be boosted, customer service would improve, and the entire company would see the benefits of a team environment with a focus on meeting goals and objectives.

Customer Retention through Service Innovation

XYZ, Inc. has had a declining customer count based on the store visit numbers. This data was provided by current employees during the study's survey.

This is the same a problem when I worked there as well. This shows a continued year over year trouble in customer acquisition. This problem is caused by short-term planning and emphasis on temporary fixes rather than long-term innovative solutions.

There are always temporary gimmicks being used to try to get new customers in the door. There are rebates, loss leaders, rewards programs, item of the month/week pushes, and other common retail tricks to try to get new

customers. The problem is that those customers only come for the deal, and do not continue to shop after the deals are over. The gimmicky environment also hurts the company's reputation and drives away current customers.

Another issue is the culture of pushy sales that sacrifices good service to gain extra margin dollars. For example, when a customer buys a computer from XYZ, Inc., the sales push is to get them to pay for extended service contracts and even to charge them to turn it on and make sure it is set up properly.

If a customer comes in with a product that has a technical issue, for example, a calculator that needs ink, the current push is to charge them to diagnose and fix the item. Associates, with manager's approval and encouragement, are patting themselves on the back because they got a tech support sale from a customer who just needed an ink roll changed in their calculator, or a customer who just needed help figuring out how to configure their desktop icons. Although this brings short-term profits, it is a sure way to lose a customer forever.

The solution is simple: plan for the long-term by investing in innovations in products and services, Deming's *constancy of purpose* (1992, 1993). Start with a total innovative service solution that other retailers are not doing. An example of a new and innovative service idea would be to stand by products you sell. Imagine how many people would become loyal XYZ, Inc. customers if they knew that XYZ, Inc. would offer technical support services to them as long as they purchased the product there.

New customers would always be trying XYZ, Inc. because they would hear about how great the service for the products is. They would leave their current suppliers and switch to XYZ, Inc. for the customer service support. This would continue to bring in new customers and retain current customers for longer.

This is not the only new service idea available and there are details to be worked out, but this is why the company needs to invest in research and development, a responsibility of management. The only way to fix the customer count is to innovate a new service or a new product. With long-term planning and investment in new products and services, there would be short-term losses, but long-term longevity for the company.

Conclusion

XYZ, Inc. lacks constancy of purpose. It does not think what it could do today to keep the company in business in the long-run, to keep the people who work for it employed, or how to create more jobs in the areas in which it operates.

It has a culture of short-term planning that only allows it to react, poorly, to the outside environment. It relies too heavily on performance based pay that stifles its employees' morale, and causes internal conflict and competition, resulting in the whole company underperforming.

This corporate culture negatively impacts the customers so that the current customers are leaving faster than new customers and coming. The new customers that try XYZ, Inc. become as disillusioned with XYZ, Inc. as the old customers due to sales and service gimmicks that hurt the company's reputation. The company cannot sustain itself with continued short-term planning-tricks.

XYZ, Inc. needs to invest in innovation. Innovation of new products and services is the only way in which new customers could be obtained and current customers retained. XYZ, Inc. should invest in research and development, and solicit its entire current workforce for ideas. To do that effectively, the internal culture at XYZ, Inc. needs to change from short-term quick fixes to long-term planning.

To fix the internal competition and employee morale, XYZ, Inc. needs to remove bonuses and implement a profit sharing system. This would help the employees and stores see that they need to work together to achieve total company goals.

When the employees are no longer competing with one another, a free flow of ideas might occur. The new company culture and product and service innovations would drive sales and customer traffic. XYZ, Inc. would only be able to survive in the long-term if it stops its current short-term management, and instead invests in innovating new products and services.

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SUPPLY CHAIN FLEXIBILITY: DRIVERS AND ENABLERS - A LITERATURE REVIEW

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Abstract

This paper is intended to provide a critical review of the literature on the supply chain, especially with the driver and enabler factors. This study aims to reveal the drivers and enablers in the concept of supply chain flexibility. Literature Review involves some articles that come from major journals related to the topic, in the period 2006-2015. Supply chain involves a broad spectrum and deep, but in this writing is more focused on several sub-topics, including: Supply chain, Demand and supply chain, Supply chain governance, Sustainable supply chain, Supply chain flexibility, and Supply chain bias.

Keywords: supply chain flexibility, drivers, enablers

Introduction

Currently the supply chain (SC) is an important issue in every industry, both manufacturing and services, due to supply chain management is a key success factor for a company to be a market leader in the industry (Lee, 2004). Various frameworks and sys-tems have been proposed by research-ers to enhance the supply chain concept. But amid the devel-opment of the study, the researchers confronted with the fact of increasing complexity of the cult of business, due to the sharpening of business com-petition and rapid technological progress. Responding to the latest developments, increasingly

felt the need to continue to develop the supply chain concept in the context of flexibility. There are seventeen enablers distinguished ISM approach has been applied to analyze the flexibility of the supply chain. It has helped in deciding the driver power and reliance of all enablers. Variations in demand, security, and delayed product differentiation have a powerful driver towards strategic interests. There are a few enablers that have a low power driver and a low reliance as the flexibility of the manufacturing system, alternative arrangements are logistics, cultural and linguistic com-patibility, economic stability, and flexibility of location. Flexibility and versatility source suppliers have high

enablers and to know whether influence one or more other enablers. This paper uses the literature approach related concept of supply chain flexibility, particularly in the manufacturing industry. This paper is supported by a number of articles related to the supply chain and the flexibility that was written by researchers which the review period 2006-2015 is expected to contribute to the development of supply chain flexibility in the future. Supply chain involves a broad spectrum and deep, but in this writing is more focused on several sub-topics, including:

- *Demand and supply chain*
- *Supply chain governance*
- *Sustainable supply chain*
- *Supply chain flexibility*
- *Supply chain bias*

Methodology Review

Source of readings to conduct a review of the literature included fifteen scientific journal articles that are treated as the main source. Due to the nature of the supply chain is multi-disciplinary, it is still necessary to add other supporting literature related to the topic of demand and supply chain, supply chain governance, sustainable supply chain and supply chain bias.

Table 1. Article Distribution Based on Journal Publisher

Agricultural Economic Review	1
An International Journal	1
An International Journal,	1
Journal of Business & Industrial Marketing	1
Journal of Business & Industrial Marketing	1
Journal of Chinese Economic and Foreign Trade	1
Journal of Logistics Management	2
Journal of Marketing,	1
Journal of Modelling in Management	1
Journal of Retail & Distribution Management,	1
Journal of Small Business and Enterprise Development	1
Management Research Review	3
Total	15

Discussion

The following journal mapping references related topics involved in the study of literature.

Table 2. Topic Classification and Methodology

No.	Author		Title	Topic							Methodology	
				Supply chain governance	*Supply chain*	*Supply chain*	*Supply chain and supply chain*	*Supply chain*	*Supply chain resilience*	*Supply chain bias*	*Research paper*	*Literature review*
1	Martin Christopher, Helen Peck, and Denis Towill	2006	A taxonomy for selecting global supply chain strategies		□						□	
2	Susanne Hertz	2006	Supply chain myopia and overlapping supply chains							□	□	
3	Nathalie Fabbe-Costes, Marianne Jahre	2008	Supply chain integration and performance: a review of the evidence		□							□
4	Pravin Kumar, Ravi Shankar, Surendra S. Yadav	2008	Flexibility in global supply chain: modeling the enablers						□		□	
5	Xiaoyong Zhang dan Lusine H. Aramyan,	2009	A conceptual framework for supply chain governance supply chain governance	□							□	
6	Song Hua, Samir Ranjan Chatterjee, Yu Kang Kang	2009	Access flexibility, trust and performance in achieving competitiveness						□		□	
7	Xiaofeng Zhao, Hui Zhao, Jianrong Hou	2010	B2B e-hubs and information integration in supply chain operations		□						□	

8	A.M.A. El Saadany & M.Y. Jaber, and M. Bonney	2011	Environmental performance measures for supply chains.	□			□	
9	Bent Dreyer, Kjell Grønhaug	2012	Coping with unpredictable supply: the role of flexibility and adaptation			□	□	
10	Po-Young Chu, Kuo-Hsiung Chang, Hsu-Feng Huang	2012	How to increase supplier flexibility through social mechanisms and influence strategies?			□	□	
11	Nigel Caldwell, Christine Harland, Philip Powell, Jurong Zheng	2013	Impact of e-business on perceived supply chain risks	□			□	
12	Alexander H. Hübner Heinrich Kuhn Michael G. Sternbeck	2013	Demand and supply chain planning in grocery retail: an operations planning framework		□		□	
13	Mohsen Varsei and Claudine Soosay, Behnam Fahimnia, Joseph Sarkis	2014	Framing sustainability performance of supply chains with multidimensional indicators		□			□
14	Elcio M. Tachizawa, María J. Alvarez-Gil, María J. Montes-Sancho	2015	How “smart cities” will change supply chain management	□			□	

15	Atul Kumar Tiwari, Anunay Tiwari, Cherian Samuel	2015	Supply chain flexibility-a comprehensive review	□	□

Supply Chain

Research related to the taxonomy of supply chain strategies at the global scope prove that the choice of supply chain strategy should be based on careful analysis of the characteristics of the demand / supply for various products or markets served by the company. This study provides a foundation for taxonomic strategy appropriate supply chains (Christopher, Peck, & Towill, 2006)

Costes & Jahre, (2008) found that supply chain integration (SCI) does not always improve performance. Definitions and measures the performance shows the pattern of SCI and diverse relationships. So it cannot be concluded that "more companies implement SCI will always have a better performance". Instead of empir-ical research using clear definitions and measures were good, very necessary. The conclusions of this study provide a foundation for further research to be developed further, both in terms of research approaches, the definition of the main concepts and theoretical basis of selection.

Supply chain supporting the success operates Business to business (B2B). Research related to the application of B2B supply chain at the conclusion that the general system theory can provide a theoretical framework of integration, while integration of information is the foundation for the integration of the wider supply chain. E-hub open communication and expand networking opportunities and thereby greatly affect the integration of information. By analyzing the B2B e-hub, this study explores the mechanisms of integration of information and demonstrate their managerial capabilities and technical limitations. Although there are many challenges in the implementation, but the e-hub capable of creating value, being able to mix and match between the buyers and sellers, creating market liquidity and reduce transaction costs. In other words, E-hub can be an important solution for supply chain integration (Zhao, Zhao, & Hou, 2010)

Supply chain management (SCM) integrates business processes to provide products, services, and information and provide added value for customers and other stakeholders. SCM also guarantees that customer demand can be met through the integration of distribution channels and stages in the supply chain. Competitive market and the introduction of new technologies (e.g. The Internet) accelerate the delivery of products to customers. But on the other side of the convenience offered also triggers the behavior of excessive consumption (Jones, Hillier, Comfort, & Eastwood, 2005) which have an impact on the ac-

tions deplete natural resources and produce more waste at a faster rate then weighed on environmental and social issues. The results of the study confirm the findings in the literature that the investments reduce environmental costs will further improve environmental performance will have an impact on increasing the company's total profit (Saadany, Jaber, and Bonney, 2011).

E-business linkages with supply chain risks

E-business has the potential to bring benefits, but also potentially create new risks. Caldwell, Harland, Powell, and Zheng (2013) found that small firms (SMEs) tend to adopt business practices of the company on a larger scale by way of "watching in a flash". SMEs are still reluctant to implement e-business. In fact, the results showed that e-business can shorten the relationship between the organization and between the organization and the individual. Global forces are evidence of the progress of the Internet to help create competition with low cost.

Linkage smart idea to supply chain management

Urban growth showed a dramatic development when compared to the conditions in the previous decade. In general, the population is concentrated in cities. Figures population density in the city continues to rise, so the pressure for the provision of infrastructure is becoming increasingly important these conditions require new investments, to support the flow of goods and people, as well as to minimize the impacts associated with environmental degradation, quality of life, etc. To manage the problem of increasing the population of cities around the world, need to adopt the concept of "Smart Cities". A smart city is a "city seeks to address public issues through information and communication solutions based on the technology on the basis of multi-stakeholder, and a relationship based on partnership. The idea is related setting initiatives, public: from buildings, transport systems that better support for creative innovations or designing energy efficiency measures.

Overall, the aim of this initiative is to provide a higher quality of life, making the city more attractive to the knowledge-based population. Linkage smart idea to supply chain management Urban growth showed a dramatic development when compared to the conditions in the previous decade. In general, the population is concentrated in cities. Figures population density in the city continues to rise, so the pressure for the provision of infrastructure is becoming increasingly important these conditions require new investments, to support the flow of goods and people, as well as to minimize the impacts associated with environmental degradation, quality of life, etc. To manage the problem of increasing the population of cities around the world, need to adopt the concept of "Smart Cities". A smart city is a "city seeks to address public issues through information and communication solutions based on the technology on the basis of multi-stakeholder, and a relationship based on partnership. The idea is related setting initiatives, public: from buildings, transport systems that better support for creative innovations or designing energy efficiency measures. Overall, the aim of this initiative is to provide a higher quality of life,

making the city more attractive to the knowledge-based population.

The findings of Takizawa, Gil, and Sancho, (2015) revealed the Smart Cities have different implications for the network structure (complexity, density and centralization) and governance mechanisms (formal vs. informal). In addition, the results of this study highlight and discuss the direction of future research related to smart cities, supply chain management and supply chain governance.

Demand and supply chain

Hübner, Kuhn, and Steenbeck, (2013) states matrix development demand and supply chain planning coherent demonstrate the interdependence in the planning of demand and supply in the grocery sector. Demand planning and supply also plays a role when defining a framework for retail operations. Integration planning framework in the grocery retail industry, following the order of hierarchical and decision-making. Research on the demand and supply chain helped form the foundation for the research and development of decision support systems in the architectural planning of the retail industry.

Supply chain governance

Trade liberalization worldwide has resulted in the integration of the supply chain in the global market. This development makes it possible to connect the traditional sectors such as agricultural production with modern, business-related export markets. One institutional innovation in the process in agribusiness is contract farming (CF). Zhang & Aramyan, (2009) proposed a conceptual model that is uniquely linked agri-food supply chain in China. The challenge facing the government, which is how the central policy can integrate small-scale farmers in the supply chain. Most of the articles dealing with this topic focus on contract farming while. Past research has still to touch on the issue of trust and relationships. However, in this study a combination of contracts and relationships discussed in depth. Based on the theory of Transaction Cost Economics (TCE) and relational theory, developed a conceptual framework for the selection mechanism of governance in the context of agribusiness in China where small-scale farmers can be involved. Governance mechanisms concept-ualized by involving contracts and relational aspects. A series of hypotheses are developed for the quality of the relationship between the chain governance and uncertainty of the environment, and consequently in the chain performance.

Sustainable supply chains

Sustainable management of supply chains is an emerging area of research for industry practice. The idea of the triple-bottom line lets create economic benefits through improved social standards and preserve the environment for future generations. This idea was well received and gradually covers the business arena. Business needs a framework of assessment and decision-making tools to measure and balance the performance of supply chains in the three dimensions of sustainability. While various valuation models available in the literature, are not always able to

cope with the three dimensions of sustainability. Conventional supply chain concept only shows the methodological issues, or just developed to the level of the organization. On the other hand, there are articles that offer practical and relatively simple approach to the design of sustainable supply chains, which focuses on the location of the facility and the supplier selection decision, and offer some contributions to the theory and practice.

Sustainable development and assessment within the supply chains included as part of the management of supply chains. This paper presents a multidimensional framework that can serve as a research tool for academics and practitioners of supply chains to identify and assess the various indicators of economic performance, environmental and social.

Through literature review and integration of the concept of the four theories of organization, identified the key driver and enabler in the development and management of sustainable supply chains. It is important for supply chains to be considered by the relevant stakeholder reciprocal relationship between members of supply chains, resources, activities and interfaces consisting of coordination, interaction, collaboration and competition. This may include internal stakeholders such as shareholders, employees and unions and external stakeholders such as customers, suppliers, partners, competitors, government and regulators, NGOs and interest groups and local and international communities. From the point of view of resources, companies will need to ensure that they have the potential to implement sustainability in terms of cost, quality and culture. In addition, the embrace of green production methods that can cause huge investment. Additionally, compatible with supplier selection, supply chains can grow the culture and exact suitability. Although supply chains are sustainable as an organization's network, can be achieved with a collaborative effort and participatory governance models (Varsei, Soosay, Fahimnia, and Sarkis, 2014).

Supply chain flexibility

Flexibility has been the domain of research in the science of decision sciences and has been relatively widely accepted in practice. Since the 1980s, the flexibility of its application has been investigated in the manufacturing industry. While supply chain flexibility includes a mix of views and processes include core processes such as procurement, sourcing, distribution and logistics and reducing uncertainty or risk. Tiwari, Tiwari, & Samuel (2015), stated that the appliance of flexibility must be accompanied by a lot of trade-offs on some key parameters of the supply chain such as efficiency, cost, uncertainty and control. Therefore, the trade-off between these factors will provide insight on how to apply managerial flexibility to realize the full potential.

Flexibility, reliability and performance Intensification of economic globalization has had an impact on the system functions and processes of the company worldwide. Companies in China face an increasing need to become more innovative in the design and development of business systems. The supply chain is an important element in building a

competitive and flexible company in the system that can offer significant advantages for economic entities to compete globally.

While flexibility is considered as an effective response to the uncertainty, so as to expand the boundaries of enterprise management, the concept of flexibility is also growing from a single company for the benefit of the entire supply chain. Therefore, supply chain flexibility will provide a rapid response capability to changes in the external environment and will be key in winning the competition. Utilizing the flexibility in supply chain access structure will enhance the relationship and confidence to ensure a significant performance improvement (Hua, Chatterjee, & Kang, 2009).

Overcoming unpredictable supply: the role of flexibility and adaptation

Findings show that flexibility is a prerequisite to overcome when facing a supply that cannot be predicted. Flexibility can take many forms and is a specific part of the company as a valuable resource. Dreyer & Grønhaug (2012), report the findings indicate that the ability to adapt to the turbulent environment is a prerequisite to be able to survive and thrive as a company. Adaptation means the company has the ability to adjust to recent developments, while the company significant flexibility capable of addressing the changes that occur. Flexibility and adaptability comes in many forms. Flexibility is relevant contextual and situational. The findings clearly reflect that flexibility plays a very important for the survival and profitability of the company, and that form of adaptation and flexibility associated with marketing, such as changes in the product mix to adjust to demand which affect the supply. As far as the company still has the flexibility specific, it is presumed that the company has the competence or the specific resources acquired through learning, investment, and competitive positioning, earlier. In some situations, such as in case of change and variation caused by uncertainties are beyond the control of the company and the manager.

Although the company has been trying to master the variations caused by the uncertainty of supply, customers will eventually be affected by the situation in the form of incapacity for providing timely products and provide products in sufficient quantities. The uncertainty caused changes mentioned above also have an impact on shareholder who eventually also have to come to adapt. For example: when the supply of cod disrupted due to weather disturbances, consumers can respond to these changes by changing their consumption patterns of the species that can be accessed consistently throughout the year.

Suppliers can be changed in a manner not entirely dependent on cod catches, but began to grow cold, in order to serve the market with the quality of high-quality fresh cod fish on a regular basis. This illustrates the need for adaptation, and thus the necessary flexibility to respond to sudden changes occur. The findings in this study also revealed that an unexpected change has consequences creates uncertainty. The relationship between flexibility and marketing is essential. As an illustration, the

flexibility and the market are not only driven by the uncertainty associated with changes in consumer preferences, but also by changes in market supply and encourage the emergence of technology solutions. These changes create new forms as a response in addressing the uncertainties that will affect the key actors who can push creation of new forms of flexibility that is relevant, valuable and long-lasting.

Thus the requirements of flexibility, dealing with implications for marketing. For example, the explosive development in information technology and modern communications, has, changed the practice of marketing. The new technology is a new opportunity, and new solutions that demands new ways of thinking in performing tasks, and thus the "strength" of adaptation and flexibility is the key to success for the company to survive in the market. A successful company is a company that has been able to adjust adequately to the emergence of a change that comes suddenly, and thus means the company has developed and already has the necessary flexibility.

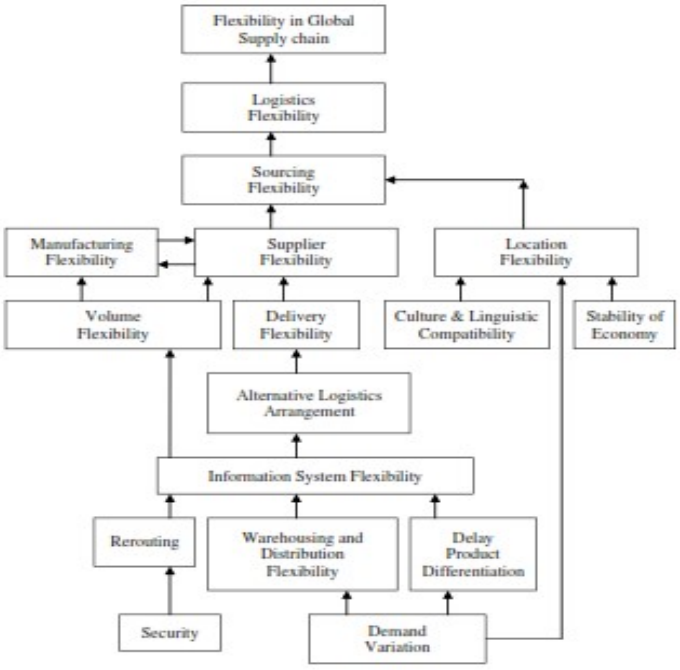
Flexibility in the global supply chain

It has been observed that some enabler has a driving power of high and low dependence is of strategic importance. Enabler requires more attention while the other enablers that based on the operation and performance depends on a strategic enabler. Kumar, Shankar, and Yadav (2008), to identify and evaluate the relationship between the variable flexibility by using Interpretive Structural Modeling (ISM). The main purpose of the model Interpretive Structural Modeling (ISM) in this study was to develop a hierarchy enabler that will help to increase the flexibility of the global supply chain. These variables should be included to analyze the performance of the supply chain that has driven power and dependency. Has been observed that there are three basic categories of enablers: based on the strategic, operational, and performance. Strategic enabler located on the lower level of the hierarchy ISM; operational enabler is located on the middle level of the hierarchy, while the performance-related enablers located on the upper level hierarchy as shown in Figure 1.

To increase the flexibility of the entire supply chain, companies must have the ability to meet variations in demand, both in terms of quantity and quality. Currently, security is of critical attention in the global supply chain. Rerouting shipping and alternative logistics arrangements are enablers, driven by security threats. Security threats may influence the effectiveness and timeliness of the delivery system. Various strategies warehousing and distribution in the global supply chain affects the level of customer service and transportation costs. The formulation of the strategy depends on aggregate demand for products from the specific zone / region. Also determine the accuracy of demand in the global market, the information system must be flexible to changes in the market and corporate structure. Flexibility delivery volume and delivery flexibility is based on powerful information systems.

Location of the facility does not only depend on increased demand from a particular region, but also on the compatibility of culture and language,

the stability of the country's economy. Compatibility culture and language plays an important role in location decisions and foreign direct investment. China and India is a country of first choice and second choice, the companies of Europe, North America and Japan, due to the investment of these countries have cultural and language compatibility and high economic growth rates. Manufacturing flexibility and versatility suppliers pushing each other. Sourcing flexibility is derived from the supplier flexibility and versatility location of the manufacturer. Sourcing in one country leads to the development of the logistics infrastructure and some of the value-added logistics services. The entire logistics flexibility enables global supply chain is flexible.



Source: Journal reference

Figure 1. ISM is based on a model for flexibility enabler within the global supply chain

This research has identified all the critical enabler of flexibility in the global supply chain by doing a review of a number of research articles. There are seventeen enablers identified ISM approach has been applied to analyze the flexibility of the supply chain. It has helped in determining the driver power and dependence of all enablers. Variations in demand, security, and delayed product differentiation have a high power driver towards strategic interests. There are several enablers that have a low power driver and a low dependence as the flexibility of the manufacturing system, alternative arrangements are logistics, cultural and linguistic compatibility, economic stability, and flexibility of location. Flexibility and versatility source suppliers have high dependency, but a low power driver. ISM hierarchy is very helpful to find the relationship between the enablers and to know whether affect one or more other enablers. A number of methodologies have been used to explore opportunities to increase flexibility in the supply chain, but most of the methodology is not sufficient to tackle the problem of global supply chain. A weighted techniques such as Analytic Hierarchy Process (AHP) is used to find and rank the relative dimensions of the global supply chain. Linear programming is used to optimize the flexibility purposes. Failure Mode Effect Analysis (FMEA) is used to provide flexibility in product design. Some techniques focused on measuring the degree or range of flexibility. All of this methodology focuses on the supply chain of a particular entity. Also, do not include reciprocal interaction between flexibility dimensions of ISM.

The research results provide important information for marketers who are involved in the management of supplier flexibility. A customer-oriented factories must have the ability to influence suppliers the flexibility to match customer demand dynamics. Tim manufacturers need to establish long-term cooperative relationships with suppliers, to build sustainable supply chains and competitive. The study found that a shared vision is the most important factor that can affect the flexibility of the supplier. A shared vision can help facilitate group actions that benefit the entire supply chain and to promote the flexibility of suppliers. In addition, the results of this study indicate the manufacturer can affect the flexibility of suppliers to meet customers' needs by choosing a strategy to influence. The results also show that the use of coercion in influencing the strategy and the development of a shared vision in promoting flexibility supplier, fully mediate the effects of trust in supplier flexibility. In addition, the supplier flexibility has a significant positive impact on the performance of the manufacturer (Chu, Chang, & Huang, 2012).

Strategy affects and supplier flexibility

A manufacturer needs to meet customer needs without adding significant cost. Supplier of flexibility is the ability of a manufacturer to combine resources to serve customers. Coercive strategy is an effort in the form of high pressure to influence suppliers to be able to bring the desired response. Research has revealed that manufacturers are adopting a strategy of coercion tend to imply profit companies may not be re-

duced. This study shows that manufacturers will adopt a strategy of coercive when it requires suppliers to be more flexible. Instead, the strategy without coercion often refers to the sense in which cooperation is being promoted in the market. A strategy without coercion center primarily on the beliefs and attitudes of the target firm involves less direct pressure from company sources. The effectiveness of the strategy without coercion takes considerable time to become aware (Frazier and Summers, 1984). Unlike coercive in influencing strategy, a strategy without coercion noncompulsory, and therefore cannot force suppliers to meet the requirements of manufacturers. Our findings indicate that the strategy without coercion is ineffective in improving the flexibility of the supplier.

Social mechanisms and flexibility suppliers

The results showed that the shared vision to positively influence the flexibility of the supplier. A possible explanation for this is that cultural differences may influence the results of this study. Described culture collectivist in the case, "the emphasis on belonging to the organization; membership is something ideal. For example, Taiwanese culture is very collective. People Taiwan see themselves as a person who inherently, wherein one another mutually dependent in a group where they derived. In the collective culture, there is a greater emphasis on fulfilling the joint vision to maintain harmony in one's relationship to the group. One may expect the group to easily achieve collective goals through the application of norms collectively.

Another possible explanation points to a shared vision as a major mediator between trust and flexibility suppliers. As a manufacturer and supplier of a separate corporation with interests and goals of each individual who is not known with certainty. Suppliers' will strive to meet the demand producers. While the opportunistic actions of suppliers probably will weaken producers' strategy. Manufacturers must exert a specific mechanism for reducing the potential for opportunism. Confidence building confidence in the reliability and integrity of the partners involved in the exchange. On the other hand, confidence as positive expectations about the motives of the target, does not impact on the behavior of the target. Research has revealed the belief that effective contribute in building a common vision. If a manufacturer believes that suppliers can be trusted, then they will tend to be willing to share sensitive or important information with suppliers who have the same purpose and understanding necessary in a collaborative effort. Vision together as a binding mechanism will help the different parts of an organization to integrating or combining resources. Given the environment and the need for a rapid response is always changing dynamically follow customer demand, the shared vision is a prerequisite in the implementation of the partnership in the supply chain. Suppliers trying to meet the needs of the plant may need to adjust capacity and production plans. In this case, the supplier with limited capacity may face the risk of losing more business opportunities. With a shared vision,

manufacturers and suppliers will feel like a team and understand that their goals are part of the collaboration. A shared vision becomes a mechanism set up to promote the interests of the entire supply chain.

A shared vision implies a strong cohesiveness among organizations, improving communication between manufacturers and suppliers. Often communication and interaction can help develop shared goals and mutual understanding. To achieve the necessary flexibility in the supply chain, manufacturers and suppliers must combine a high level of cooperation and joint planning. In addition, the flexibility associated promotional supplier may require increased investment or involvement of workers (eg role in shape, good training, R & D spending, capacity expansion). Therefore, suppliers to consider the benefits of a shared vision throughout the supply chain and create more than just an attempt to meet the demand of manufacturers to increase flexibility. The study also provides important implications for marketers who share a vision in determining to make suppliers more flexible. Indicated that marketers must make the revolution a shared vision with partner companies, and not just do a buy-sell approach.

Flexibility supplier and manufacturer of achievement

The greater flexibility of the supplier will provide benefits for manufacturers that are responsive to the behavior of competitors. Suppliers who have the ability to quickly adjust the amount of production means has a volume flexibility, and simultaneously produce multiple types of products or able to make rapid adjustments from one product to another (mix flexibility) will be much more able to compete. In addition, suppliers were able to accommodate sudden demands or special orders (delivery flexibility), reducing the time required to modify existing products, introducing new products (product flexibility), and more likely to contribute to the response to customer demand dynamic producer. Suppliers often limit the ability of manufacturers to respond quickly linked to customer needs. However, the results showed that manufacturers often use coercive influence strategies or build a shared vision with suppliers, so that it can help to promote flexibility suppliers to accommodate customer demand dynamic. This allows manufacturers to better manage them with relevant market share, sales revenue, customer satisfaction, and the chances of getting the project. Flexibility supplier and manufacturer of achievement.

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Bias supply chain: Supply chain myopia

Increased integration and a wide range of products and services, together with technological changes, the effect on the design, the number and variety of supply chain. The integration of the supply chain in terms of collaboration between the companies and the coordination of logistics flows is often seen as a prerequisite for the development of the supply chain. Hertz (2006), found an overlap in the supply chains in terms of actors, resources and important activities that can delay, impede and increase the cost of the process when there is a change in the level of integration of the chains. Therefore, supply chains myopia may cause an increase in the total cost of a company. Furthermore, there is a trade-off between the cost of integration in the chain focus and increased costs arising from the integration of the decline due to the overlap in the supply chains. Failure to consider the negative effects and resistance caused by the delay in supply chains and relationships that overlap can be detrimental. Overlap between the chain can have a positive or negative, and may apply to the contrary at another time.

Conclusion

Trade liberalization worldwide has resulted in the integration of the supply chain in the global market. Development of demand and supply chain planning matrix coherent chain shows interdependence of demand and supply chain planning. Demand planning and supply also plays a role when defining a framework for the operation. Flexibility is a prerequisite to overcome when facing a supply that cannot be predicted. Flexibility can take many forms and is a specific part of the company as a valuable resource. The ability to adapt to the turbulent environment is a prerequisite to be able to survive and thrive as a company. Adaptation means the company has the ability to adjust to recent developments, while the company significant flexibility capable of addressing the changes that occur. Flexibility and adaptability comes in many forms. Flexibility is considered as an effective response to the uncertainty, so as to expand the boundaries of enterprise management, the concept of flexibility is also growing from a single company for the benefit of the entire supply chain. Therefore, supply chain flexibility will provide a rapid response capability to changes in the external environment and will be key in winning the competition. Supply Chain Flexibility includes a mix of views and processes include core processes such as procurement, sourcing,

distribution and logistics and reducing uncertainty or risk.

There are seventeen enablers identified ISM approach has been applied to analyze the flexibility of the supply chain. It has helped in determining the driver power and dependence of all enablers. Variations in demand, security, and delayed product differentiation have a high power driver towards strategic interests. There are several enablers that have a low power driver and a low dependence as the flexibility of the manufacturing system, alternative arrangements are logistics, cultural and linguistic compatibility, economic stability, and flexibility of location.

The idea of the triple-bottom line lets create economic benefits through improved social standards and preserve the environment for future generations. This idea was well received and gradually covers the business arena. Business needs a framework of assessment and decision-making tools to measure and balance the performance of supply chains in the three dimensions of sustainability.

The results showed that the use of coercion in influencing the strategy and the development of a shared vision in promoting flexibility supplier, fully mediate the effects of trust in supplier flexibility. In addition, the supplier flexibility has a significant positive impact on the performance of the manufacturer.

Found overlaps in the supply chains in terms of actors, resources and important activities that can delay, impede and increase the cost of the process when there is a change in the level of integration of the chains. Thus, supply chains myopia may have an increment in the full price of a troupe.

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TRUST TRANSFER AND REPAIR: A MULTICHANNEL STUDY ON THE SMARTPHONE INDUSTRY

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Abstract

This study explores how trust transfer among diverse business channels in smartphone industry. We further examine the impact of trust repairing strategies in creating the positive emotions of customers and consequently trust restoring when customers experience unfavorable events in the multichannel context. Positive emotion was considered as a mediator between trust repair and trust within multichannel trust transfers. Based on the survey of smartphone users, the results show that brand users' that develop initial trust of telecom operators tend to transfer their trust to channel distributors; moreover, positive emotion has a mediating effect between trust repair and trust. This study has theoretical and practical implications.

Keywords: Multichannel; Positive emotion; Trust; Trust repair; Trust transfer

Introduction

Internet and electronic media growth have resulted in more and more consumers purchasing through multiple channels; the amount of consumption has also increased dramatically. Multichannel sales refer to the merging of varied retailing channels to transact and serve customers. Multichannel sales are a brand strategy to facilitate business transactions in ecommerce and to provide customers with better purchase experiences (Bock et al., 2012; Kwon

and Lennon, 2009). Prior studies have outlined the advantages of multichannel sales as compared to the use of a single path, as well as the relationship between customers and multichannel sales (Pookulangara et al., 2010; Slovenia, 2004; Rhee, 2010; Yan, 2011). Additional researches have attempted to investigate customers' motivations and the decision-making process when choosing a channel in a "social" multichannel environment (Dalla Pozza, 2014), and the motivation for consumers to purchase products or services from various channels (Birgelen et al., 2006; Cho and Workman, 2011). Or maybe consumers are locked into the relationship with online stores and are unwilling to switch from online stores to offline stores (Zhou, 2016). However, the multiple channel sells studies on the relationships among the different channels, such as how customers transfer brand trust among various telecom operators and channel distributors, are relatively rare.

Trust is the foundation of developing long-term business relationship in multichannel practice. In the context of multichannel sales, consumer exhibits varying degrees of trust based on the importance of the channel they are associated with and such initial trust may transfer across associated retailing channels (Stewart, 2003; Susanto et al., 2013). While trust transfer may offer great opportunity for firms to interact with customers, the multichannel sales also raise concerns for trust damage when customers experience inconsistent service, information, or product quality through these diversified channels (Bart et al., 2005). These types of problems can lead to a loss of brand trust on the part of users or potential customers, which in turn may affect their motivation to buy brand products in the future. Trust repair is essential yet complicated in multichannel sales because it is difficult for customer to ascertain who is responsible for a particular product/service deficiency.

This study aims to investigate trust transfer and trust repair in multichannel systems – important business issues but not previously understood by practitioners and researchers. The research target is smartphone industry in Taiwan. Taiwan's smartphone industry delivers products from diverse range of online and off-line retailers and a spectrum of service providers including Telecom operators, branded vendors, and channel distributors (Market Intelligence and Consulting Institute, 2015). All these channels, except branded vendors, carry full range of smartphones brands and services. Such flexible business model not only offers multiple contacts with customers but also enable the manufacturer to increase market exposure.

This study explores how trust transfer among diverse business channels in smartphone industry of Taiwan. We further examine the impact of trust repairing strategies in creating the positive emotions of customers and consequently trust restoring when customers experience unfavorable events in the multichannel context. Researchers that focus on trust repair propose three strategies, namely affective repair, informational repair, and functional repair to respond to the causal attributions of trust violation and to compensate individual loss (Xie and Peng, 2009). Organizations frequently apply these trust repair strategies to create positive psychological state to minimize the loss of customers. However, it

is still not clear how the trust repair strategies change customer emotions in multichannel context.

The remainder of this paper is organized as follows: in section 2, we discuss the theoretical background of the research. In section 3, we discuss research hypotheses and describe research method. Finally, we detail our results and conclude with a discussion of the theoretical and practical implications of our findings

Theoretical Foundations

Norm of Reciprocity

The norm of reciprocity is one of the central concepts in social exchange theory (Blau, 1964; Emerson, 1976). Homans (1958) states that human interactions represent a rational information exchange process: people tend to react to something with rewards. Based on social exchange theory, positive feedback and communication between people or organizations would result in better interaction that further improve the relationship and service (Bateman and Organ, 1983).

Reciprocity is the key to establish trust (Alavi et al., 2010). Examining reciprocity from trade interaction, Gouldner (1960) argue that reciprocity is a behavior model based on how the people involved in the trade. Reciprocity can become a basis for social behavior and increase stability in social systems. Reciprocity occurs when sellers serve their customers well in the product sale and post sales service; it enhances consumers' consumption motivation and intent to repurchase in the near future (Morales, 2005). As such, reciprocity is one of the key factors to establish trust and customer loyalty (Morais et al., 2005; Palmatier et al., 2009)

Positive Emotions

Emotion refers to a type of self-awareness, a state of subjective feelings, and an expression of what an individual feels in daily life, including their interactions with others (Jones and George, 1998). Emotion is an expression of strong affection associated with a specific environment or case (Ben Ze'ev, 2000; Simon et al., 1982). Most researchers agree that the adjectives used to describe positive emotions include: exciting, passionate, enthusiastic, cheerful and steady (Kimberley and Hartel, 2008; Watson et al., 1988).

Prior research shows the relationship between trust and emotions (William, 2001). Hansen (2014) suggested that managers should seek to rebuild the positive relationship between trust and loyalty in order to receive the full benefit of their trust-building efforts. Emotion can influence trust from three ways. First, all emotions, whether strong or subtle, accumulate to create different degrees of trust. Emotion is the most distinctive means to convey one's level of trust. Emotions also influence people peripherally. Second, the degree to which people trust others is closely related to their general outlook on life: those who are generally positive tend to exhibit greater faith in others (Gouaux, 1971; Veitch and Griffitt, 1976). Third, trust is built on expectations and is connected to emotions. Unrealistic expectations can intensify emotions to the point that they generate distrust. In these types of cases, people can make decisions based on emotions

that are far from their regular values and attitudes (Frijda, 1988)

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Constructs and Hypotheses

Research Structure

The current study is based on initial research conducted by Xie and Peng (2009); it explores significant influences of emotions on initial trust and trust repair in terms of telecom operators, branded vendors, and channel distributors. The focus is smartphone users. This study attempts to understand if any trust transfer exists among downstream smartphone suppliers. Furthermore, this study attempts to explore how and why customer rebuild their trust of downstream smartphone suppliers when they experience inconsistent product or service quality. The conceptual structure is shown in Figure 1.

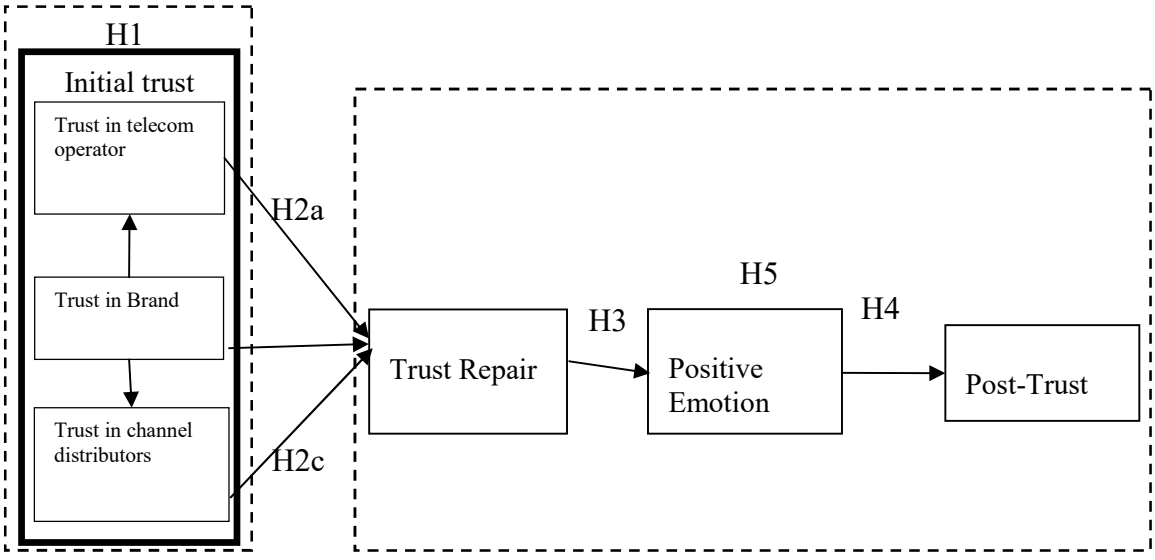

Figure 1. Research model

Research Hypotheses

According to Lu et al., (2011), "the trust transfer process is a cognitive one in which the trust in one domain has an influence on attitudes and perceptions in another domain." Trust can be transferred across different categories. For example, Uzzi (1996) finds that individual transfers trust from a known environment to an unknown one.

There are two types of trust transfers (Lee et al., 2007): intrachannel transfers refer to trust in a particular channel being influenced by products or comments on the service offered through that channel, while interchannel transfer refers to the trust between different business channels. In the digital economy, interchannel trust transfer is particularly important for firms that intent to maximize profit through multi- channels sales. Compared with traditional business practice, customers tend to perceived Internet transactions with higher risk than purchasing through substantial channels. To reduce the risk, most customers choose to use the same channel or purchase (cross-channel) products from both virtual and substantial channels of the same company (Lee and Choi, 2011).

Developing positive brand impression and initial brand trust is important in multichannel sales. Initial trust originates due to buyer awareness of other buyers' positive transaction experiences through various channels, which makes them more willing to trust the sellers (Doney and Cannon, 1997). Stewart (2003) pointed out that consumers sometimes choose a brand that they lack experience with simply because of their intuitive associations with the brand. The initial brand trust enables the organization to take the advantage of multichannel sales. Based on trust transfer, consumers who have positive experiences with particular brand tend to purchase the brand product even from channels that they have never dealt with. Based on the above arguments, we hypothesize the following:

H1. Trust transfer takes place in multichannel.

H1a. Consumers initial trust in mobile phone companies will transfer to Telecom operators.

H1b. Consumers initial trust in mobile phone companies will transfer to channel distributor.

Well-known brands are beneficial in terms of building up the initial trust of customers and inducing them to purchase brand-specific products across multiple channels (Chen and Dhillon, 2003). While trust is a cornerstone of business transaction, trust violation is a serious offense that requires extensive effort to ease the conflict between customer's expectation and reality. Trust violation does not equal to distrust, however. When consumers purchase a product via one of multiple channels and the transaction process or the product itself is flawed, they rarely immediately distrust the company; rather, consumers usually expect the company to repair the situation based on the initial trust established at the point of purchase. Trust repair refers to the effort to overcome the salient negative expectation arising from the trust violation (Kramer and Lewicki, 2010). Trust repair signals the intent to prevent future violation. The initial trust plays a role in offering opportunities of trust repair.

Customer's initial trust implies the positive experience and expectation in terms of the vendor's ability to deliver high quality of products and services. People with initial trust of the vendor may willing to believe that the incident is an anomaly and the mistrusted party will correct the mistake in the future.

Based on the above, we hypothesize:

H2. The initial trust among multichannel has a positive impact on trust repair.

H2a. Consumers' initial trust of Telecom operators has a positive impact on trust repair.

H2b. Consumers' initial trust of smartphone companies has a positive impact on trust repair.

H2c. Consumers' initial trust of channel distributors has a positive impact on trust repair.

The building of trust associates with positive personal expectations and the willingness to believe the counterparty in uncertain circumstances. The level of cognitive trust partially involves emotions. When there is a significant difference between expectations and reality, one's emotions will reflect the amount of trust damage as well as the demands for a follow-up recovery (Wang and Huff, 2007). Developing effective trust repair strategies are important to control the business crisis and to reduce the chance of losing customers. Xie and Peng (2009) observe the cause of trust violation and identify three major trust repair strategies. Affective trust repair strategy, such as apologies via various media, written letters, or in person, is helpful to lessen the negative perceptions of the corporate image and to develop consumer's forgiveness feelings (Chen et al., 2013). Financial compensation, including cash refund, free maintenance or a purchase exchange, is effective in repairing the economic loss of the customer. Ultimately, improvements in the transaction process and communication channels, or by offering the latest information is effective to mitigate complaints in consumers' minds. These trust repair strategies could negate consumers' negative emotions or even help to generate positive emotions as part of the repair process. In response, this study posits the following hypotheses:

H3. Trust repair among multiple channels has a positive impact on positive emotions.

H3a. Affective repair has a positive impact on positive emotions.

H3b. Functional repair has a positive impact on positive emotions.

H3c. Information repair has a positive impact on positive emotions.

Emotion plays an important role when consumers deal with unfamiliar agents (McKnight et al., 2002; Stewart 2003). Emotion, especially the positive emotion, is one of the essential factors in developing trust. Positive emotions enhance positive impressions of others and create a more positive faith in humanity. People with positive personality are more generous and more willing to help others (Lount, 2010). Dunn and Schweitzer (2005) point out that positive emotions like excitement or enthusiasm is helpful to facilitate the trusting belief. Positive emotion may lessen the negative cognitive state such as skepti-

cism, cynicism, and fear—core obstacles that hamper social interaction.

Positive emotion makes it easier for consumers to accept apologies, physical compensation, or the appeal of pardon from service or product providers. Positive emotion will endow a person with a better prospect to counterparty's effort in cognitive and physical compensation and enhance the trust to other. In this regard, organizations that are successfully induce customers' positive emotion in service/product repairing are more likely to rebuild customer trust after detrimental events. On this basis, we propose:

H4. Positive emotion has a positive impact on the level of post-trust associated with mobile phone companies.

Positive emotion is essential to augment the impact of trust repairing strategies. During the trust-building process, peoples' impressions of others are enhanced by positive emotions (Dunn and Schweitzer, 2005; Lount, 2010). Positive emotions can obscure mistakes in the minds of consumers, who in turn become more willing to accept apologies or compensation from product or service providers. This also leads to greater consumer satisfaction (Schoefer and Diamantopoulos, 2009; Worth and Mackie, 1987). As such, positive emotion is crucial in both the trust buildup and repair processes.

In investigating the process of trust grows, decline, and rebuild, Chen et al. (2013) found that individual's emotional state plays essential role in augmenting the effect of trust repair efforts. Trust repair strategies have a positive impact on individual emotions. Consumers' emotions become more positive when an intention to repair (apology, physical compensation or improvement to a communication channel) becomes apparent, which also influences consumer perceptions of the company in question; in turn, it becomes more likely that consumers will do business with the firm again. As such, we propose:

H5. Positive emotions across multiple channels are a mediating variable for repairing post-trust associated with a mobile phone company.

Research methodology

Sample information

Taiwan has advanced mobile technology and service with high market penetration. The smartphone industry of Taiwan is blooming with double-digit annual growth in shipment volume and values. The value chain of smartphone industry comprises upstream, midstream, and downstream suppliers (Market Intelligence and Consulting Institute, MIC). The downstream suppliers include telecom operator, branded vendors, and channel distributors. All downstream suppliers, except branded vendors, carry full range of products and services for varied smartphone manufacturers. According to statistics report from the National Communications Commission (NCC), Taiwan's major telecom operators are Chunghwa Telecom Co., Ltd, Taiwan Mobile Co., Ltd, and Far Eastone Telecom Co., Ltd and the respective market shares of each company are 54%, 22.7%, and 22.7%. The total number of service subscribers reached 7.51 million in August of 2014.

This study adopted non-probability, convenience sampling method by focusing on the subscribers of major telecom operators of Taiwan because telecom service is a necessity for smartphone users. To understand if trust transferred across downstream suppliers and the impact of trust repair strategy in rebuilding the consumer trust, a research scenario regarding an unhappy product and service experience was provided and a questionnaire comprised measurement items of research variables was posted online for data collection. The questionnaire was linked via public messages to allow participants to complete the questionnaire. Names, email addresses and IP addresses were screened to avoid repeat participants. A lottery was conducted to increase the research participation.

The investigation period was from February 20, 2015 to April 30, 2015. In total, 523 questionnaires were completed; 52 were excluded due to not proper objects for this research. As such, the valid response rate was 92%. Table 1. outlines basic information about the sample. According our samples, Similair the real market share, Chunghwa Telecom Co., Ltd, Taiwan Mobile Co., Ltd, and Far Eastone Telecom Co., Ltd and the respective market shares of each company are 59.9%, 18%, and 14%, the others is 8 %.

Table 1. Valid Sample Statistics

Variable	Frequency	Percentage	Variable	Frequency	Percentage
Gender			**Age**		
Male	262	55.6	< 20	161	34.2
Female	209	44.4	21-25	226	48.0
			26-30	52	11.0
			> 30	32	6.8
Frequency of use			**Purchase of Channel**		
< 1 hour	131	27.8	Regular	302	64.1
1-4 hours	175	37.2	Chain Telecom Franchisee Telecom	78	16.6
5-8 hours	95	20.2			
9-12 hours	59	12.5			
> 12 hours	11	2.3	Agent Telecom	81	17.2
				10	2.1
Brand			**Telecom Service**		
Apple	194	41.2	Chunghwa Telecom	282	59.9
HTC	164	34.8			
Sony	68	14.4	Far EasTone Telecom	85	18.0
Samsung	34	7.2			
Motorola	11	2.3	Taiwan Mobile Telecom	66	14.0
			Others	38	8.0

The demographic data indicate that more than 93% of the respondents are under 30 years of age, about 35% of the respondents use smartphone more than 5 hours per day, and over 64% of the respondents purchase smartphone from the channel distributors. Apple and HTC are major players in Taiwan's smartphone industry and have 41.2% and 34.8% market share respectively. Further, about 60% of the respondents subscribed telecommunication services from Chunghwa Telecom Corp. Ltd.

Sample Validity

Taiwan has advanced mobile technology and service with high market penetration. The smartphone industry of Taiwan is blooming with double-digit annual growth in shipment volume and values. The value chain of smartphone industry comprises upstream, midstream, and downstream suppliers (Market Intelligence and Consulting Institute, MIC). The downstream suppliers include

In order to assure the validity of the returned questionnaires in terms of their ability to represent all samples, we conducted a split validity test to assess the fit of the data in the responses. The results suggest that there are no differences in terms of the characteristics of the sample. Because all data are self-reported and collected through the same questionnaire during the same period of time with cross-sectional research design, the research data may subject to common method bias.

Common method bias where variance is attributed to the measurement method rather than the constructs of interest may cause systematic measurement error and further bias the estimates of the true relationship among theoretical constructs. Harman's one-factor test and confirmatory factor analysis, post hoc statistical tests, were conducted to test the presence of common method effect. The confirmatory factor analysis presents eight factors and these eight factors together accounted for 72 percent of the total variance. Besides, the first (largest) factor did not account for a majority of the variance (13%). Thus, common method bias is not significant in this study.

To help ensure that the results of the study were not inflated by common methods variance, the marker variable technique was used (Lindell and Whitney, 2001). Specifically, the correlations between post-trust, a variable theoretically unrelated to all others in the study, and the other variables were measured. Results indicated that none of the correlations were significant, thus instilling confidence that the results were not inflated due to common methods variance.

We used AMOS 6.0 to test the reliability and validity of the research model. We conducted confirmatory factor analysis (CFA) to examine the effects of the research model. The result of CFA showed that all factor loadings and squared multiple coefficients were greater than 0.5. Moreover, the composite reliability and value of AVE exceeded 0.5, indicated high reliability for the research construct. Table 2 summarizes the statistical outcomes of the measurement constructs and factor analysis. Table 3. presents the matrix of coefficient correlation.

Table 2. Reliability Analysis

Measurement Construct	Factor loading	*SMC*	CR	AVE
Trust in Telecom Service (Sirdeshmukh et al., 2002, Alpha=0.862)				
Generally speaking, I trust this company or seller.	0.861	0.741	0.870	0.628
Generally speaking, this company or seller is reliable.	0.896	0.802		
I will buy this company's or seller's products when I need.	0.69	0.477		
I am willing to recommend this company or seller to my relatives and friends.	0.702	0.492		
Trust in Brand (Sirdeshmukh et al., 2002, Alpha=0.930)				
Generally speaking, I trust this company or seller.	0.915	0.838	0.927	0.719
Generally speaking, this company or seller is reliable.	0.905	0.819		
I will buy this company's or seller's products when I need.	0.931	0.867		
I am willing to recommend this company or seller to my relatives and friends.	0.734	0.539		
Generally speaking, I trust this company or seller.	0.729	0.531		
Trust in Retailer (Sirdeshmukh et al., 2002, Alpha=0.929)				
Generally speaking, I trust this company or seller.	0.872	0.746	0.929	0.687
Generally speaking, this company or seller is reliable.	0.897	0.785		
I will buy this company's or seller's products when I need.	0.91	0.814		
I am willing to recommend this company or seller to my relatives and friends.	0.764	0.61		
Generally speaking, I trust this company or seller.	0.791	0.667		
Affective Repair (Xie & Peng, 2009, Alpha=0.898)				
I think the company or seller has made an obvious apology.	0.794	0.631	0.898	0.689
I received sincere compensation.	0.836	0.699		
I think the company or seller has considered consumers' feelings when receiving negative feedback.	0.854	0.729		
I think the company or seller has held a forum to make an apology, helping consumers to feel the company's or seller's sincerity.	0.834	0.695		
Functional Repair (Desmet et al., 2011, Alpha=0.927)				
I received specific compensation.	0.822	0.675	0.927	0.719

I think the company or seller has made substantial efforts in responding to negative feedback.	0.844	0.713		
I think the company or seller has provided a partial/full refund based on negative feedback.	0.859	0.737		
I think the company or seller has provided a substantial discount on relative products and services to consumers.	0.842	0.708		
I think the company or seller has provided a substantial discount on relative products and services to consumers.	0.872	0.761		
Information Repair (Xie & Peng, 2009, Alpha=0.918)				
I have received a response from the company or seller.	0.787	0.619	0.742	0.92
I think the company or seller has provided the necessary information about its response to negative feedback.	0.911	0.83		
I think the company or seller has provided specific information to consumers that met their demands.	0.899	0.809		
I think the company or seller has provided information to consumers that met their expectations.	0.844	0.713		
Positive Emotion (Gelbrich, 2010, Alpha=0.940)				
Following the company's response and the disposal of the problem, I feel happy.	0.83	0.688	0.931	0.773
Following the company's response and the disposal of the problem, I feel glad.	0.916	0.839		
Following the company's response and the disposal of the problem, I feel pleased.	0.902	0.814		
Following the company's response and the disposal of the problem, I feel joyful.	0.866	0.749		
Post-Trust (Sirdeshmukh et al., 2002, Alpha=0.953)				
Generally speaking, I trust this company or seller.	0.934	0.872	0.944	0.773
Generally speaking, this company or seller is reliable.	0.942	0.888		
I will buy this company's or seller's products when I need.	0.944	0.89		
I am willing to recommend this company or seller to my relatives and friends.	0.796	0.633		
Generally speaking, I trust this company or seller.	0.761	0.579		

Table 3. Cross-loading Matrix

Items	Mean	STD	TIT	TIB	TIC	AR	FR	IR	PE	PT
TIT1	3.16	1.129	**0.78**	0.42	0.27	0.26	0.36	0.28	0.31	0.17
TIT2	3.72	.811	**0.77**	0.39	0.31	0.28	0.34	0.30	0.36	0.18
TIT3	3.60	.810	**0.75**	0.35	0.34	0.34	0.32	0.32	0.32	0.12
TIT4	3.54	.839	**0.71**	0.32	0.34	0.27	0.40	0.34	0.31	0.14
TIB1	3.70	.803	0.30	**0.82**	0.32	0.17	0.20	0.17	0.19	0.16
TIB2	3.79	.754	0.35	**0.77**	0.34	0.22	0.15	0.25	0.25	0.20
TIB3	3.81	.742	0.26	**0.78**	0.29	0.18	0.21	0.25	0.24	0.10
TIB4	3.70	.840	0.25	**0.71**	0.31	0.23	0.20	0.27	0.28	0.15
TIB5	3.56	.874	0.29	**0.70**	0.30	0.20	0.26	0.24	0.25	0.14
TIC1	3.52	.801	0.24	0.33	**0.86**	0.23	0.21	0.23	0.22	0.16
TIC2	3.29	.779	0.28	0.31	**0.78**	0.19	0.27	0.30	0.17	0.13
TIC3	3.30	.785	0.32	0.38	**0.75**	0.23	0.26	0.24	0.25	0.18
TIC4	3.29	.811	0.24	0.36	**0.81**	0.16	0.25	0.31	0.26	0.20
TIC5	3.19	.833	0.25	0.34	**0.83**	0.19	0.26	0.17	0.24	0.21
AR1	3.34	.915	0.29	0.25	0.14	**0.73**	0.17	0.34	0.41	0.25
AR2	3.36	.921	0.25	0.18	0.21	**0.75**	0.14	0.35	0.38	0.26
AR3	3.38	.936	0.28	0.20	0.27	**0.71**	0.19	0.36	0.35	0.28
AR4	3.40	.913	0.24	0.26	0.26	**0.72**	0.18	0.29	0.37	0.29
FR1	3.43	.868	0.41	0.16	0.25	0.35	**0.70**	0.35	0.38	0.21
FR2	3.41	.876	0.44	0.13	0.23	0.37	**0.78**	0.37	0.39	0.25
FR3	3.42	.867	0.38	0.18	0.31	0.34	**0.76**	0.38	0.34	0.28
FR4	3.45	.858	0.39	0.16	0.24	0.31	**0.74**	0.45	0.38	0.21
FR5	3.40	.937	0.38	0.20	0.28	0.34	**0.72**	0.41	0.39	0.28
IR1	3.53	.851	0.41	0.26	0.30	0.35	0.41	**0.79**	0.41	0.25
IR2	3.61	.840	0.44	0.24	0.31	0.38	0.38	**0.75**	0.46	0.25
IR3	3.58	.833	0.33	0.29	0.28	0.33	0.46	**0.72**	0.41	0.28
IR4	3.48	.878	0.36	0.28	0.34	0.38	0.39	**0.73**	0.43	0.24
PE1	3.44	.837	0.31	0.35	0.27	0.21	0.31	0.34	**0.82**	0.29
PE2	3.45	.805	0.34	0.28	0.35	0.25	0.28	0.29	**0.90**	0.28
PE3	3.46	.826	0.34	0.28	0.31	0.28	0.24	0.31	**0.89**	0.30
PE4	3.46	.823	0.35	0.27	0.35	0.27	0.27	0.29	**0.89**	0.28
PT1	3.23	1.021	0.41	0.30	0.28	0.31	0.28	0.22	0.48	**0.70**
PT2	3.75	.821	0.35	0.25	0.36	0.29	0.32	0.19	0.49	**0.70**
PT3	3.75	.800	0.39	0.21	0.34	0.28	0.28	0.23	0.46	**0.69**
PT4	3.74	.898	0.35	0.24	0.29	0.26	0.29	0.20	0.48	**0.76**

Note: TIT: Trust in Telecom operator; TIB: Trust in Brand; TIC: Trust in channel distributors; AR: Affective Repair; FR: Functional Repair; IR: Information Repair; PE: Positive Emotion; PT: Post-Trust

Note: the item loading of PT3 (0.691) is lower than the threshold value 0.7, However, the experts suggest we do not delete because it is very important.

Analysis of measurement model

This research employed structural equation modeling to examine the hypotheses and the fitness of the research model. Table 4 presents the indices of model fit. The results (RMSEA=0.038, GFI=0.926, and AGFI=0.911) suggested goodness of the model fit. Further, the other fit indices were superior to the standard value overall. As a result, the entire structure fitness of this study was acceptable. Brands normally win customers' initial trust effortlessly. Brands facilitate the establishment of customer trust across multiple channels, which in turn facilitates multichannel product sales (Chen and Dhillon, 2003). The research results show that the initial trust of the branded smartphone would be transferred to telecom operators ($\gamma = 0.355$, $p<0.01$) and channel distributors ($\gamma = 0.261$, $p<0.01$), supporting H1a and H1b. The results suggest effectiveness of multichannel strategies.

Trust repair implies the vendor's intention to meet customers' expectation and reduce the personal loss (Kramer and Lewicki, 2010). Explain, apologize, or financially compensate are major strategies to remedy the business mistake. Our findings suggest positive relationship between initial trust of telecom operators and affective trust repair ($\gamma = 0.388$, $p<0.01$), functional repair (($\gamma = 0.252$, $p<0.01$), and information repair ($\gamma = 0.3$, $p<0.01$) strategies. Furthermore, the result also supports the positive relationship between branded vendors and affective trust repair ($\gamma = 0.24$, $p<0.01$), functional repair ($\gamma = 0.252$, $p<0.01$), and information repair ($\gamma = 0.525$, $p<0.01$) strategies. The findings support H2a and H2b. However, the relationship between channel distributors and trust repair strategies shows positive on information repair only ($\gamma = 0.183$, $p<0.01$). No significant effects were detected between channel distributors and affective repair ($\gamma = 0.081$, $p>0.05$) as well as financial repair ($\gamma = 0.085$, $p>0.05$), resulted a partial support of H2c. Our findings suggest that customer did not weight the competences of telecom operators, branded vendors and channel distributors equally. Customers tend to believe that telecom operators and the branded vendors have sufficient competences to prevent the trust violation in the future. However, customers might consider the channel distributors are either irresponsible or lack of sufficient capabilities to resolve the conflict situation.

Trust violation occurs when a service or product provider fails to keep in the promise in terms of product or service qualities and thereby induces customer's negative emotions. Organizations can eliminate or reduce such negative emotions if they sincerely apologizes (affective repair), offers substantial compensation (functional repair), or improves the transaction and communication process (information repair). These types of actions deliver important signals to the extent that the company values its customers and is willing to act responsibly towards them. These types of actions are often perceived as trust repair strategies, which help to reduce the negative customer emotions. The results of the current

Table 4. Correlation matrix

Variables	1	2	3	4	5	6	7	8
Telecom Service	(0.862)							
Brand	.601**	(0.930)						
Retailer	.506**	.427**	(0.929)					
Affective Repair	.405**	.516**	.370**	(0.898)				
Functional Repair	.407**	.497**	.298**	.710**	(0.927)			
Information Repair	.421**	.540**	.451**	.751**	.722**	(0.918)		
Positive Emotion	.254**	.403**	.338**	.604**	.678**	.642**	(0.940)	
Post-Trust	.156*	.425**	.183*	.331**	.271**	.330**	.330**	(0.953)

*p<0.05, **p<0.01 ()=alpha

study show that trust repair measures, including affective repair ($\gamma = 0.125$, $p<0.05$), functional repair ($\gamma = 0.269$, $p<0.01$) and information repair ($\gamma = 0.350$, $p<0.01$), all have a positive impact on positive emotions. As a result, H3a, H3b, and H3c are all supported.

Finally, we examined the relationship between positive emotion and post-trust and assessed the impact of emotional state on trust development. Positive emotions can raise one's preference as well as consumers' trust in a company. Positive emotion is found to influence post-trust positively ($\gamma = 0.158$, $p<0.01$). H4 is therefore is valid, and the results match those of Lowry et al., (2011). Figure 2 presents the outcome of the statistical analysis.

Mediating Effect Test

This research further explores if trust repair (affective repair, functional repair and information repair) influences consumers' trust in the multichannel environment (of telecom operators, branded vendors, and channel distributors) due to positive emotions. This study, based on Tippins and Sohi (2003) and Luca and Gima (2007), applied the Competing Model as the mediating effect to verify the mediating effect of positive emotions.

Tables 5. and 6. display the results of regression analysis as well as the mediating effect of positive emotion. We examined the direct model, full mediate model and partial mediate model. The direct model shows the influence of trust repair (affective, functional and information repair) on the trust in a multichannel environment. The full mediate model includes the above and adds positive emotions as a mediating variable to represent the influence of trust repair on positive emotions and that of positive emotions on trust in a multichannel environment. The partial mediate model shows that apart from positive emotions, trust repair has a direct impact on trust within a multichannel environment. According to results in Table 6., the full mediate model is with fine fitness (/df=2.786, P-value=0.007). The result is superior

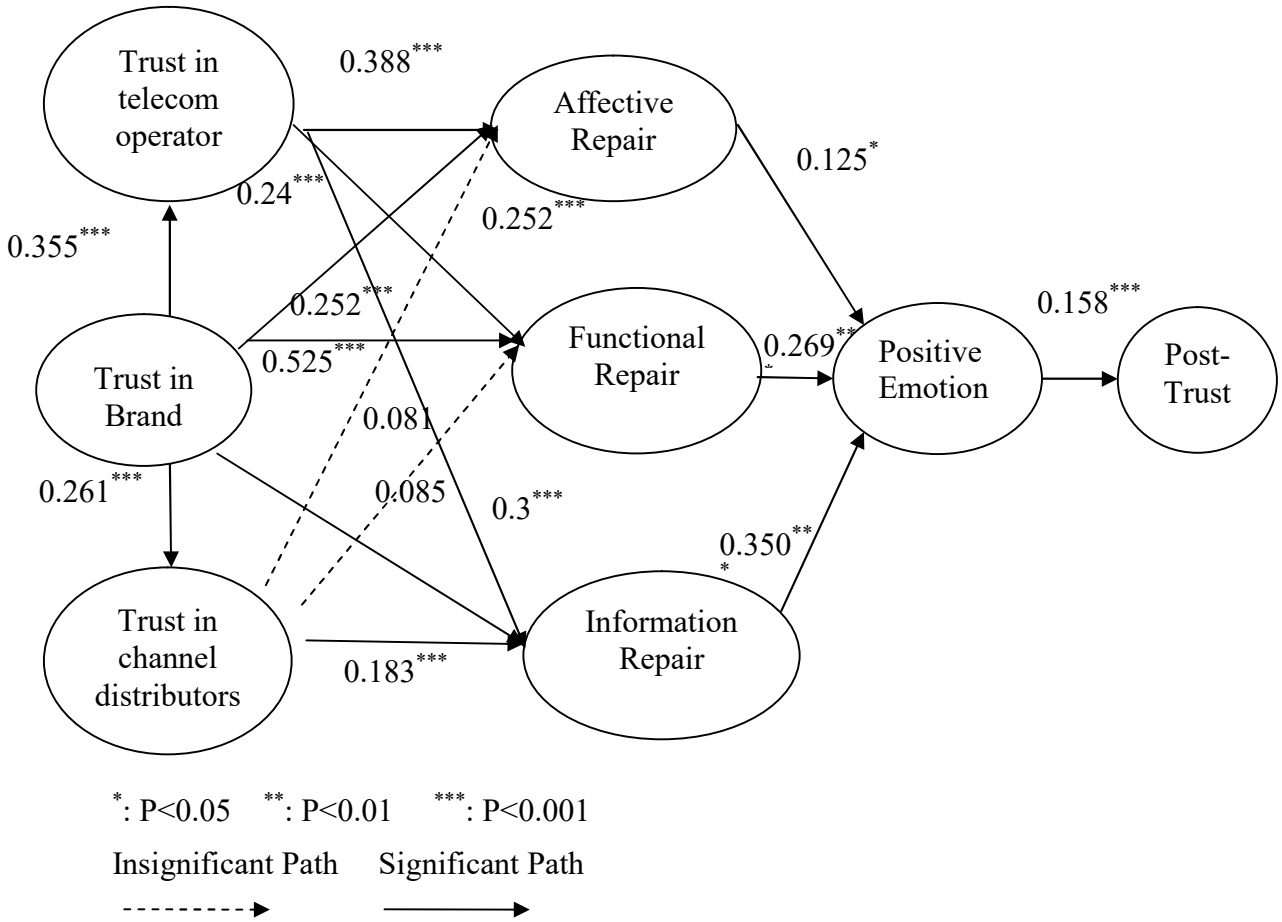

Figure 2. Model testing result

Table 5. Model fit analysis

Statistics	Perfect Fit Standard	Index	Y/N
x^2	P>0.05	0.000	N
d.f		439	
Absolute perfect fit indicator			
RMSEA	<0.08	0.038	Y
GFI	>0.9	0.926	Y
AGFI	>0.8	0.911	Y
Incremental fit index			
NFI	>0.9	0.942	Y
RFI	>0.9	0.935	Y
IFI	>0.9	0.971	Y
TLI	>0.9	0.967	Y
CFI	>0.9	0.971	Y
PGFI	>0.5	0.770	Y
PNFI	>0.5	0.834	Y
PCFI	>0.5	0.859	Y
x^2/ df	<3.00	1.970	Y

Table 6. Hypotheses testing

Hypotheses	Path Coefficient	t - Value	p- Value	Test Result
H1a：Trust in Brand→ Trust in Telecom operator	0.355	9.071	<0.001***	Y
H1b：Trust in Brand→ Trust in channel distributors	0.261	6.222	<0.001***	Y
H2a：Telecom operator→ Trust Repair				
Telecom Service→ Affective Repair	0.388	5.972	<0.001***	Y
Telecom Service→ Functional Repair	0.252	3.836	<0.001***	Y
Telecom Service→ Information Repair	0.300	4.976	<0.001***	Y
H2b：Brand→ Trust Repair				
Brand→ Affective Repair	0.240	5.103	<0.001***	Y
Brand→ Functional Repair	0.252	3.836	<0.001***	Y
Brand→ Information Repair	0.525	5.669	<0.001***	Y
H2c：Channel distributors→ Trust Repair				
Retailer→ Affective Repair	0.081	1.636	0.102	N
Retailer→ Functional Repair	0.085	1.646	0.1	N
Retailer→ Information Repair	0.183	3.872	<0.001***	Y
H4a：Affective Repair→ Positive Emotion	0.125	2.468	0.014*	Y
H4b：Functional Repair→ Positive Emotion	0.269	6.237	<0.001***	Y
H4c：Information Repair→ Positive Emotion	0.350	5.934	<0.001***	Y
H5： Positive Emotion→ Post-Trust	0.158	3.446	<0.001***	Y

*：P<0.05 **：P<0.01 ***：P<0.001

Table 7. Competitive model analysis for positive emotion as mediating effect

Measurement Model	x^2	*df*	x^2/df	*P-value*	RMR	RMSEA	GFI
Direct Model	14.261	3	4.754	0.003	0.028	0.073	0.994
Full Mediate Model	19.5	7	2.786	0.007	0.028	0.05	0.993
Partial Mediate Model	20.9	5	4.186	0.001	0.029	0.067	0.993
Measurement Model	AGFI	NFI	RFI	IFI	TLI	CFI	
Direct Model	0.948	0.99	0.931	0.992	0.945	0.992	
Full Mediate Model	0.966	0.99	0.960	0.993	0.974	0.993	
Partial Mediate Model	0.948	0.989	0.939	0.992	0.953	0.992	

Table 8. Bootstrapping results

				Bias-corrected (95% CI)		Percentile (95% CI)	
Variables	Estimate	SE	Z	Lower	Upper	Lower	Upper
Indirect effect							
Positive emotions	0.132	0.049	2.694	0.041	0.235	0.042	0.236

Total samples *(N*=471)

than that of the direct model (/df=4.754, P-value=0.003) and the partial mediate model (/df=4.186, P-value=0.001). The RMR, RMSEA and GFI values fall within the accepted ranges, while the AGFI, NFI, RFI, IFI, TLI and CFI values are better than those associated with the direct model or the partial mediate model. This demonstrates that the full mediate model has a better overall fitness and corresponds to the theoretical research model; it also verifies that positive emotions within a multichannel environment have a mediating effect on the trust repair model. In other words, trust repair measures (affective, functional, and information repair) influence consumers' trust via positive emotions. Positive emotions play a mediating role between trust repair and trust. The findings support H5.

This finding corresponds to the results of positive emotions play a mediating role between trust repair and trust. Table * shows a total of 471 samples were used and AMOS was employed to implement bootstrapping and the process was repeated for a total of 5000 times. The outcomes show that both Bias-corrected 95% confidence interval (CI) and Percentile 95% confidence interval (CI) related to the indirect effect do not include zero indicating a significant mediating role.

Conclusion

Past studies have investigated trust transfer for single organization only. For example, Haselhuhn et al., (2010) studied one brand across various purchase channels. A company that employs different channels is less complicated than many companies that employ multiple channels because the feedback procedure associated with problematic products is more intricate. The study of various brands with multichannels are relatively complicate compared with the single brand study. Consumers' acceptance and attitudes towards trust repair vary based on different degrees of initial trust associated with each company. Our study augments current understanding of consumer behavior by examining the trust transfer and impact of trust repair across varied channels. We also expand the trust research from the study of purely vendor-customer relationship to the study of multi-vendor and customer relationship.

Within multichannel environments, consumers have more purchase channel options than in the past. This fact also brings about the problem of which companies the after-sales service goes under. Our results show that the customer tends to trust branded smartphone regardless the sales channels. In case of the product or service quality differs from customer expectation, customers are more willing to accept the attempts at trust repair (apologies, physical compensation, or information updates) by the telecom operators and branded vendors. It is worth to note that our results show that customers do not believe that channel distributors have sufficient competence to resolve the business conflict. Among the three major trust repair strategies, our results show that affective repair is most important, followed by functional and information repair, respectively. Therefore, when a problem occurs, a company must convey sincere apologies to consumers and offer proper compensation, product discounts, and a sound communication environment to enhance the trust repair and revive consumers' confidence. Furthermore, our findings suggest that positive emotion is helpful to rebuild the trusting relationship between vendors and customers.

There are several limitations associated with this study. First, the sample consisted of consumers who had purchased "smartphones". Since smartphone brands and operations vary greatly, the trust repair process could be influenced by other antecedents including brands, purchase channels, and prices, among others. Future research should take these into consideration. Secondly, due to the restriction of samples delivering, all data were collected through Internet questionnaires, such that the response environments were unlikely to be identical. Further, the convenience sampling method em-

ployed in this study may also have resulted in deviations.

Researchers may wish to continue the investigation in several areas. First, future research may explore factors of trust transfer between channels and analyze which incentives should be taken to create consumers' trust transfer. These factors include recommendations, product discounts, and promotions. Second, future study may also create different perspectives of emotions, explore their influences on trust as well as the necessity to improve the trust repair process. Finally, apart from the positive emotion, there are other possibilities. Future research may examine how a company could offer the proper trust repair measure to different emotions.

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ANALYSIS OF IMPORTANCE OF THE PROFESSIONAL ABILITIES REQUIRED BY PERSONNEL IN WEDDING PLANNER SERVICES

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Abstract

Traditionally, the entire family would engage in wedding preparations; nowadays, most people hire wedding planners for weeding preparations. Under the assistance of professional personnel, couples can easily and successfully complete a wedding. A wedding planner is very important today, and would be an indispensable service industry in the future. It is necessary to identify the professional abilities that are required for wedding planners in order that they can deliver their services smoothly and successfully. In this study, literature review, expert interview, and hierarchical analysis methods are adopted to clarify the professional abilities required, as well as their corresponding importance. The research results show that regarding the professional abilities required for wedding planners, "Marketing ability" is the most important, followed by "Self-management ability", "Professional competence", and "Team-work ability". The findings can serve as reference for training and recruitment of those interested in becoming wedding planners or wedding planning companies.

Key Words: Wedding Planner, Professional Ability, Analytic Hierarchy Process.

Introduction

A wedding not only involves the couple, but also the entire family. Neighbors and Sobal (2008). The complexity of a wedding is likely to cause friction between the two families, and often requires assistance from others. Most couples-to-be entrust their wedding preparations to a third party, and the wedding planning industry is developed, in order to assist these couples with wedding preparations. (Career Winner Magazine Editorial 2005; Li 2004; Hsu 2012) Therefore, wedding planners have become a new emerging industry, and it is important to clearly define what professional abilities are required for wedding planners to complete their work perfectly. Thus, this study aims to analyze the professional abilities required for wedding planners, as well as the importance of these abilities. The findings can serve as reference for personnel training or recruitment of wedding planners.

Literature Review

Wedding Planner

The profession of wedding planner was originated the U.S., and has become popular abroad. Hsu (2012) In Taiwan, wedding planners began to appear in 2001, and there were about 10 wedding planner service companies in 2004. With successful examples of some celebrities' wedding planning, this industry has been rapidly developed. There are currently about 100 wedding planner companies. Together with the wedding photography companies and hotels catering for newlyweds, the wedding market has been prosperously developing. Chen (2005)

In recent years, the soon-to-be-wed couples, who have novel ideas for wedding planning, but have no time or lack the experience in planning, tend to hire wedding planners to take charge . Career Winner Magazine Editorial (2005) Weddings are very important in life. For couples, a wedding planner is like a butler, a personal secretary, and a window to the outside, as they manage and prepare all wedding related affairs, thus, the couples are willing to spend money on a wedding planner. Moreover, the wedding planner can remind and suggest the important matters for the event. The main services provided by a wedding planner are as follows: (Kim and Lee 2014; Ahn 2012; Guo 2005)

1) Plan the desired wedding.
2) Save the families the time and efforts required for a dreamlike wedding.
3) Provide reminders for various affairs, control the wedding procedure, and other related matters.
4) Provide professional knowledge, experience, and resources.
5) Serve as a wedding coordinator in order to reduce friction between the two sides.
6) Take full charge of the wedding in order to easily and happily complete the wedding.
7) Make the wedding day become the best day in the couples' life.
8) Make all guests feel ease.
9) Provide professional services.
10) Make efforts to provide the best service quality.

11) Make the couples and their families feel relaxed.

Professional Abilities

The work of a wedding planner requires various abilities. A wedding planner should be professional, patient, prudential, good at communication, and passionate, in order to design and plan a romantic wedding ceremony for couples. In addition to the general abilities (Table 1) required in the job market, a wedding planner should provide professional abilities. "Professional abilities" refer to the abilities required for a professional job, and such professional abilities are important for the successful completion of a job. (Melinde and Kerith 2010; Chen 2008; Abefe-Balogun, Nwankpa 2011; Wu 2001; Li 1997).

Table 1: Classification of general abilities (Tiun et al. 2011; Melinde and Kerith 2010; Chen 2008; Abefe-Balogun, Nwankpa 2011)

Knowledge	***Skill***	***Attitude***
1.Application of mathematical logic	1.Independent work	1.Personal physical and mental qualities
2.Language expression	2.Application of technology	2.Adaption to change
3.Cultrue learning	3.Problem solving	3.Emotion management
4.Acquisition and application of information	4.Creation and critical thinking	4.Sense of responsibility
5.Understanding of multi-culture	5.Decision making	5.Active learning
6.Career planning		6.Participation in public affairs
		7.Team work
		8.Frustration tolerance
		9.Interpersonal social skills
		10.Communication and coordination
		11.Respect and trust

Professional abilities consist of explicit abilities and hidden abilities, where explicit abilities include "professional competence, management ability, interpersonal ability, and attitude"; while hidden abilities include "value and mind ability". Job performance is related to professional competence, and the abilities, such as job attitude, are related to personal thought ability. (Li 1997; Hong 1997).

Many people engage in the wedding planning industry because they have visions for weddings. Guo and Luo (2013) According to the Taiwan Hsiung Chuang Organizational Development Association, the professional abilities required by the wedding planner

Table 2: Classification of professional abilities required. Taiwan Hsiung Chuang Organizational Development Association (2008)

Knowledge	***Skill***	***Attitude***
1. Marriage psychology	1. Ability to communicate	1.Impact and influence
2. Consumer behavior cognition	2. Ability of expression	2.Achievement mindset
3. Conception of space design	3. Sales technique	3. Proactivity
4.Conception of aesthetics and art	4. Cost analysis	4.Interpersonal EQ
5. Understanding of wedding rituals and customs	5. Planning ability	5.Customer service mindset
	6.Creative design ability	6. Self-confidence
	7. Theme thinking skill	7. Relationship establish-ment
	8. Ability to arrange	8. Analytic thinking
	9. Troubleshooting skill	9. Conceptual thinking
	10. Sense of make-up and aesthetics	10. Information seeking
		11. Awareness of organiza-tion
		12. Enthusiasm, patience, empathy

industry are classified, as shown in Table 2, and it is important to clearly define and discuss the various professional abilities required.

Research Method

In this study, literature review is conducted to discuss the professional abilities required for wedding planners. The Delphi method and repeated questionnaire surveys are used to obtain the views and opinions of experts and scholars concerning the professional abilities required for wedding planners. Finally, AHP is conducted to analyze the importance of the required professional abilities. The specific process of this study is as shown in Figure 1.

Investigation and Analysis with the Delphi method

The Delphi method is known as the expert survey method, and is a type of research method integrating quantization and qualitative technologies. After consultation, all experts' views and opinions are collected and summarized, and the general opinions and prediction problems are sorted. These opinions and problems are resent to experts for

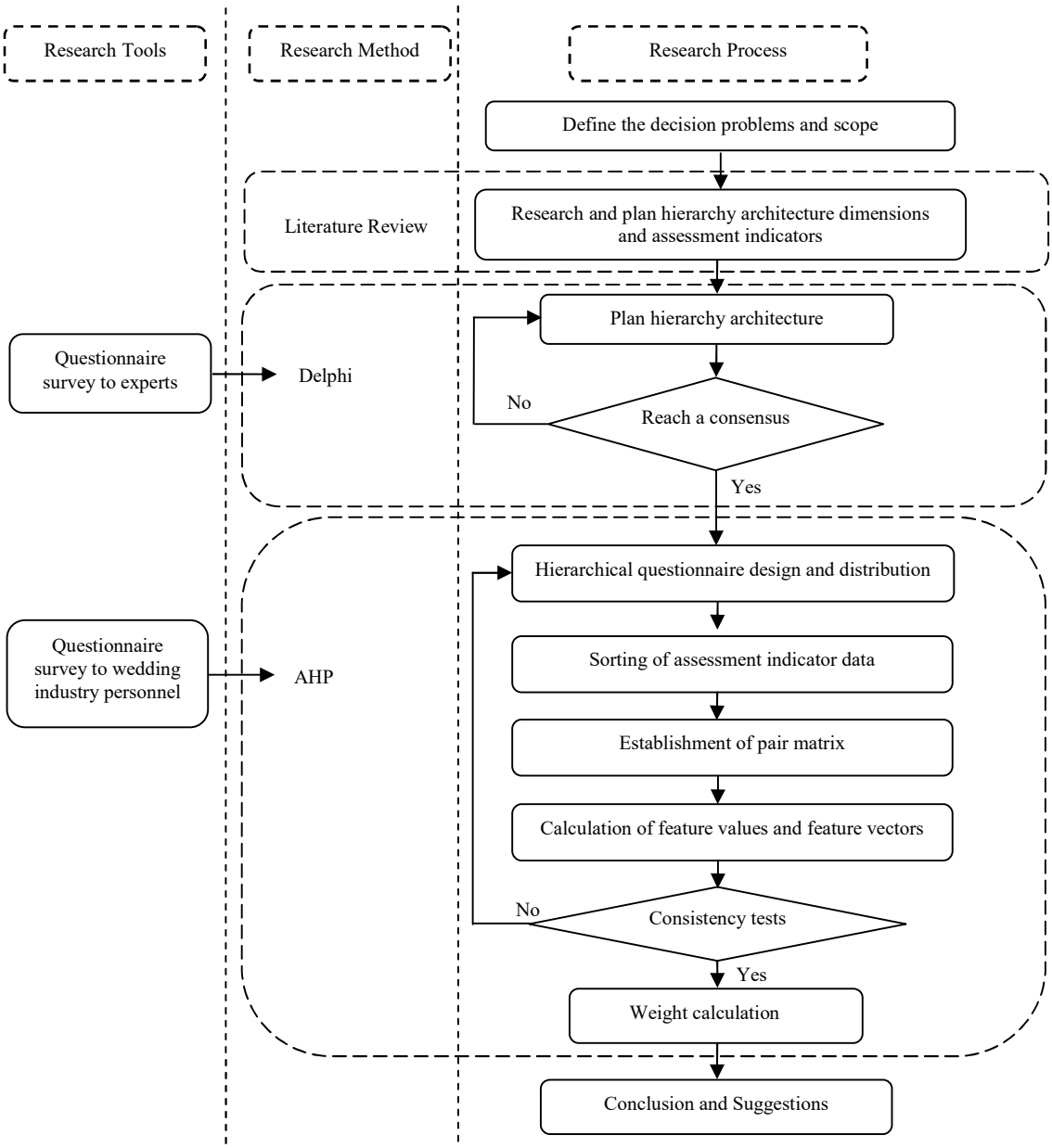

Figure 1: Research Process

consultation, where the experts modify their original opinion according to the general opinions, and the opinions are summarized once again. After repetition, a decision with consensus would be made. Green et al. (1990)

In this study, the coefficient of variance (C.V.) is taken to measure the difference between the testes, and judge whether experts and scholars have achieved consensus. According to the standard suggested by Chang (2002),

when C.V. ≦ 0.3, it means that experts and scholars are consistent, and finally, 4 dimensions and 21 assessment indicators of professional abilities required by wedding planners are established. The research structure is as shown in Table 3. (Editor's Note: See Tables 3 through 10 at the end of this article).

AHP

AHP is to systematize complex problems and sort relevant materials, thoughts, and intuitive judgment, into a logical and hierarchical structure for decision making and assessment. AHP can help decision makers think and obtain conclusions, improve decision making quality, and reduce the risks of making wrong decisions. (Chen 2008; Teng and Tzeng 1989a; Teng and Tzeng 1989b). See Figure 2. for a graphical depiction of the AHP Process.

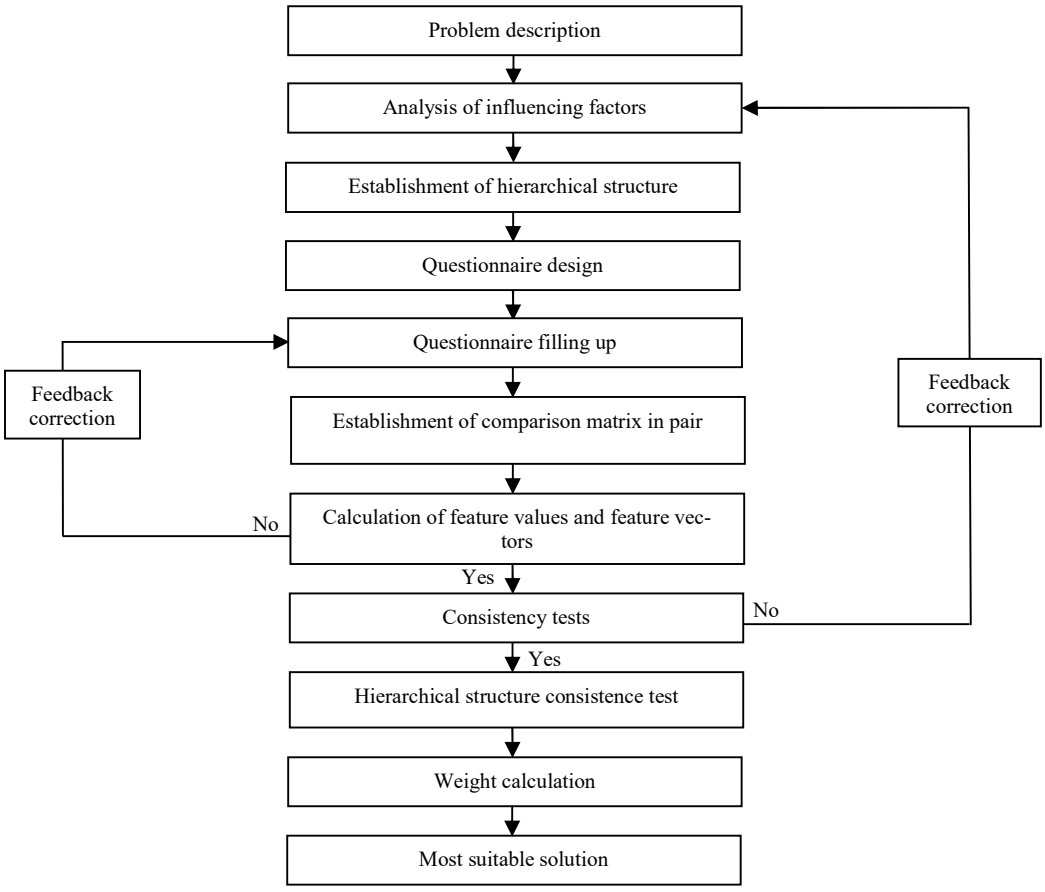

Figure 2. AHP Analysis Procedures

In this study, 30 wedding industry personnel are the respondents of the questionnaire regarding the professional abilities required by wedding planners (Table 4). Then, the pairwise comparison method of assessment dimensions or

indicators is adopted to determine the weight of each dimension or indicator.

Due to the subjective judgment of the respondents, the pairwise comparison matrix may be consistent. Therefore, Saaty suggested detecting the consistence of the pairwise comparison matrix with the Consistence Index, C.I. ($C.I. = \frac{\lambda_{max} - n}{n-1}$) and Consistence Ratio, C.R. ($C.R. = \frac{C.I.}{R.I.}$). The difference between and n (matrix dimension) obtained with the eigenvector method can be used as the measurement baseline to judge the degree of consistency. When C.I. =0, it means the judgments before and after are completely consistent; when C.I. >0, it means the judgments before and after are inconsistent. Saaty thought that C.I. < 0.1 means a permissible bias error. When C.R. (Consistency Ratio) < 0.1, it means the consistency of the matrix is satisfied. (Saaty 1980; Saaty and Kearns 1985)

Results and Discussion

Analysis Results of Major Assessment Dimensions

Regarding the professional abilities required for wedding planners, the consistency detection of the major assessment dimensions, as well as the importance of the four dimensions, is as shown in Table 5.

Analysis Results of Minor Assessment Indicators

For the minor assessment indicators under the four major assessment dimensions, consistency detection and indicator importance are shown as follows:

The consistency detection of the minor assessment indicators under the marketing ability dimension, as well as the importance of the indicators, are as shown in Table 6. The consistency detection of the minor assessment indicators under the self-management ability dimension, as well as the importance of the indicators, are as shown in Table 7. The consistency detection of the minor assessment indicators under the professional competence dimension, as well as the importance of the indicators, are as shown in Table 8. The consistency detection of the minor assessment indicators under the team-work ability dimension, as well as the importance of the indicators, are as shown in Table 9.

Analysis Table of Weight of Overall Assessment Indicators

The summary of the weight of the four major assessment dimensions and 21 minor assessment indicators is as shown in Table 10. The total weight of "Interpersonal EQ" (2.58%), "Understanding of wedding rituals and customs" (2.56%), "Space design conception and arrangement ability" (2.10%), "Leadership" (1.94%), "Respect for others" (1.66%), "Sense of identity and sense of belonging" (1.61%), and "Application of activity-related devices" (1.44%) is 14%, which are the professional ability indicators that wedding industry personnel feel are less important.

Conclusion

In this study, literature review and the Delphi method are taken to divide the professional abilities required for wedding planners into four major assessment dimensions and 21 minor assessment indicators:

1) Marketing ability dimension
Four minor assessment indicators: Conception of consumption psychology behavior, Sales technique, Customer service skill, and Customer relationship establishment and management.

2) Self-management ability dimension

Six minor assessment indicators: Self-confidence, ambition, Sense of responsibility, Proactivity, Resistance to pressure and emotion management, and Empathy.

3) Professional competence dimension

Six minor assessment indicators: Cost analysis, Ability of communication and expression, Creative design and planning ability, Space design conception and arrangement ability, Understanding of wedding rituals and customs, and Application of activity-related devices.

4) Team-work ability dimension

Five minor assessment indicators: Team work spirit, Leadership, Interpersonal EQ, and Sense of identity and Sense of belonging

The AHP results suggested that, in the professional abilities required for wedding planners, the wedding industry personnel think “Marketing ability” is the most important, followed by “Self-management ability”, “Professional competence”, and “Team-work ability” in order.

The total weight, by importance, of the first seven indicators of professional abilities required for wedding planners is 59%. The seven indicators are in order, Customer relationship establishment and management (14.36%), Conception of consumption psychology behavior (11.67%), Customer service skill (8.16%), Sales technique (6.57%), Sense of responsibility (6.53%), Resistance to pressure and emotion management (5.84%), and Self-confidence (5.63%). The seven indicators are mostly under marketing ability and self-management ability dimensions. The total weight of the seven less valued indicators is 14%, which are, in order, Interpersonal EQ (2.58%), Understanding of wedding rituals and customs (2.56%), Space design conception and arrangement ability (2.10%), Leadership (19.4%), Respect for others (1.66%), Sense of identity and sense of belonging (1.61%), and Application of activity-related devices (1.44%). The seven ability indicators are mostly under professional competence and team-work ability dimensions.

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Table 3: Professional abilities required for wedding planners

Goal	*Major assessment dimensions*	*Minor assessment indicators*
The professional abilities required for wedding planners	Marketing ability	Customer relationship establishment and management
		Customer service skill
		Conception of consumption psychology behavior
		Sales technique
	Self-management ability	Sense of responsibility
		Self-confidence
		Ambition
		Proactivity
		Resistance to pressure and emotion management
		Empathy
	Professional competence	Ability of communication and ability of expression
		Cost analysis
		Creative design and planning ability
		Space design conception and arrangement ability
		Understanding of wedding rituals and customs
		Application of activity-related devices
	Team-work ability	Team work spirit
		Leadership
		Interpersonal EQ
		Sense of identity and sense of belonging
		Respect for others

Table 4: AHP respondent statistics

Type of respondent	*No.*	*Percentage*
Restaurant supervisor	10	33%
Bride secretary	6	20%
Wedding decoration personnel	4	13%
Wedding dress manager	5	17%
Wedding photographer	5	17%
Total	30	100%

Table 5. Weights and order of major assessment dimensions

	Marketing ability	Self-management ability	Professional competence	Team-work ability	Weights	Order
Marketing ability	0.433	0.570	0.310	0.321	0.408	1
Self-management ability	0.188	0.248	0.462	0.295	0.298	2
Professional competence	0.223	0.086	0.160	0.269	0.184	3
Team-work ability	0.156	0.097	0.068	0.115	0.109	4
C.I.=0.069866657 C.R.=0.077629619						
C.I.< 0.1 & C.R.< 0.1 comply with the consistence requirements.						

Table 6: Weights and order of the minor indicators under the marketing skill dimension

	Conception of consumption psychology behavior	Sales technique	Customer service skill	Customer relationship establishment and management	Weights	Order
Conception of consumption psychology behavior	0.251	0.483	0.155	0.257	0.286	2
Sales technique	0.074	0.142	0.221	0.209	0.161	4
Customer service skill	0.315	0.124	0.194	0.166	0.200	3
Customer relationship establishment and management	0.361	0.251	0.430	0.368	0.352	1
C.I.=0.086275571 C.R.=0.095861746						
C.I.< 0.1 & C.R.< 0.1 comply with the consistence requirements.						

Table 7: Weights and order of the minor indicators under the self-management ability dimension

	Self-confidence	Ambition	Sense of responsibility	Proactivity	Resistance to pressure and emotion management	Empathy	Weights	Order
Self-confidence	0.172	0.373	0.201	0.145	0.151	0.093	0.189	3
Ambition	0.041	0.088	0.107	0.145	0.098	0.103	0.097	6
Sense of responsibility	0.187	0.181	0.218	0.396	0.175	0.155	0.219	1
Proactivity	0.186	0.096	0.086	0.156	0.313	0.266	0.184	4
Resistance to pressure and emotion management	0.214	0.169	0.234	0.094	0.188	0.275	0.196	2
Empathy	0.200	0.093	0.154	0.064	0.074	0.109	0.116	5
C.I.=0.095406188 C.R.=0.076940474								
C.I.< 0.1 & C.R.< 0.1 comply with the consistence requirements.								

Table 8: Weights and order of the minor indicators under the professional competence dimension

	Cost analysis	Ability of communication and ability of expression	Creative design and planning ability	Space design conception and arrangement ability	Understanding of wedding rituals and customs	Application of activity-related devices	Weights	Order
Cost analysis	0.166	0.094	0.279	0.145	0.263	0.239	0.198	3
Ability of communication and ability of expression	0.452	0.255	0.279	0.238	0.120	0.202	0.258	1
Creative design and planning ability	0.117	0.179	0.196	0.224	0.376	0.193	0.214	2
Space design conception and arrangement ability	0.136	0.128	0.104	0.119	0.068	0.129	0.114	5
Understanding of wedding rituals and customs	0.071	0.239	0.059	0.198	0.113	0.154	0.139	4
Application of activity-related devices	0.058	0.104	0.084	0.076	0.060	0.083	0.078	6

C.I.=0.078418517 C.R.=0.06324074

C.I.< 0.1 & C.R.< 0.1 comply with the consistence requirements.

Table 9: Weights and order of the minor indicators under the team-work ability dimension

	Team work spirit	Leadership	Interpersonal EQ	Sense of identity and sense of belonging	Respect for others	Weights	Order
Team work spirit	0.289	0.355	0.236	0.297	0.253	0.286	1
Leadership	0.137	0.168	0.314	0.146	0.125	0.178	3
Interpersonal EQ	0.271	0.118	0.221	0.337	0.236	0.237	2
Sense of identity and sense of belonging	0.130	0.154	0.088	0.134	0.233	0.148	5
Respect for others	0.173	0.204	0.142	0.087	0.152	0.152	4

C.I.=0.055024899 C.R.= 0.049129374

C.I.< 0.1 & C.R.< 0.1 comply with the consistence requirements.

Table 10: Weight of professional abilities required for wedding planners

Order	Assessment indicator	Weight	Dimension
1	Customer relationship establishment and management	14.36%	Marketing ability
2	Conception of consumption psychology behavior	11.67%	Marketing ability
3	Customer service skill	8.16%	Marketing ability
4	Sales technique	6.57%	Marketing ability
5	Sense of responsibility	6.53%	Self-management ability
6	Resistance to pressure and emotion management	5.84%	Self-management ability
7	Self-confidence	5.63%	Self-management ability
8	Proactivity	5.48%	Self-management ability
9	Ability of communication and ability of expression	4.75%	Professional competence
10	Creative design and planning ability	3.94%	Professional competence
11	Cost analysis	3.64%	Professional competence
12	Empathy	3.46%	Self-management ability
13	Team work spirit	3.12%	Team-work ability
14	Ambition	2.89%	Self-management ability
15	Interpersonal EQ	2.58%	Team-work ability
16	Understanding of wedding rituals and customs	2.56%	Professional competence
17	Space design conception and arrangement ability	2.10%	Professional competence
18	Leadership	1.94%	Team-work ability
19	Respect for others	1.66%	Team-work ability
20	Sense of identity and sense of belonging	1.61%	Team-work ability
21	Application of activity-related devices	1.44%	Professional competence

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THE IMPACT OF MOBILE HOTEL BOOKING BY CUSTOMER REVIEWS AND EXPERIENCE

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Abstract

The purpose of this study is to analyze if customer reviews work for mobile hotel booking with regard to the APP. With the advent of mobile APP, communication among customers and service providers will be enhanced. A great number of hospitality service providers have come up with efficient ways to access their systems and do bookings without having to make a call to the hotel. Therefore, this study will explore the importance of experiences in mobile hotel booking context. This study will employ the use of review of existing data by looking at the customer reviews in experience. The sample is an online page consisting of customer reviews in experiences on best hotel booking sites. The study reveals causal link between customer reviews in experiences and mobile hotel booking with an APP. The implementation of mobile hotel booking is an effective online strategy for customers.

Key Words: Customer reviews, mobile hotel booking, hotel industry, customer experience, online strategy

Introduction

With the advent of technology, the hotel industry has undergone tremendous developments in terms of technological platforms in order to survive in the current competitive business environment. The tremendous technological advancements has made more and more consumers within the hotel industry to turn to 'on the go" technology so as to access services. More and more customers are turning to the use of Smartphones and their related Apps to access hotels, make bookings and reservations from anywhere in the world. The "App" mobile in the hotel industry is a convenient system for users worldwide. There is currently limited literature on if customer reviews work in mobile hotel booking.

However, due to the prospective benefits, the hotel industry gains a lot from this mobile apps. There is also continual research in analysis and information concerning the advancements made and how these platforms can be tapped in order to enhance their marketing strategies.

When a traveller wants to book a hotel, he or she would look for plenty of customer reviews on the hotel profiles. In spite of the price, most of the best hotels will have plenty of customer reviews together with high scores.

Every hotel is aware that when it comes to travel plans, customers would opt for an easy way to access their services and make bookings or reservations. For this reason, stakeholders and hotel managers resolve to innovative ways that are convenient to customers when making their reviews. The hospitality industry is experiencing tremendous changes hence maintaining the high number of reservations can be devastating (Lu, 2015).

For sustainability and faster response to the increasing number of reservations from customers, a great number of hospitality service providers have come up with efficient ways to access their systems and do bookings without having to make a call to the hotel (Anuar, Musa and Khalid, 2013).

Numerous hotels have adopted the APP due to its numerous advantages in customer reviews such as if a traveller wants to make a reservation with a hotel that has a better rate or wants to check out a destination basing on the information found through the APP. Hotels such as Hilton Hotels, Hyat Hotels, Choice hotels and Intercontinental hotel have their customized

APP and are free of charge for downloading (Heller, 2011). These hotels are known to have made great developments in increasing their client base through adopting m-marketing (Mobile marketing), which benefits customers and businesses.

According to Kown, Bae and Blum (2013), in the hotel industry, almost 40 percent of leisure travellers look for travel information using smartphones, and approximately 25 percent of these customers make reservations via their smartphones. A study revealed that social media networks were frequently used by hotel industry for marketing purposes (Noone, McGuire, and Rohlfs, 2011).

This paper focuses on the different perspectives the international hotel industries have in order to reach their potential customers basing on APP's user experiences. These types of hotels heavily rely upon service as a medium of differentiating their hospitality from their competitors. It is therefore important for hotel managers to have an understanding of the needs of these guests and how they are utilizing the APP service. An analysis of three booking sites will be done to collect in depth information regarding customer reviews and mobile hotel booking.

Literature of Review

Introduction

The growth of mobile internet and the growing adoption of smartphones have had a tremendous impact on individuals' life, as well as the travel process (Lu, 2015). A great number of consumers are currently engaged in smartphones to access travel-related businesses. Moreover, mobile apps that are installed on smartphones provide excellent user-interface and service delivery, therefore various main brands such as the hotel industry have developed their own mobile apps in order to enhance customer experiences (Nysveen, Pedersen and Skard, 2015). The mobile channel makes its users to stay connected and informed all through their trips via mobile apps.

Mobile Hotel Booking

A well-established mobile hotel booking can lead to many customer reviews hence customer loyalty especially if the benefits are well designed by the hoteliers (Anuar, Khalid and Musa, 2014). Mobile phones with internet accessibility not only allows a customer to make a reservation but also access the location of the hotel and have a look at hotel reviews, that have been posted by the other consum-

ers as per their previous experience (Sparks and Browning, 2011). Mobile apps are therefore a good platform for global rating and hotel bookings. Ting and Hsu (2013) argue that hotels that develop these apps for the main purpose of creating a competitive advantage customize these applications in order to create a unique experience which results to positive customer reviews.

In recent times, mobile hotel booking technology has become predominant in Malaysia among luxury city hotels. Search for a 3-5 star Malaysian hotel that uses mobile hotel app via the search engine Yahoo showed a list of 27 hotels throughout the country.

Consequently, Choice Hotels international make use of an app that permits customers or guests to reserve rooms and also use their smartphone in locating their premises. According to Kirby (2009), within the mobile app, each of this individual property consists of its own page that displays pictures, room rates and amenities. On the same hand, Omni Hotels offers a mobile app that includes links to the industry's Facebook and Twitter, and also a login for loyalty programme guest page. In addition, Hilton currently offers mobile log-ins that permits a guest to go into the hotel and enter the room without having to stop at the front desk. Lombardi (2010) adds on that customers can order for room service from the road and wait for them upon arrival at the hotel. These options increase the number of customer reviews hence enhancing a hotel's reputation and increases its client's base.

Customers are increasingly using mobile apps to help meet their travel needs and find local attractions. Therefore, hotel industries are making use of location-based messaging to access potential customers (Lombard, 2010). According to a survey undertaken by PhoCusWright, (Craig, 2010), 67 percent of travellers made use of mobile device in order to locate local services.

Wang (2014) concluded that customers are more eager to participate in branding, online rating, product or service reviewing and interacting. To add on that, these consumers are influenced by social media which changes their emotions, and these changes may be connected to their friends, families, relatives, businesses as well as other APP users or online users when making decisions.

Customer Experience

Tseng, Qinhai and Su (1999) stated that when customers buy a service, they buy desirable experiences concurrently. For instance, a good hotel industry that provides better mobile hotel booking will have numerous customer reviews in experience. Experiences are usually formed in consumer's heads basing on their understanding of elements of service as well as interaction with the provider of the service in a given context. Schmitt (1999) proposed "strategic experiential modules (SEMs)" that consist of five dimensions of experiences elements which can be created for customers and regarded as experiential marketing perspectives by hotel service providers. They include: sense, feel, think and act and relate. Schmitt (1999) regards the sensory qualities of a mobile hotel booking to culminate to the sense experiences displayed by consumers, for instance, a hotel booking site that has a variety of hotel details makes it stand out from the rest since it displays the hotel as invigorating. This influences the buying behaviors made by consumers since they are able to decide on their preferences within the blink of an eye. The same author assumes that, feel experiences are evoked by the moods and emotions that are induced in consumers. In such an instance, customer loyalty is attained if consumers trust the brand of a service because it evokes positivity in them, such as being happy, at ease, pleased and confident (Delgado- Ballester and Munuera-Aleman 2009).

Think experiences are brought about by the imagination stimulated by the experience of the service. For instance, consumers can associate the service provided by the hotel with happy times, therefore, whenever they come across that mobile app, they only think about those happy incidences that happened in their lives (He and Huang, 2015). Act experiences stimulate the behavioural reactions that consumers display. For instance, consumers attest that they feel motivated to give positive reviews when they use particular mobile app for hotel booking. The relate experiences can be assumed to be the social context that is emulated from the use of a specific kind of service (He and Huang, 2015). For instance, there are hotel booking services that make consumers feel important, exclusive and high rated because they are associated with celebrities or are highly regarded in the society. Therefore, customers regulate their customer reviews behavior regarding a certain hotel based on these experiences. Marketers can thus predict the impact that mobile hotel services has on consumer behavior by measuring their hotel ex-

periences, for instance via questionnaires.

According to several studies including Macdonald and Sharp (2010), emotions play a profound role in influencing the buying behavior of consumers. Behavior of consumers towards customer reviews is influenced by the attitudes and norms of individuals, which drives their intentions towards choosing the brand of their preferences (Phau and Cheong 2009).

Customers categorize experiences that are pleasurable into four perspectives: social, sensory, emotional and intellectual (Dube and Le Bel, 2003). Furthermore, in the age of experiential marketing, in order to bring customer experience, functional service experience is a significant element. In addition, relational service has been argued to bring about customer experience for a longer period of time (Berry, 1995). Functional value is an experience which is generated from the service provided by specific features, such as features of a mobile app. Relational value is an experience that is generated from a service that aims to help companies lure, maintain and enhance relationships with customers.

Relevance of APP on Consumer Choice

Consumer behavior determines the choice consumers make regarding hotel services. It elaborates the interaction that exists between hotels and consumers (Ghauri & Cateora 2010). Kotler and Armstrong (2009) explain that, just like any other kind of behavior, consumer behavior can be conditioned, controlled and predicted. This is prudent as it enables hotel industries to enhance their marketing strategies. App marketing is one of the most commonly used marketing strategies to increase the scope of consumers, as well as maintaining market control. This is especially important in the current business environment, which is characterized by intense global competition, rapid technological advancements and an increased number of firms offering similar products and services.

According to a study conducted by Ching-Fu and Myagmarsuren (2011), APP's increases the ability of travellers to identify, recognize and recall a specific brand of product or service. Hotel reputation highly influences consumer choice on service to buy. It acts as a crucial cue in the retail environment because of its ability to guide consumers when making decisions. From a psychological perspective (using behavioral science to understand how the brain absorbs and

processes received information to make decisions). Hotel reputation lures the attention of consumers to make reservations thus enabling them to recognize and purchase familiar brands. This helps hotels to attain a competitive edge against their counterparts because they manage overwhelmingly to convince consumers to make more customer reviews and make reservations mobile App's. The hotels are able to influence the buying behavior of consumers to make different reservations and different hotel bookings (Rahman and Azhar 2010).

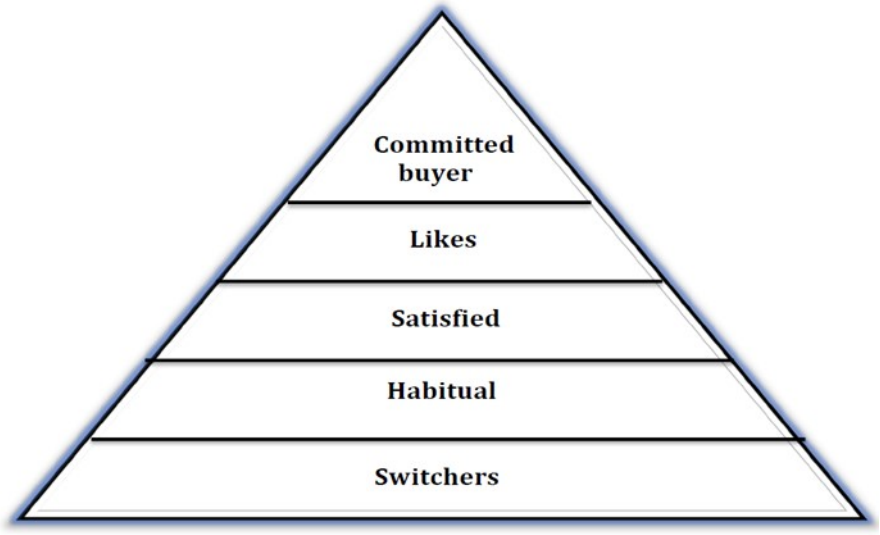
Im*pact of Customer Reviews in Mobile Hotel Booking*

Customer loyalty is the conscious and unconscious behavior of consumers continuously to repurchase the same product or service. Mobile hotel bookings play a profound role in increasing customer loyalty because it enables consumers to recognize a certain brand of product by increasing the reputation of that brand. As a result, the degree of consistency of preference and customer reviews towards the hotels' services increases.

Hotel details and booking process improves the subjective picture of services to influence the emotional needs of consumers when buying hedonic services. Mobile app plays with physiological and psychological feelings of consumers to drive their purchasing behaviors. As a result, mobile apps manage to lure continuous reviews of the same hotel service hence attain customer loyalty. Therefore, it is prudent for marketers to study the trend of customer reviews on certain hotels because this plays a profound role in customer loyalty and extension. Phau and Cheong (2009) perceive brand loyalty to be a product of the five elements of brand equity as illustrated.

Consumers that keep on changing their preference from one hotel booking site to another due to low costs are referred to as switchers and are at the bottom of the pyramid. Habitual buyers are those consumers that buy the same service. The author further groups consumers that are loyal to a particular service because it fulfills their demands as satisfied customers. They are placed at the center of the pyramid. At the top of the pyramid are committed buyers that highly trust and value a particular brand thus have a strong commitment towards that service. Immediately below this tier are consumers who are emotionally attached to a particular brand of product thereby making them loyal customers.

Figure 1. Brand loyalty pyramid adapted from Phau and Cheong (2009)



Methodology

Qualitative methods seek to acquire an in-depth understanding of the motives, opinions as well as underlying reasons relating to the issue being investigated. Qualitative methods provide data that is very rich in details hence provide more insight on the context and setting of the problem (Creswell, 2013). This study will entail customer reviews in mobile hotel booking. Customer reviews in terms of experiences were conducted basing on top three booking sites from customer feedback. The hotel booking sites include:
www.hotels.com,
www.hotwire.com and
www.booking.com.

In the context of mobile apps and experiential marketing age, customer reviews in mobile hotel booking will focus on experiences. Considering the context as well as the literature review, the research topic if customer reviews work in mobile hotel booking is a confirmed area of research. The topic of hotel booking with an app is also decided. During the current age of experiential marketing, hotel industries are searching for better and new ways to create value.

This study employed the use of review of existing data by looking at the customer reviews in experience. The sample is an online page consisting of customer reviews in experiences on best hotel booking services

http://www.reviews.com/travel-sites/hotels/. APP mobile plays an important role in mobile hotel booking and acts as a marketing tool in hotel industry. This study will rely on the principles and findings of previously conducted studies to develop the base of the study. This will ensure that valid content, which is enough and relevant to answer the research questions is used.

When making a reservation using an APP, customers are able to communicate with one another and share consumption experiences, thus the social value is developed. This includes tastes, values and preferences to others. Moreover, when customers get exposed to a real context, they start interacting with features of sensory experience, for instance, decoration of a hostel.

Findings

There are a few factors that are considered by a traveller when he or she is searching for the best hotel booking site. (http://www.reviews.com/travel-sites/hotels/). For example, when one has interest in traditional hotel, any travel site could help out. However, customers who are searching out for hostels, vacation rentals or other kinds of travel accommodations require a more specialized site. All kinds of properties accessible for reservation and various filter tools for narrowing down the outcomes and speeding up one's search are available in the best hotel booking sites.

Each of the hotel sites has its own approach of helping one save. The best one for a customer will rely on his or her travel habit/behavior. The three booking sites listed as follows are very different, nevertheless each of them can help a customer find low prices for hotels worldwide.

In order to confirm if customer reviews work in mobile hotel booking, the comments are used basing on (http://www.reviews.com/travel-sites/hotels/. The reviews for the 3 best hotel booking sites were conducted in terms of experiences of the customers in hotel industry.

According to the reviews, the most essential feature of a hotel booking site varies from trip to trip and an individual to an individual. A relatively low price was the overwhelming winner amongst the sites surveyed in 3 different queries from hotel booking services. From the reviews, it is also

Table 1. Customer Reviews and The 3 Best Hotel Booking sites

Category	Comments
Sorting Features (Price)	-Hotwire.com was the consistent hotel booking site. -Booking.com emerged averagely to have the highest booking prices. -Hotels.com has sizeable discounts and offers a customer enough to save, sometimes even up to 50 percent.
Hotel Details (Amenities, room and hotel images, hotel policies, maps, etc).	-Hotwire.com, Hotels.com and Booking.Com all emerged to be satisfactory in terms of hotel details.
Reservation Process	-All the 3 best booking sites have a booking a room online option. They do have a mobile app. -Hotels.com has loyalty programmes which are not common amongst the other sites. -Hotwire.com keeps the travel site one is booking a secret until he or she purchases it.
Booking Help (FAQ's, telephone and emails).	-All the three sites have FAQ's pages, telephone and email options in case one needs help in booking. -Hotels.com is the only site amongst the three the offers live chat which is a quicker way of communication.

found out that specific features and amenities also rank highly. Consequently, location, reputation, Wi-Fi and breakfast are highly considered in hotel choices. More so, the online reviews provided valuable information about a booking site in terms of rooms and what they exclusively offer. Irrespective of the price, it is noted that the best hotels will have plenty of reviews. To support these findings, Tseng, Qinhai and Su (1999, p.60) state that when customers buy a service, they buy desirable experiences concurrently. For instance, a good hotel industry that provides better mobile hotel booking will have numerous customer reviews in experience. Schmitt (1999) regards the sensory qualities of a mobile hotel booking to culminate to the sense experiences displayed by consum-

ers, for instance, a hotel booking site that has a variety of hotel details makes it stand out from the rest since it displays the hotel as invigorating. This influences the buying behaviours made by consumers since they are able to decide on their preferences within the blink of an eye.

According to the reviews, Booking.com ranks at the top and has been reported to have a very high degree of customer satisfaction with their service. The site has a variety of features of properties, for example, theme search, something that is uncommon with the other sites.

Hotels.com ranks second since it gives the customers the best sorting options that they have experienced. The site offers live chats and loyalty programmes which is a distinct feature that customers have reviewed. Experiences are usually formed in consumers' heads basing on their understanding of elements of service as well as interaction with the provider of the service in a given context. According to a study conducted by Ching-Fu and Myagmarsuren (2011), APP's increases the ability of travellers to identify, recognize and recall a specific brand of product or service. Comparatively, Choice Hotels international make use of an app that permits customers or guests to reserve rooms and also use their smartphone in locating their premises. According to Kirby (2009, p.42), within the mobile app, each of this individual property consists of its own page that displays pictures, room rates and amenities. On the same hand, Omni Hotels offers a mobile app that includes links to the industry's Facebook and Twitter, and also a login for loyalty programme guest page (Kirby).

Hotwire.com which comes third in the review emerges top in pricing. This is because, in every search that was conducted, Hotwire.com was characterized by a lower price compared to all other sites. This could be the reason as to why it does not offer loyalty program as Hotel.com does. In addition, the site does not save a guest's research searches, thus one is required to type in a new search each time he or she searches for a hotel within a specific city.

Conclusion

There are a number of limitations in this study which provides opportunities for further research. The findings gathered from the reviews of the top three booking sites may contain a few non-voluntary biases including careless, deviant, consistent responding, contamination of responses and acquiescence. This is, as a result, of consumers basing their answers on theories that they believe describe their purchase habit. This is mostly contributed by the desire of being consistent throughout their answers; original and not to waste a lot of time making reviews

On the same hand, the study may be curbed with social desirability bias. Voluntarily the respondents can provide false information so as to conform to expectations perceived by the society regarding hotel booking. For instance, very few frankly admit that they buy brands that are cheaper so as not to be viewed as a low-income earner. When a traveller wants to book a hotel, he or she

would look for plenty of customer reviews on the hotel profiles. In spite of the price, most of the best hotels will have plenty of customer reviews together with high scores. However, so as to overcome these hurdles the researcher may focus on utilizing the psychological processes that influence the decisions individuals make, for example in this case, in terms of ranking the sites. Also, the availability of inadequate time to conduct the research may have curbed the ability of the researcher to conduct a comprehensive research. This limitation will be overcome by formulation of a realistic timetable to cater for any unforeseen eventualities that may occur during the research process. This will enable the researcher to keep time and conduct a reliable study Yin (2009: p. 12).

The study reveals causal link between customer reviews in experiences and mobile hotel booking with an APP. It is important for scholars to have an understanding of the role technology plays in service delivery given the rise in technology applications (Meuter et al., 2003). The development of mobile APP increases social connection of customers hence increased social needs. Booking.com ranks at the top because it has been reported to have a very high degree of customer satisfaction with their service, in that the site has variety of features which satisfy the customer's social needs. The study shows that relational experience in an APP for hotel offer positive reviews on customer's social experience.

The implementation of mobile hotel booking is an effective online strategy for customers. On the same hand, once the booking hotels have adopted the mobile APP system, they are required to put into consideration the issue of reducing the prices like Hotwire.com which is a sorting feature according to the reviews.

Further research should be conducted to analyze the change in customer reviews due in mobile hotel booking and how these have had an impact on hotel service delivery.

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INTEGRATING CREATIVE PLAY IN PRESCHOOL PRESERVICE TEACHER EDUCATION: ORCHESTRATING AESTHETIC INQUIRY FOR YOUNG CHILDREN

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There has been a growing awareness of the contribution of aesthetics to the pedagogical experience of young children. Aesthetics along with children's play design generated implicit and explicit messages that impact children's creativity. While discrete elements of creative thinking curriculum can be taught by educators, this study discusses ways we might begin to help pre-service teachers apply creative thinking lens to early learning play curriculum using an aesthetic-informed framework to critique creative play purposed for preservice teachers' progress for realizing designing children's play and their viewpoints for teaching. Given the nature of action research method, this study exerts observation, document analysis, and in-depth interview to collect and analyze data, and obtains the following conclusions:
(1). Creative thinking model for designing children's play within aesthetic area benefits pre-service teachers in the following aspects: 1. Pre-service teachers can thereby realize the benefit of creative play on teaching in aesthetic area; 2. Pre-service teachers can learn how to employ creative thinking strategies within aesthetic area play and realize self-concept in teaching; 3. Pre-service teachers learn to relate children's living experiences as well as physical and mental development with curriculum design.

(2). The difficulty for pre-service teachers before class lies in the unity and integrity of play curriculum; the one in class lies in how to provide children clear rules and classroom order management.
(3). The creative thinking that pre-service teachers exert more often are excitation, association method, 6W Review, checklist technique, defect enumeration, and wish point listing method; 4. The creative thinking skills that pre-service teachers need teachers' guidance are habit change method, attribute enumeration method,

Keywords: The Aesthetic Area; Children's Play; Creativity; Creative Thinking Teaching; Pre-Service Teachers

Introduction

In the previous years, Taiwan drew upon educational reform's trend, cultural policy drawing up, business's standard of personnel recruiting, and posited that "aesthetic ability" and "creativity" have gradually become indicative concern (Abbs, 2012; Apps & McDonald, 2012; Lieberman, 2014, Mayesky, 2014; Vecchi, 2010). Educational theories take a similar position, noting that aesthetic education can gradually cultivate whole child development, including exploration, observation, imagination, expressing, and operation capability, substantially impacting children's positive personality, intelligence, and function as the foundation of holistic education (Campbell & Scotellaro, 2009; Eckhoff, 2011; Samuelsson et al, 2013; Sherwood & Reifel, 2010). Rather than simply a tool for organizing and beautifying children's development, the European countries famous for high overall aesthetic quality of the citizens all include art education into formal education curriculum. Similarly, in January, 2001, United States Department of Education declared for the first time that all elementary and high schools in U.S. must provide art curriculums, because it is equally important as other disciplines.

In Taiwan, the Education Special Edition of Common Wealth Magazine in 2001 explored aesthetic learning can be a point of entry into how the creativity are activated, engaged with and embodied. Further, children's creative play in concert with aesthetics generates implicit and explicit messages that contribute to the process of teaching and learning (Runco & Acar, 2012; Yurt & Cevher-Kalburan, 2011). Early childhood environments are dynamic, continually being re-contextualized by the teachers, children and curriculum in which they are occupied.

Even well-intentioned design become reconfigured for children's creativity within their play (Davies et al, 2013; Honey & Kanter, 2013), and in which the aesthetics originate. Especially for Taiwan preschools implement the "Curriculum Outlines for Preschool Care-taking Activities", it was understood that alternate frameworks may be constructed using children's creativity, and that meaningful pedagogy in early learning classrooms in similarly dependent upon the teacher-student relationships, inspiration and engagement through aesthetic construction within children's play, and there exist other positions from which to cultivate children's Six Abilities through integrating all areas, among them, the learning dimension in aesthetic area refers to affection and art media.

To deepen this, in Taiwan Grade 1-9 Curriculum, single-discipline teaching has been replaced by domain teaching, among which "art and humanity" domain includes artwork, music, and performance art. Using the lens of cultivating sense of aesthetics and appreciation ability is considered in light of the possibilities to link creative play and children's whole development, to both yield greater engagement and a more sophisticated pedagogical aesthetic, especially to have our children keep in touch with aesthetics and creative play since childhood (Johnson et al, 2013; Rogers, 2010; McClure, 2011).

In early childhood education, aesthetic teaching wasn't inclined to single art work products but to see aesthetics and free play as an activating agent in teaching and learning (Vecchi, 2010). With abdunt research (Cropley & Cropley, 2011; Saracho, 2012; Wallerstedt & Pramling, 2012) supportive of aesthetic activities have long been integrated into the creative pedagogy of Western preschools, Pramling Samuelsson (2011) posited that "The preschool should strive to ensure that each child develop their ability to convey impressions, thoughts, and experiences in many different forms of expressions, such as play, pictures, songs and music, dance and drama, and aesthetics is considered to be a subject and content in itself (p.8).

However, in Taiwan, research show that preschool teachers and parents often related aesthetics to methods and not to content such as something children should learn. Also, preschool in Taiwan seldom mentioned children's play as teaching strategy in aesthetic area (Chien & Hui, 2010; Eckhoff, 2011; Lee & Kemple, 2014; Yeh etal, 2011), and both the content and play activities are rarely seen in high-

grade text-books or manual in aesthetic area. This article aims to employ more diversified aesthetic teaching methods within play to excite pre-service teachers' teaching, including basic induction strategy, concept mapping teaching, discussion method (such as brainstorming, seminars, and discussion), role play, situational model teaching, multiple intelligence teaching, cooperative learning, thinking method training, ethnic culture teaching, case study, drama teaching, teaching that challenges group prejudice, issues-centered approach, oral history teaching, and story connection exploration strategy (Brinkman, 2010; Ewing & Gibson, 2015; Gibson, 2010; Tan, 2009).

The questions investigated in the study were to introduce art and aesthetics into the educational system by integrating teacher's education curriculum with creative thinking strategies. That is, to help pre-service teachers and children to proceed integrative curriculum, on one side, subject extension teaching method can be exerted to develop children play's teaching activities in aesthetic area as reference for preschool educators in aesthetics teaching. On the other side, through action study on creative thinking strategy, the author tries to assist pre- service teachers to design play curriculum, and further discuss their creativity development process and ideas in terms of play design in aesthetic area. The purposes of this research is as described below: 1. To help pre-service teachers to design play teaching through creativity's action study strategy. 2. To understand pre-service teachers' process of and difficulty in play curriculum design in aesthetic area. 3. To analyze pre-service teachers' viewpoints of play curriculum design in aesthetic area through creative thinking strategy.

Literature Discussion

Research Related To Creativity Teaching

In recent years, methods of raising children's creativity have aroused discussion and concern from all sides (Bolden et al, 2010; Brinkman, 2010; Ewing & Gibson, 2015; Tan, 2009;); there are many creative play which are integrated with aesthetics can certainly enhance students' learning motivation (Carton & Allen, 2007; Garvis & Pendergast, 2011). From this perspective, the research intends to help preschool pre-service teachers combine theory with practice to investigate the following thoughts. What is the function of play for teaching, what is literature related to raising pre-service teachers' creativity and creativ-

ity teaching, and what does it enlightened in this study? To answer the questions above, our literature discussion focuses on three subjects: 1. Relative research on play curriculum. 2. The current strategies pre-service teachers' employ into creativity teaching. 3. The strategies and studies related to creativity teaching.

Black & Browning(2011) made a study of the functions of the adults' applying children's play for teaching, and the results show that the standard of functions needs to meet children's interest to explore, play and have fun within; for play can raise learning motivation, sense of achievement, dignity, and modify their learning attitudes (Sherwood & Reifel, 2010; Rogers, 2010); and play can enhance children's language and cognition skills, and practice to play their social role (Johnson et al, 2013). Besides, play is helpful for children to generate pleasant emotions, elevate learning motivation, change their learning attitudes, and reduce their learning anxiety. Moreover, aesthetics education plays an extremely crucial role in preschool children's development as well as creative thinking (Chan, 2011). But, while the author searched for the domestic periodicals and thesis, the results showed that pre-service teachers' topics of creativity mostly highlight math (Bolden et al, 2010), science (Sadat et al, 2012), and multimedia technology (Black & Browning, 2011), and the subjects mainly focus on elementary school children or older ones. It often stress on children's reaction to learning, but scarcely focus on pre-service teachers' designing preschool children's play and aesthetics in teaching (Kim, 2011).

Thus, in this study, aesthetic area was exerted as the range of creativity development, wherein people can be further aware the process of pre- service teachers' designing play for teaching in aesthetic area. In terms of the current condition of and strategies for pre-service teachers' bringing teaching creativity to a play, the range of creative thinking cannot be ignored when it comes to design of play for teaching. Under such premise, research relative to the current condition of and strategies for pre-service teachers' bringing teaching creativity to a play were consulted by the researcher in order to draw up action strategies. With axis of aesthetic area, pre-service teachers' process of design children's creative play and their self-growth was further recognized.

Research (Graziano & Nanarrete, 2012; Howell, 2012; Romlevoch, 2009) has indicated that pre-service

teachers can not only recognize the importance of creativity in the disciplines, but also expect to carry out their teaching value with the method of creativity and construction. Unfortunately, nowadays, other studies also point out the insufficiency of pre-service teachers' performance on ability of creativity. According to Bolden et.al. (2010) analytical results, pre-service elementary school teachers have poor concept of creativity, get restricted by the resources and tools in the past, and concern teaching creatively more than teaching for creativity. Also, Bolden et al (2010) reveal that pre-service teachers are facing the following difficulties: 1. Restricted to use semi- finished- product resources and tools; 2. Concerning outcomes of creativity more than guiding children to develop creativity; 3. Not give children enough time to observe what is beautiful in life; 4. Insufficient chances for children to bring creativity to a play; 5. Not knowing how to encourage and evaluate children's creativity.

Suggestions related to raising pre-service teachers' creativity and creativity teaching

In addition to the aforementioned studies on pre-service teachers' performance of creativity, there are also many scholars proposing suggestions to raise pre-service teachers' ability of creativity teaching, expecting to resolve their difficulties with those methods, as listed below: 1. Ko & Chou (2014) mentioned that teacher's education institutes should help pre-service teachers with creative thinking action strategy to design play for teaching in the aesthetic area, strengthen their creative thinking and meta-cognitive abilities for teaching. 2.Elevate pre-service teachers' creativity through teacher-student interaction and interaction with peers as well as experts. In Newton's (2009) research results, it is further recommended that enhancement of creativity for pre-service teachers is done through teacher-student interaction and interaction with experts to raise their creative thinking concept and retrospective ability. As Tillander (2011) pointed out, through interaction with the experts, such as discussion, implementation, and instruction, the intern teachers can proceed creative thinking and co- construction from multiple sides. Sadat etal (2012) mentioned that the learner's interpretation of his/her own work to others, and communication of his/her own creative ideas with others are both reaction and behaviors of creativity, which is also the outcomes of teacher-student interaction and interaction with the experts. To sum up, creativity enhancement relies on process orienta-

tion methods, such as the educator's guidance and teacher-student interaction (Newton, 2009), interaction with the experts (Garvis & Pendergast, 2011), and peer interaction as well as inter-inspiration (Chan, 2011). As a result, the author adopted action strategy and interaction process orientation for pre-service teachers to exert creative thinking strategy and proceed teaching design in the process of design play for teaching. 3. In pre-service training stage, chances and assignment for pre-service teachers to conduct creative criticism and retrospection should be provided. Gibson (2010) indicated that the university professors merely put an emphasize on discussion on theories of creativity, but seldom take practical action to raise pre- service teachers' creativity. He claimed that innovative curriculum, plays, teaching materials, or assignment should be offered to challenge or stimulate pre-service teachers' creativity and thinking ability. To synthesize the present condition of pre-service teachers' teaching creativity development, and literature discussion on strategies, the research generalized that strategies to cultivate pre-service teachers' creativity involve the following 5 points: 1. Teaching pre-service teachers creative thinking strategies; 2. To cultivate pre-service teachers' creativity through teacher-student interaction, peer interaction, and interaction with experts; 3. To value pre-service teachers' orientation training of critical thinking ability, provide challengeable activities to raise pre-service teachers' creativity, and establish the correct value of creativity.

Teaching Strategies for Creativity and the Relative Research

The purpose of implementing creative thinking teaching is to develop students to have creative thinking, attitudes, and ability, while the emphasis is that, after the educator comprehend the concept of creative thinking, how does he/she utilize effective teaching strategies and activity design to provide opportunities for the students to exert their imagination so as to cultivate students' smooth, flexible, innovative, and sophisticated thinking. In terms of the educator, he/she can enjoy pleasure, fulfillment, and achievement in active teaching. Just as Williams (1986) proposed the 3D "Cognitive-Affective Interaction Model" for the educators employ strategies to trigger creative thinking through the content of curriculum. This teaching model that can enhance students' creative behaviors includes three dimensions; that is, the curriculum, teaching approaches, and students' behaviors.

The 1st Dimension- Curriculum: Including teaching each discipline like language, Math, natural science, social science, art, and etc.

The 2nd Dimension—Teaching Approaches: Including 18 teaching strategies 1. Paradox; 2. Attribute Listing; 3. Analogy; 4. Discrepancy; 5. Provocative Question; 6. Examples of change; 7. Examples of habit; 8. Organized random search; 9. Skills of search; 10. Tolerance for ambiguity; 11. Intuitive expression; 12. Adjustment to development; 13. Study creative process; 14. Evaluation on situations; 15. Creative reading skills; 16. Creative listening skills; 17. Creative writing skills; 18. Visualization skills.

The 3rd Dimension—Student Behaviors: Including two parts: cognition and affection. A. Cognition Part—1. Fluency; 2. Flexibility; 3. Originality; 4. Elaboration. B. Affection Part—1.Curiosity; 2. Imagination; 3. Risk Taking; and 4. Complexity. On the basis of Guilford's Structure of Intelligence Theory, the scholar Chen Longen (2000) also generalized each kind of creative thinking strategy into divergent thinking and convergent thinking. 1. Divergent thinking includes (1) brainstorming; (2) Synectics; (3) Association; (4)Word divergence association training: Aiming at the students' individual difference to inspire their methods of thinking (5) Term divergence association training; (6) Method of dream; (7) Sensitivity activities; (8) William's creative thinking strategies; (9) Wiles & Bondi's Creative Thinking Teaching Strategies

2. Convergent thinking includes: (1) attribute enumeration method; (2). defect enumeration; (3). wish point listing method ; (4). Elimination method; (5). Hot spot method; (6). Pattern analysis method; (7). Catalog technique method; (8). checklist technique method; (9). 6W Review method; (10). Word divergence association training; (11). Term divergence association training; (12).classification; (13). Example method; (14). Data modification method; (15) tips for invention; (16). forced relationships; (17). William's creative thinking strategies; (18). Wiles & Bondi's Creative Thinking Teaching Strategies; (19). Creative problem solution method.

In this study, through the above-mentioned literature discussion, the author has adopted totally 13 types of creative thinking strategies to function as the vital principles and procedures in her teaching and guiding students, and the concrete content will be explained in detail in Research Methods and Procedures in Chapter 3. In the

aforementioned creativity teaching, an experiment based on William's (1986) creative thinking strategies indicated that creative thinking strategies have significantly positive influence on students' fluency and originality, but insignificant influence on their flexibility and elaboration. Additionally, Chen (2006) drew up a set of creative thinking teaching program for children's development of language through "Three- phase model for creative thinking teaching". The research results reveal that in terms of the creativity's score for "Fluency", "Flexibility", "Originality", and "Elaboration", the Experiment Group performed significantly better than the Control Group. And, in the light of the basic learning abilities like "Reading Preparation Ability", "Conceptualized Reading Ability", and "Writing Ability", the Experiment Group performed significantly better than the Control Group as well. As for Eggen & Kauchak (2011) attribute enumeration method and 6W Review method were employed in his research on creative thinking, and it is found in the results that Grade 6, 7, 8 students and pre-service teachers held positive viewpoints of the creative thinking strategies. Later, Smogorzewska (2012) exerted pyramid of association and story line to conduct his research, and found that both creation outcomes were quite original, while the creation outcomes done by group cooperation were better than what are done individually. However, since the students cooperated with strangers for their creative work, it might restrict their outcomes of creation. From the studies above, it can be found that combination of divergent thinking and convergent thinking strategies is helpful for the students' creative skills. Likewise, William's creative thinking strategies, synectics, association method, and attribute enumeration method all enhanced students' development of creativity, so divergent and convergent creative thinking methods were both applied inn this study.

Research Methods and Procedures

Research Methods

This study adopted action strategies to help students design play for teaching, so that theory and practice can be integrated. Then, participant observation, document analysis (meeting record analysis and retrospection journal), and in-depth interviews were also used. In the process of pre-service teachers' creation and exploration, the researcher realized the pre-service teachers' creating process and transformation through observation and interaction. The author wrote observation journal, and proceeded semi-

structure interviews after the pre-service teachers' creation. Since the researcher was also the researcher, in each interaction and discussion with pre-service teachers, she used creative thinking strategies to inspire their imagination and creativity, and made feedbacks for their creation to further culminate.

Research Subject and Range

The subject in this study were pre-service teachers in the author's class in the preschool, all had taken Introduction to Aesthetic Area. Totally 45 teachers were divided into 9 groups. In the beginning of teaching, the author had pre-service teachers have certain degree of understanding of teaching strategies in aesthetic area by means of instruction, report, and discussion, and then conducted two weeks' teaching of creative thinking strategies. The action research lasted from March to the end of June in 2016.

This study applied action research, adopted qualitative research methods such as observation, interviews, and document analysis to collect data, and made self-introspection critically and periodically to remind herself of taking a neural position. Before pre-service teachers enter the preschool for pilot teaching, other pre-service teachers were recruited as the game players for trial of teaching in order to ensure the play's feasibility.

The creative thinking action strategies in this study are described below.

1. Excitation: The author taught pre-service teachers to exert brainstorming for idea collection, seek for a new meaning of each issue and item, arouse the motivation of knowledge exploration, and explore and discover new knowledge.

2. Synectics method: To introduce familiar things and make them novel (from connection to separation), or to make novel things become familiar for others (from separation to integration).

3. Association: To enable pre-service teachers to proceed association by contiguity, association by similarity, association by contrast, and free association. such as pen + translation machine= translation pen.

4. 6W Review method: Through 6W Review method, to have pre-service teachers think of feasibility and reasonability of the play they had designed from six angles, and find out the shortages of the play.

5. **Attribute enumeration**: Initiated by Crowford (1954), to list the physical item's structure, properties and characteristics, and examine how to improve each characteristic.

6. Defect enumeration: Every time when pre-service teachers share their creative work's draft, the author would guide them to find the weakness of the work and figure out the proper solution. This method should also be applied to each discussion with pre-service teachers.

7. Wish point listing: The author encouraged the students to list their wishes without considering the feasibility, led them to discuss the distance between imagination and reality step by step, and finally figured out a feasible approach to carry out their wishes.

8. Check-list: Introduce how to use this technique by listing the problem analysis and directions for change.

9. Example method: when the whole group was stuck in an extreme difficulty, the author would timely provided some plays, serving as reference example to trigger the students' inspiration.

10. Reorganization: By means of reorganizing the framework, another systematic method can be formed and thereby propose new teaching activities.

Curriculum design and implementation

The design flowchart and implementation method of the curriculum is proceeded with "Cognition-Affection Interaction Model", which is described as below.

Williams once said that the teaching goal is like the destination of a trip, the curriculum goal is like transportation tools, and teaching strategy is like the route. When the teaching goal is confirmed, effective teaching strategies can be practiced through each teaching discipline. Among the three elements, what the educator can control most and what makes the biggest difference from other teachers is exertion of the teaching strategy. From Gilford's SOI theoretical model, it is learned that human's intellect is composed by 180 different abilities composed by interaction among content, operation, and result. The content includes visual, auditory, symbolic, semantic, and behavioral dimensions. Operation refers to the method of thinking when the individual processes data, and also the main process of our intellectual activity, each kind of ability exerted to solve various kinds of problems. As for the result, it is when the individual

employs various kinds of thinking abilities to a variety of contents, the forms of organizations it presents, including units, classes, relations, systems, transformations, and implications.

To apply action strategy that create thinking to help pre-service teachers deign play in the aesthetic area, the researcher gave them time for free association. When pre-service teachers encountered difficulty, the author also had them propose questions, discuss, and communicate to help them confirm the difficulty in thinking and seek for creativity. Through learning from doing, pre-service teachers search to solve problems in the design activities and take actions.

Data Collection and Analysis

Data collection includes (1). The researchers' observation and retrospection journal; (2).Dialogue between the educator and the pre-service teachers; (3). Document collection; (4). Seminar and content of the interview.

Data analysis and coding includes (1). Type the interview content into transcripts and conduct open coding, axial coding, and selective coding for interview content's classification and analysis; (2). Analysis of teacher's observation and retrospection

Research Limitations

In this qualitative research, the subject are restricted to the pre-service teachers in the author's school, the elicited conclusions can only be applied to the similar situations. In addition, this study mainly focused on the pre-service teachers' creative thinking in the aesthetic area, not on children's feelings for the plays.

Research Results and Discussion

The research results are described from three perspectives as follows.

1. T*he Pre-service Teachers.*

In regard of the content of play for teaching in the aesthetic area, in the action strategies, each group of students proceeded design of play for teaching in the aesthetic area. What follows enumerates three designs' content on the basis of *Aesthetics Exploration and Awareness, Design Performance,* and *Feedback to appreciation and analysis*, while creativity focuses on *Fluency, Flexibility, Originality,* and *Elaboration*

	Questions - Examples	Creative Thinking Strategies
1.	Which subject do you want to teach in the aesthetic area, and what effect or the advantage do you expect to obtain?	Wish point listing method
2.	What can you integrate teaching with plays? What can be used as play for teaching?	Brainstorming
3.	What are other changes in those plays? How do you use them to make students feel amazed?	Synectics; Association
4.	What is the teaching goal after connecting the play with teaching?	Wish point listing method
5.	Which plays are fun? Why? Can they be used in teaching?	Association; Synectics
6.	What characteristics or attributes of those plays that can be changed?	Attribute enumeration method
7.	What are the characteristics of the designed play? Is it different from the play for teaching in the past?	Habit change method
8.	How do you proceed these plays? What do you have to pay attention to in the process (steps and rules)?	6W Review Method
9.	Are the order to proceed the plays the same as you have designed? Can they be re-organized? Or are there other possibilities?	Re-organization method
10	In the designed plays, are there unnecessary steps or elements?	Defect enumeration method
11	Are the rules for play clear? How about the comprehensibility? What do you have to supplement?	Attribute enumeration method; 6W Review Method
12	How is coherence of the designs designed by you? Is there paradox between the plays? Do you have to make adjustment or re-organization?	Re-organization method; elimination ,method
13	What are the advantages and disadvantages of the designed play? After on-site teaching in the classroom in the elementary school, what are required to make adjustment? How to modify it?	Defect enumeration method

1. Super Pig: This play mainly targets at little dirty pig board game. At first, by means of finger rhymes, picture books, and group plays, the pre-service teachers guide children to understand the rules of the board game, and further explained, modeled, and practiced personally for the children to have an idea of the logic relationship of building a house, locking the door, and assembling lightening conductor. Finally, in “Little Farmer” play, they allowed the students to proceed role play on the farm.

2. Return to the past Since the resources on earth have been destroyed, creatures on earth decided to co-invent time machine to rescue the ecology and resources on earth. The pre- training before setting up was to have the children play different roles (level of team member, level of section leader, and level of the captain), and allow them to say ecological crisis on earth.

In the 2nd stage, children could select different tasks from the mystery box to solve the problems of water, air, and noise pollution. Once the task was completed, the children could win a time machine chip. In the 3rd stage, creativity development, loose materials were collected to make beautiful works like the animals and plants in each ecological system, the climate, and protection of ecology.

3. It is so good to be different: The design of this play followed the axis of respecting diversified cultures. In addition to introduce related picture books, plays were even exerted to guide the children to know the aboriginal people, Southeastern Asian culture, the featured food, clothes, or festivals to make picture cards. (1). Memory card for aboriginal culture: Within specific time duration, the group that flipped the most number of the same cards won. (2). Bingo for Southeastern Asian culture: the group that link three lines won. (3). By little stories, the educator taught the children know Buddhism, Taoism, Islam, Christianity, and Catholics. Then, children were taught to collect the treasure map's chips to make the puzzle.

In conclusion, the teaching action was also the process of pre-service teachers' re-defining creative plays for teaching. Teaching in the aesthetic area can be proceeded not only by recounting, story-telling, surveys, chart making, and etc., but also through plays to put into practice the diversity of teaching that values children's need.

2. *Process of pre-service teachers' design plays for teaching in the aesthetic area.*

At the beginning of this study, pre-service teachers were very excited in creative teaching activity design. But when they started to communicate and discuss, and to compose teaching projects, they started to hold divergent ideas. In discussion, they modified ir removed the previous ideas, and kept on seeking solutions.

Frustration and difficulties that pre-service teachers encountered in the design process include: 1. Difficulty in time coordination, in which complies with Yeh et al (2011); 2. Difficulty in

getting inspiration, in which complies with Tan (2009); 3. Team cooperation could contribute to creativity development, and it was also hindered by opinion integration, in which complies with Lee & Kemple (2014); 4. Insufficient coherence for each little game; 5. Easy to ignore balance between teaching and play; 6. Elaboration of play manual composition, the coherence of plays in the holistic play, and how to enrich plays with teaching implications; 7. After micro-teaching, pre-service teachers conducted modification and adjustment of the plays designed by themselves to enhance the comprehensibility; 8. Over-complex play rules could not be absorbed by the children in a short time, and time that spent was often more than what was pre-evaluated; 9. Difficulties in play time arrangement and play order maintenance

3. *Pre-service teachers' application to and self-fulfillment of creative thinking skills*

1. The creative thinking skills used by pre-service teachers were excitation, association, attribute elimination method, 6W review method, checklist technique, defect enumeration, and wish point listing. Regarding pre-service teachers' application of creative thinking skills, what they were more familiar with were excitation, association, and wish point listing, while concerning the frequency of use, excitation, association, and wish point listing were exerted the most frequently at first. In the process of gradual play formation and pre-service teachers' discussion with the author, elimination method was gradually used to delete immature or less mature or less sound creativity, while in regulating play flow and play manual, 6W review method and defect enumeration method were exerted more frequently.

As for re-organization method, pre-service teachers often applied it to modify the play flow (order of each stage) and play manual (play instruction). 2. The creative thinking skills that required pre-service teachers to be prompted by the instructor include: habit change method, attribute enumeration, and synectics. Besides, most pre-service teachers expressed that they considered to use synectics less often; rather, they used the "metaphor" and "analogy" skills more often. When pre-service teachers designed the initial draft with creative thinking skill, they tended to be confined to the existing habits, and exerted plays they were used to for creation proceeding, such as Bingo, random pairing, and etc., since they could not find out new elements or new play methods. At this point, it is consistent with what was

proposed by Bolden et al (2010) in their research that pre-service teachers in the elementary school have weak concept of creativity, and are confined to the resources and tools used in the past. It also complies with Graziano & Navarrete (2012) finding that the pre-service teachers may sense their weaker ability, so they tend to get stuck in creativity development.

Conclusions and Suggestions

In this study, the process of designing plays in the aesthetic area benefits pre-service teachers in the following aspects: 1. pre-service teachers can understand play's potential in teaching, and experience utilization of ways differing from the traditional teaching methods. 2. Employment of creative thinking action strategies can help pre-service teachers to enhance their creativity, teaching faith, self-expectation, and sense of satisfaction in terms of self-fulfillments. 3. Pre-service teachers are aware of the need of taking into consideration the children's demand and physical and mental development.

Further, the suggestions related to teaching and the subsequent research are as follows.

Play curriculum design: (1). The teaching material teaching method for preschool teacher's education should allow the pre-service teachers to experience the process of play design to raise their learning motivation as well as interest, elevate their learning attitudes, and enhance teacher-student affection. (2). The teacher's education institutes had better increase formal curriculum regarding creative thinking skill training to assist pre-service teachers to take teaching design. (3). Since pre-service teachers are less familiar with habit change method, attribute enumeration method, synectics, it is suggested that in the independently creative thinking curriculum, more training can be provided to pre-service teachers for proceeding teaching design through the aforementioned strategies in a diversity of courses. (4). Attention should be paid to coherence and integrity among the plays, whether the play rules are clear enough, how to resort to the play rules to maintain classroom order and play time evaluation. By means of peer evaluation, micro-teaching, and other methods, the instructor can have pre- service teachers review and adjust the teaching activity designed by themselves.

For the subsequent studies, it is recommended that such research can be extended to exploration of aware-

ness of children's learning achievement in plays in the aesthetic area. On the other side, the relative studies following this paper can employ experiments in the teacher's class, so that different research results can be extracted.

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