

## A Case Study of Innovation of the Versatile Hat

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(Received 9 March 2014; final version received 8 December 2014)

### Abstract

Nowadays, we live in an era of rapidly changing trend of fashion. We expect to keep consumers from overspending and being awkward to storage and maintenance of hats. Therefore, “convenience” and “economy” are our main theme of this innovation. The principles of this innovation are to save storage space, reduce spending, and have storage easier. The Versatile Hat comprises the crown of the hat and at least one brim. There are three types of attaching parts at the bottom of the crown, namely buttons, Velcro, and studs; additionally, corresponding attaching parts are at the bottom of the brim so as to incorporate the brim into the crown. This ingenious design can create multi-pattern hats simply by attaching the same crown into different brims; these replaceable brims make the Versatile Hat a snap-on product. That is to say, one Versatile Hat provides many different patterns of hat to match various clothing and different occasions. For storage space, users need only one small space to lie just one crown of the hat rather than several crowns. This creative design can meet modern people’s demand perfectly by providing multi-pattern hats without overspending and also reducing storage space.

*Keywords:* Versatile Hats, Patent, Innovation.

### 1. Introduction

Nowadays, we live in the highly competitive twenty-first century. Enhancing competitiveness is of vital importance if the products are expected to gain a foothold in the market. Therefore, “creativity” and “innovation” are two essential elements for the products. In the background of rapidly changing trend of fashion, hats are no longer only the aristocracy’s accessories for important occasions. On the contrary, hats are now one of the popular accessories in most people’s daily life; it is now in widespread use by people of all ages. This innovation is to provide consumers a superior hat product other than the current conventional hats in the market.

Hats are very common accessories for nowadays people when they attend any social occasions; it is used mainly in fashion trend and clothes matching. As different clothes are required to fit in with different occasions or sports activities, the hats need to correspondingly match the garment. In the current market, there is a great diversity of hat products for users’ options to meet different occasions. Most users usually own numerous hats to match their different clothes styles, such as basketball cap, round hat, and beanie. Hats lovers all understand to store a hat properly is to

have the hat lay in storage space by keeping the crown from being squashed. Improper storage of the hats will result in the distortion of hat shapes.

Hats are traditionally assumed to be the garment for our heads. Most of the hat products in the market are able to cover the entire top of our heads, the main function is to protect our heads. However, hats can be also a part of our apparel besides above basic function. According to different cultures, the etiquette of wearing a hat is also different. Hats are more significant in western culture because wearing a hat was one type of status symbol in old-time culture; it signified a certain status and image. Different styles of hat or different ways of wearing a hat could have different signification in old-time western culture.

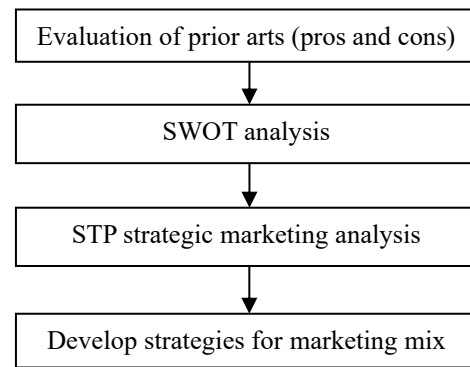
Therefore, the hat products in the market provide different function by its different designs of brims. For instance, the peaked cap and the sun hat are with bigger brim to protect our heads and eyes from the sun; they are particularly suitable for sports activities. The lady hats with wavy brim are suitable to match the dress. The hats made of hard plastic material are mainly used in construction site. Spontaneously, most people usually own various different hats for different functions in daily life. This results in problems of space occupying and

awkward maintenance of hats, and it usually costs users a considerable sum of money to own numerous hats.

There is a wide diversity of hat products in current market. People usually need to purchase various styles of hats to match their assorted garments and fit in with different occasions. The storage of numerous hats at home usually occupies space; furthermore, improper storage might have hats covered with dust easily. Besides inconvenient storage, if the hat is purchased for single-use purpose, it is not only unfavorable to the environmentally-friendly consciousness but also unfavorable to the principle of economy. Especially in such period of economic downturn, price is usually the first priority for consumers' purchase plans. The current hat products in the market are not only single function but also expensive.

Most hats are with the edge sticking out or even sloping downward, which is called the brim of a hat or the peak of a cap. The function of brim is to protect our heads and eyes from the sun; moreover, it can be used to protect the hair style, to hide the bald patch, to match the garment, and to be part of team uniform or religious clothing. There is a wide category of hat products. To classify hats by practical applications, there are full-face and open-face helmets for motorbike riders; sun hats for anyone who needs to protect their heads from the sun; dust helmets or safety helmets or construction helmets for workers in the workplace. To classify hats by particular users, there are cowboy hats, sailor hats, army caps, police hats...etc. for different professions. To classify hats by patterns, there are berets, peaked caps, scarf hats, skullcaps, lady hats...etc. There is a great variety of hats in both categories and materials.

Due to the inconvenience of the hat products in the current market, this innovation is to improve the structure of the current hat products and remove the disadvantages by creative design with our practical experience of producing hats samples. The Versatile Hat is designed to solve the problems of current hat products such as single function, expensive price, space occupying, inconvenient storage, and awkward maintenance. Therefore, this innovation is with benefits of changeable patterns, cost effective, convenient storage, and space efficient. By the combinations of the crown and the various designs of brims to turn into multi-functional hats so as to conform to the purposes of practicality, convenience, and economy. Therefore, the paper shows how to design versatile hats and develop strategies for marketing issues. The research flowchart is shown in Fig. 1.



**Fig. 1** Research flowchart.

## 2. Literature review

Hats are generally used to protect our heads and eyes from the sun in our daily life. In addition, it is even more frequent to be used to match garments of all kinds. Many people have experiences of looking at the shop windows full of a great variety of hat products but unable to purchase numerous types you like due to limited budget. For this reason, the inventor is expecting to provide an innovative hat which brings greater satisfaction to consumers. That is to say, consumers will own several patterns of hats by just purchasing one hat at a time instead of purchasing several single-pattern hats. This innovation, the Versatile Hat, with changeable patterns, will fulfill people's needs in owning multipattern hats without overspending no matter the users are adults, children, male, or female.

### 2.1 The basic of innovation

Design for daily-life products is usually created and developed according to the market demand. Most of daily-life products generally look special in the appearances; even for some products, people are not able to realize its function at the first look. The fun and creativity of product design not only bring the pleasure and entertainment to our life but also enhance our commoditization. A good product design is able to enhance life quality for people. Although the product design might be only a small part of our life, it can bring more fun and convenience to us. Nowadays, people are receiving more pressure from either their work or life; with the benefits of a good product design, to a certain extent, it will relieve some stress and bring more pleasures to people. Furthermore, a good product design might increase our efficiency at both work and life. It is definitely worth further studies of effect brought by product designs on both our mental and physical conditions.

A fertile imagination and innovative ability are significant for design of daily-life products. In the broad sense, innovation includes creativity, innovative

mechanism and enterprising spirit; the fruitful results of innovation are the achievements of creativity in all kinds of different industries and territories. The innovative ability is a major indicator of knowledge economy and social development. In addition, creativity is the education indicator of learning outcome. In the narrow sense, creativity is the knowledge base of innovation while innovation is the concrete practice of creativity. Creativity and innovation are two sides of one coin, both complement each other (Ministry of Education, 2002).

Some innovations enhanced our work quality and life quality, or strengthened our competitive position; some other innovations brought essential effects to our economy, society, and techniques. However, innovation does not need to be the completely new products or brand new ideas; it can be simply the current products added with new package or new style or new function; it can be the current method with improvement. In other words, total quantity remains the same while the structure varies, or the structure remains the same while the total quantity varies. Innovative products can be the unusual, valuable, practical or appropriate products, or other particular meaning. Being an unusual product or not can be judged by comparison with other similar current products. Being a valuable product or not can be judged by the benefits or the meanings of the product, and to whom the benefits or meanings are (Liu, 2011).

Innovative ideas are not only making improvement or association with daily ideas or daily products, it can be the extension of an idea or thinking through mind mapping. Mind mapping is one method to substantiate radiant thinking, so it is one method conforming to humankind's thinking. There is a great benefit to the mapping function of mind mapping; one of the substantial benefits is to bring out the potentialities of the human brain. The application of mind mapping can help students to enhance creative thinking and problem-solving abilities of the whole brain. In other words, mind-mapping is a visual or pictorial thinking method. It is a meshed organization chart spreading outward from the center, which can extend thinking boundlessly. Therefore, mind mapping can be a quick and accurate learning tool. To integrate and associate with all lines, colors, written words, figures, signs, pictures, and key words; to express all the concepts we learn in visual and pictorial mapping so as to bring out the boundless potentialities of the human brain (Hsu, Chang, and Hsieh, 2008).

To launch the daily-life products into the market, creative thinking is certainly needed besides innovative ability. Parnes (1967) believed that the major purpose of

Teaching for Creativity is to stimulate and develop students' creativity. According to Parnes (1967), the teachers who teach for developing students' creativity can stimulate children to develop their productivity, and allow students to express their opinions and thoughts freely. Furthermore, these teachers are capable to teach students to learn to listen rather than just de-liver opinions. Therefore, the teachers who teach for developing students' creativity do not have to deliver information or knowledge to students in a creative method. However, if we want to form an atmosphere where creativity can be learned easily, building an environment where students can express thoughts and ideas freely is vital. In addition, encouraging sense of humor, allowing evolvement of thoughts, and valuing both quality and quantity of thoughts at the same time are also required. After the integration of creative thinking, it will turn into creativity, the spirit of daily-life products. Creativity is the combination of three elements; namely differentiation, aesthetics, and message of the products. The essential of creativity is to create a new and meaningful art by using an interrelated, trustworthy, and superior method to associate with the unconnected objects and happenings in the past. Such new relation enables to unfold certain fresh messages of the products (Education Wiki, 2013).

To compare the significance of hats in the past and nowadays through creative thinking, we found the fact that hats are more significant in western culture because wearing a hat was one type of status symbol in old-time culture; it signified a certain status and image. Nowadays, hats are very common accessories when people attend different social occasions; it is used mainly in fashion trend and clothes matching. As different clothes are required to fit in with different occasions or sports activities, the hat needs to correspondingly match the garment.

To store a hat properly could occupy space inefficiently. Users need to have the hats lie in storage space and keep the crown from being squashed. Improper storage of the hats might result in the distortion of hat shapes and the hat might not be able to recover to its original shapes. For this reason, the Versatile Hat is designed to improve the structure of the current hat products and remove the disadvantages. This innovation provides users an option of saving storage space and having storage easier besides matching various garments delightfully, especially for users who are fond of fashion and changing styles. This innovative hat is favorable to environmentally-friendly consciousness and also the principle of economy due to

reducing spending and storage space. Enhancing the practical value of products and being multi-functional are exactly our purposes of this innovation.

## 2.2 Research of hats

Hat is one of important accessories to our garments since ancient times, it has been existing and developing successfully at the same time with clothing till the present. Along with the development of material culture, our life styles have been changing accordingly. Spontaneously, it led into a wide development of hat products gradually. Owing to this fact, hat has become one of essential accessories to our garments in daily life. However, being an accessory of garments, hats are not restricted by the garments styles. On the contrary, hats have been changing and developing according to noticeable fashion trends; the rapid changes of hat fashion are even greater than the garment fashion.

The quality of a hat is usually reflected from its specification, pattern, materials, and production. To be more specific, the specification needs to meet the required standard; the pattern needs to be aesthetic and elegant with symmetrical and reasonable structures; materials need to conform to the requirement. The colors of single-color hats need to be consistent on the whole hat while the colors of multi-color hats need to be harmonious. The warps and wefts of the hats should be smooth without deflection. The materials should be without any obvious defects, for example, the leather surfaces should be without shedding or scars or insect bites. Accessories of hats should be complete. The brims of hats should be with certain reinforcement for added stability.

Each detail of the hats needs to be qualified. For example, the stitching should be tidy and should match the colors of hats harmoniously; the stitching should not be undone or with continuous skipped stitches. The circumference of a hat should be without obvious deflection or any concavity, the brim should be with proper look. The surface of body of woven hats should be without any concavity, convex, uneven tightness, or uneven decorative design. The stuffed cotton inside the cotton hats should be even; spacing of stitches on the hat should be proper; accessories on the hats should be positioned well and harmoniously if there is any; embroidery should be made correctly without crease. Hats need to look smooth and beautiful without any folds inside the crown; more-over, it should look tidy without any stains, folds, or damages (Chinese Encyclopedia Online, 2013).

By the research of the hats, we can learn how the hats were created and evolved in old-time development. Wearing a hat was one type of status symbol in old-time culture; it signified a certain status and image. Different hats or different ways of wearing a hat could have different signification in old-time. The purpose of hats is the same as our clothing, especially in different ceremonies. For example, the hats for a wedding dress, a morning coat, or a funeral dress and garment. In terms of social etiquette, the hats can be one for an evening dress, a cocktail party garment, or a casual dress. Different materials and patterns are required for different specifications and designs. Nowadays, the hats for formal occasions have been changing as well.

For modern people, hats are used mainly in fashion trend and clothes matching. By studying the development of hats in different regions at different period in history, we can understand the information of old-time social structure, aesthetics, skill and craft standards, and living conditions, etc. at that period. Furthermore, we will be able to reproduce the hat designs and production skills at that time by assimilating the ideas and information from the study of development history of hats. By understanding better the clothing and hats development in history will be beneficial for our study of human history and might facilitate the future development of humankind.

After searching related or other similar patents of hat products through Taiwan Patent Search online, we found eleven related patents about multi-functional hats in Utility Model Patent such as patent number M380004 "Scarf with Function of Hat", M314532 "Hat body Structure of Leaf Hat Type Assembly", and M384550 "Multifunction Hat Assembly" etc.; however, those related patents on Taiwan Patent Search website are not the same as this Versatile Hat in this report. The eleven patents of other hats are listed below (see Table 1).

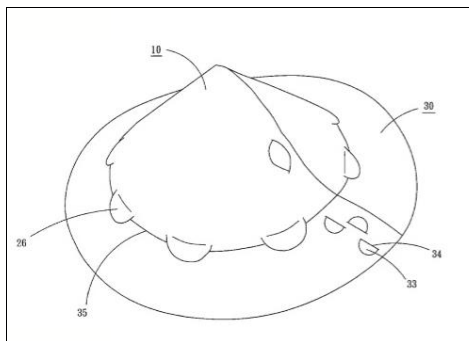
**Table 1** Searching results of related patents of hats.

Title of Utility Model Patent	Patent Number	Inventor
Advanced-Structure of Sun Hat	M414103	Chen, Jing Cheng
Structure of Sun Hat	M412632	Lan, Yu Xiang
Advanced Hat with Disposable Lining	M403903	Huang, Xiu Rong
Hat with Hair Decoration	M388858	Hua, Hai Li
Scarf with Function of Hat	M380004	Liu, Chih Chen

		Chuang, Ting Chieh Wu, Tsung Han Chou, Chun Hung
Hat	M376174	Ho, Xiu Lang
Hat with Cooling Fan	M381294	Huang, Ren Yi
Hat with Function of Producing Water	M380723	Chen, Rui Wen
Aromatic Hat	M263002	Wang, Bo He
Hat body Structure of Leaf Hat Type Assembly	M314532	Ho, Pei Lin
Multifunction Hat Assembly	M384550	Xu, Zhi Feng

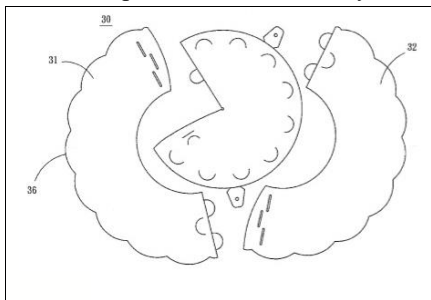
Source: Taiwan Patent Search (2013). Retrieved from: <http://twpat2.tipo.gov.tw/tipotwoc/tipotwkm>.

This innovative hat of “Hat Body Structure of Leaf Hat Type Assembly” can be assembled by users easily at any time (see Fig. 2).



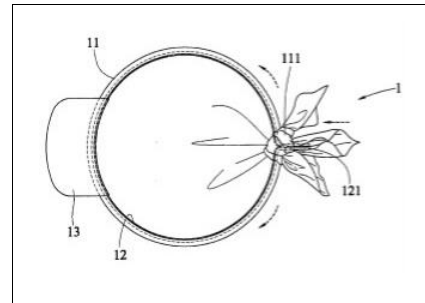
**Fig. 2** Assembly of Hat (M314532).

Such assembly not only brings entertainment to users, but brings convenient storage because users can disassemble it when the hat is not in use. Therefore, entertainment and convenient storage are the added value of this innovative hat (see Fig. 3). However, the disadvantage of this patent is that it is made of cardboard and it is not water-proof and can be easily damaged.



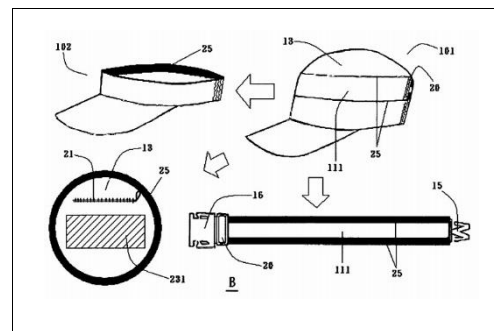
**Fig. 3** Disassembly of Hat (M314532).

This innovative “Scarf with Function of Hat” can be adjusted to be either a scarf or a hat according to users’ demand. It has a brim to protect the eyes from the sun as well (see Fig. 4). However, the disadvantage of this patent is that it has very few varieties of styles.



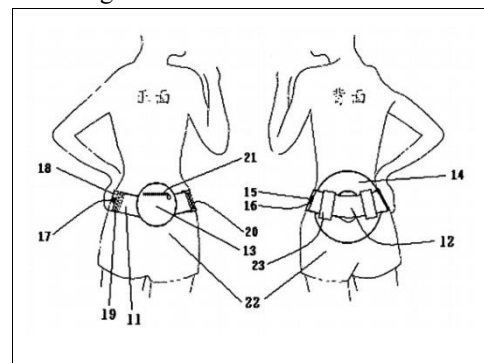
**Fig. 4** Scarf with Function of Hat (M380004).

This innovative product of “Multifunction Hat Assembly” can be simply a hat with the function of protecting our eyes from the sun (see Fig. 5).



**Fig. 5** Multifunction Hat Assembly (M384550).

Furthermore, it can be a waist bag for users to pack belongings (see Fig. 6). However, the disadvantage of this patent is that not many people like to have things tie around them or considering using a hat as their fanny pack/waist bag.



**Fig. 6** Multifunction Hat Assembled to be a waist bag (M384550).

### 2.3 The features of the innovation

Hat function is available anytime wherever the users need a hat.

(1) Features: more than one way of wearing this hat. By separating the crown from the brim, the crown can be the lining of a helmet, and the brim attached with the circumference of the hat can be a sports hat, for example, a hat for golfing.

(2) Advantages: customized hat with various patterns and functions; it can be matched with different garments easily and is suitable for consumers of all ages.

(3) Disadvantages: this innovation is restricted by different materials. If materials of the crown and brim are distinctly different, they cannot be interchanged in such way due to not matching each other.

After comparing with other existing patents of innovative hat products, we found that the Versatile Hat is with benefits of function, value, convenience, and creativity that cannot be found in other existing patents. This fact makes the strengths and opportunities of the Versatile Hat more visible to consumers. By lessening its weaknesses and threats and enhancing its visibility, we aim to possess certain market share with this innovative hat in both domestic and worldwide markets.

### 2.4 Theories of strategic marketing

Nowadays, people live in the era of rapid changes. The living expense has been rising continuously while people's income has been stagnating for years. Consequently, the affordable-price products have been growing rapidly. In this report, the theories of SWOT analysis, STP strategic marketing analysis, and 4P marketing mix are applied to further discuss the market of the innovative hats.

Weitz and Wensley (1984) defined "marketing" as having the appropriate allocation of resources so as to achieve sustainable competitiveness under the scope of existing market. Kotler (1994) defined "marketing strategy" as the extensive guiding principle for business units when they expect to achieve the market objective in their target market; it usually includes policies of marketing expenditure, marketing mix and marketing allocation of resources...etc. Overall speaking, marketing strategy is to allocate the limited resources effectively and optimize the use of resources. To achieve this strategic objective, certain theories of marketing analysis need to be applied accordingly. Generally speaking, marketing comprises three phases. The first phase is environmental scanning, SWOT analysis is often applied in this phase. The second phase is marketing strategy; STP strategic marketing analysis is

often applied in this phase. The third phase is marketing mix, which is the further marketing strategy, it can be also regarded as a frame of guiding principle in the process of strategic planning, and marketing mix (4P) is often applied in this third phase. Further information of these three theories is introduced as below.

#### 2.4.1 SWOT analysis

SWOT analysis is conducive to identify whether the business strategy is favorable to the business or the organization, it is used to identify the internal factors of strengths and weaknesses, and external factors of opportunities and threats (Proctor, 1997). External factors of opportunities and threats are formed by affairs generated by the economy, society, culture, demographic variable, environment, politics, law, technology, and competitive tendency; the affairs might be favorable or unfavorable to the organization. Internal factors of strengths and weaknesses are the results of how the policies or projects in the organization are implemented; for example, the resources inherent in the organization or activities of functional management in the organization. According to Barney (1991), one organization's basis of resources is the analysis basis of internal strengths and weaknesses; it is also the basis of one organization's sustainable competitive advantages. To discuss SWOT analysis from the aspect of basis of resources is one type of strategic marketing (Fahy and Smithee, 1999; Valentin, 2001).

#### 2.4.2 STP strategic marketing analysis

STP strategic marketing involves three elements, namely "Segmentation, Target Market, and Positioning". The market differentiation strategy is applied in more and more products, which indicates that STP is the mainstream of future marketing strategy. Three elements of STP marketing are introduced below (Lin, 2002).

##### (1) Segmentation

Markets can be separated into several segments, each segment is made up of customers with similar needs or demands. Segmentation is to identify different groups of purchasers by similar hobbies, needs or similar reaction to advertisement. Once the segment is identified, a marketing plan can be created to meet different groups' needs effectively so as to reinforce the adaptive capability of marketing mix in the market. Therefore, segmentation is fundamental to the market targeting and market positioning.

##### (2) Target market

Target market is a group of customers towards whom the organization decided to aim its marketing efforts.

### (3) Positioning

Positioning is to create the important and unique benefits for the products or services into the market, and deliver these messages to the target consumers. In other words, positioning is to identify the possible positioning concept in the target market, and afterwards select the proper positioning concept according to organization's inherent resources and capability. Furthermore, to develop and deliver the selected positioning concepts through marketing mix (Lin, 2002).

#### 2.4.3 STP strategic marketing analysis

According to Kotler (1994), marketing mix is one strategic marketing tool used by organizations to control all the variables in target market when the organizations aim to achieve the marketing objectives. Generally speaking, marketing mix is the 4P marketing mix introduced by American scholar McCarthy (1960), which comprises product, price, place, and promotion.

##### (1) Product

Product can be an idea, a tangible product, a service, or any combination of above-mentioned three elements. It can be anything provided in the market to meet consumers' various demands or needs or wants; which can meet individual or organization's objectives. The scope of products is beyond the tangible objects. In a broad sense, products involve services, happenings, people, places, organizations, ideas or concepts besides tangible objects, or any combination of above terms.

##### (2) Price

According to Monroe (1990) and Kotler (1994), price is the amount of money paid by consumers to purchase products or services. Price is also the amount of currencies paid by consumers to obtain their required products or services. Therefore, price can be the ratio of amount of currencies the seller gains to amount of products or services the purchaser gains.

##### (3) Place

The place element is also named distribution channel. It is a process formed by all the activities of transporting products or services from manufacturers to consumers or organizations. Under the current economic system, the intermediaries are a bridge between manufacturers and purchasers. The manufacturers sell products to purchasers through intermediaries; meanwhile, the intermediaries also deliver the information of purchasers' preferences to manufacturers. In the entire process of distribution channel, the intermediaries provide functions of transactions, logistic, and the facilitation of transactions. Moreover, the intermediaries are capable to provide benefits of improving efficiency of transaction, adjusting the

differences of quantity and category, and creating efficacy.

##### (4) Promotion

Promotion represents the various marketing communications conveyed to target consumers from organizations; the organizations can be either non-profit organizations or profit organizations. Overall speaking, the organizations can operate a promotion to convey related information of products or organizations to consumers through their own sales representatives, public relations, advertisement, or direct marketing. The purpose is to enhance the image of products and organizations, and to enhance visibility so as to increase the sales volume as well. Kotler (2001) believed that promotion is one of the fundamental elements for marketing activities; which includes all kinds of incentive tools but mostly temporary. The purpose of promotion is to encourage consumers or distributors to generate immediate buying behavior and higher buying power. Promotion tools comprise three types, namely promotion to consumers, promotion of transactions, and promotion of the organization and its sales representatives.

## 3. Introduction of Technical Designs

### 3.1 Technical Designs

The Versatile Hat comprises one crown of the hat and at least one brim. There are attaching parts at the bottom of the crown, and corresponding attaching parts at the bottom of the brim so as to incorporate the brim into the crown. This ingenious design can create many different patterns of hats while the same crown of the hats attaches to different brims, these replaceable and changeable brims make the Versatile Hat a snap-on product. The design of attaching parts of buttons, Velcro, and studs ingeniously provides users a multi-pattern hat once users attach the crown and brim together. The purpose of this innovation is to provide one multi-functional and multi-pattern hat to consumers. By simply attaching various brims to the same crown can become a changeable and multi-functional hat with advantages of convenient storage, easy maintenance, and affordable prices.

### 3.2 Technical methods

In this report, the Versatile Hat is well illustrated in four patterns, which are baseball cap, cowboy hat, cloche hat, and sun hat with UV-resistant function. With the design of attaching parts (buttons, Velcro, and studs) to connect the crown and the brim, a hat can fit in with different occasions is simply created. Therefore, reduced

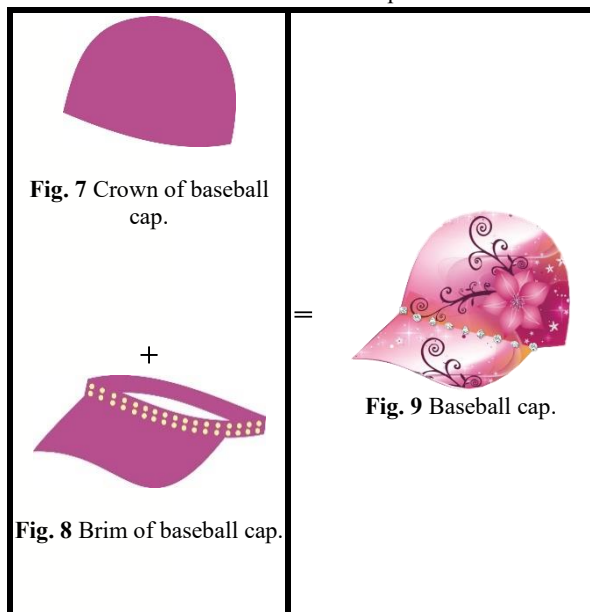
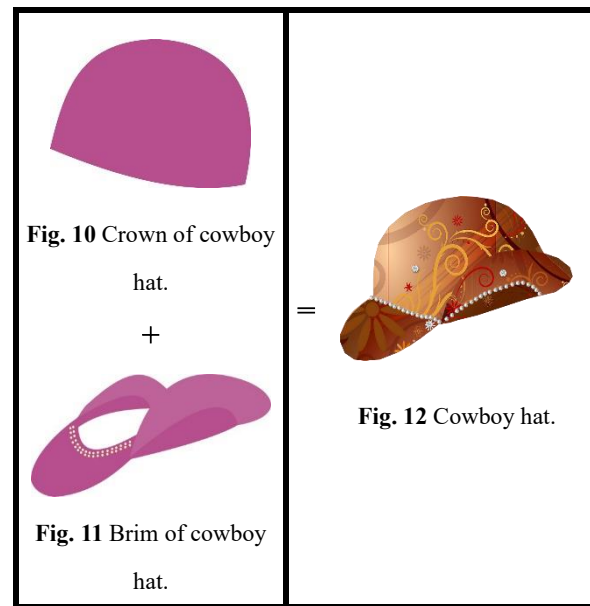
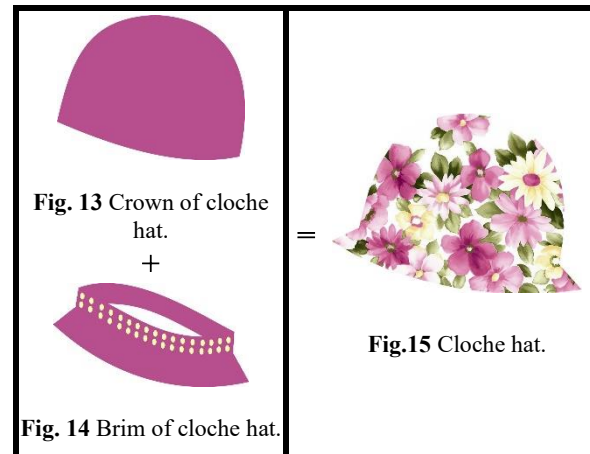
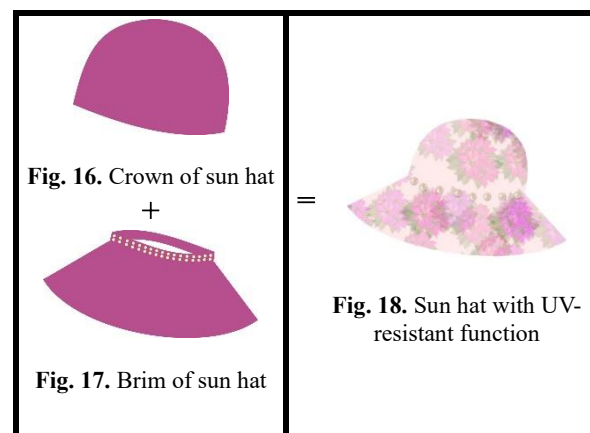
spending on hat products for consumers and affordable prices are the noticeable benefits of this innovation. Detailed explanation of these four patterns is illustrated from Table 2 to Table 5 and Fig. 7 to Fig. 18 as below.

(1) A fashionable baseball cap in Fig. 9 is created by connecting the crown in Fig. 7 with the brim of baseball cap in Fig. 8 through the attaching studs. The yellow small dots in the brim are the protrusions of studs.

(2) A characteristic cowboy hat in Fig. 12 is created by connecting the crown in Fig. 10 with the brim of cowboy hat in Fig. 11 through the attaching studs. The yellow small dots in the brim are the protrusions of studs.

(3) A beautiful cloche hat in Fig. 15 is created by connecting the crown in Fig. 13 with the brim of cloche hat in Fig. 14 through the attaching studs. The yellow small dots in the brim are the protrusions of studs.

(4) A sun hat with UV-resistant function in Fig. 18 is created by connecting the crown in Fig. 16 with the brim of sun hat in Fig. 17 through the attaching studs. The yellow small dots in the brim are the protrusions of studs.

**Table 2 Baseball cap.**

**Table 3 Cloche hat.**

**Table 4 Cloche hat.**

**Table 5 Sun hat with UV-resistant function.**




## 4. SWOT Analysis

### 4.1 Strengths

To create diversified patterns of hat, the inventor has started to develop various patterns and styles besides selecting different fabrics and colors for hats. We aim to develop diversified patterns to fit consumers of all ages. Users will find the hats natural, lively, and pleasant while wearing it. Furthermore, the elastic environmental fabrics are applied for this Versatile Hat, this will help users with disheveled hair to save time to arrange the hair before going out. With this Versatile Hat, users can own several patterns of hat at the same time to fit in with different occasions. Additionally, easy and convenient assembly enables users to be ready to go out in a short time lively and pleasantly. The strengths of this innovative hat are:

- (1) Multi-changing patterns and colors
- (2) Easy and convenient assembly
- (3) Suitable for consumers of all ages
- (4) Customized patterns to be unique

### 4.2 Weaknesses

The innovation needs two patterns to become changeable hats. If the materials or the sizes of two patterns are distinctly different, it is difficult to interchange. Therefore, two patterns of hats need to be the same materials and sizes. The weaknesses of this innovative hat are:

(1) This innovative hat is restricted by the materials because hats in different materials cannot be interchanged, especially materials like knitting and weaving.

(2) When users want to select a hat in different colors of fabric to match their garment, users need to purchase extra accessories to meet this requirement, for example, a hat with decorative diamond.

### 4.3 Opportunities

Young people are looking for fashion and changing variety, and prefer various patterns and colors. On the contrary, the middle-aged and old-aged people are simple and industrious, and usually prefer to save time at shopping by purchasing enough items or patterns at a time. Therefore, our target customers are people of all ages as long as they like hats. The opportunities of this innovative hat are:

- (1) Target market is large.
- (2) Patterns of hats can be always increased and updated according to the latest fashion.
- (3) Customized patterns and colors are available.

- (4) UV-resistant function is added in the materials.

### 4.4 Threats

Many people might think that hats are suitable in only winter. However, besides protecting our eyes and heads from the sun in summer, hats can also frame our faces and enhance our styles and images. The threats of this innovative hat are:

- (1) Hats are not necessity.
- (2) Patterns of hats are easy to be imitated and modified.
- (3) There is a wide variety of hats in the market, and distribution channels are too extensive.

## 5. STP Strategic Marketing Analysis

### 5.1 Segmentation

(1) Demographic Variable: along with the changing fashion trend, nowadays male consumers also start to wear various hat products to match their garments. Therefore, this innovative hat is not restricted by male or female users. In terms of age, the Versatile Hat is suitable for consumers of all ages. In terms of occupation, this innovative hat can be customized so it is not restricted by any occupation.

(2) Psychographic variable: this innovative hat is designed to be convenient assembled and easy disassembled; so it is easy for storage in terms of life style.

(3) Behavior Variable: in terms of benefits, owning one Versatile Hat means owning four different patterns of hats; additionally, this product is changeable and can be quickly interchanged.

### 5.2 Target Market

The main and secondary target market of this product are:

- (1) Main target: 15~25 years old young people.
- (2) Secondary target: 26~38 years old female consumers.

To understand the thoughts of the target market on the design of the product, this study conducted a depth-interview analysis on 73 male and female possible users of the product, ranging from 15~40 years old. Based from the interview, it was found that more than 70% thinks that the product is unique and has a variety of styles and functions compared to the hats available in the market and thus, is more creative and is more useful. Half of the respondents expressed that they will be more than willing to purchase the product if ever it become available in the market.

### 5.3 Positioning

With its strengths and differentiation, positioning of this innovation is to provide consumers a diversified hat with benefit of easy storage.

## 6. Marketing Mix Analysis

### 6.1 Product

Besides the customized patterns to meet different consumers' demand, this innovative hat is also convenient for storage and hard to distort the shape. The most noticeable feature is the fact that owning one Versatile Hat means owning four different hats. As long as the users want to change the pattern of the hat, simply change the brim wherever the users are as this product is easy and convenient to be carried (see Fig. 19 to Fig. 21).

(1) The attaching parts of button design of Versatile Hat are used in hat products in current market (see Fig. 19).



**Fig. 19** Attaching parts of button design of the Versatile Hat in current market.

(2) The attaching parts of button design of Versatile Hat are used in baseball hat in current market (see Fig. 20).



**Fig. 20** Attaching parts of baseball hat of the Versatile Hat.

(3) The attaching parts of button design of Versatile Hat are used in bucket hat in current market (see Fig. 21).



**Fig. 21** Attaching parts of bucket hat of the Versatile Hat.

### 6.2 Price

To make this innovative hat an affordable product to consumers of all ages, prices are set in three types:

(1) Basic pattern: lower price with lower profit. The basic pattern has two patterns of hats for interchanging.

(2) Customized pattern: this pattern highlights its unique design and exclusive production; price is relatively higher than basic pattern and with higher profit. The customized pattern has two or more than two patterns of hats for interchanging according to customer's requirement.

(3) Deluxe pattern: this pattern can particularly satisfy consumers' need for owning multi-pattern hats at one-time purchasing; price is the highest among three types and also with highest profit. The deluxe pattern has more than two patterns of hats for inter-changing.

### 6.3 Place

#### (1) Physical Channel

a. Night Market: one of Taiwan's distinct features, and also the tourist attractions in Taiwan. Night markets are not only everywhere in cities, but also spreading in countryside.

b. Hypermarket: most modern people in the cities usually choose to shop in hypermarkets no matter for important festivals or daily-life products. The benefits attract many people to hypermarkets are its convenience and fast service especially people in cities are usually busy. Example of hypermarket: Carrefour.

#### (2) Virtual Channel

a. Virtual TV Channels: television is available in most households nowadays. Moreover, virtual TV channels are available most of the time, numerous people would be attracted to purchase on TV after those skillful pro-motions.

b. E-commerce: with the highly widespread internet nowadays, many physical shops transformed to E-commerce business model. To provide consumers a convenient platform to order customized hats, marketing through internet is a perfect sales channel. By establishing a website, offering customized service

anytime to numerous consumers at the same time can be effectively implemented.

#### 6.4 Promotion

The product aim to enhance the visibility and loyalty of the Versatile Hat through below three types of promotions:

- (1) Building a website on social networks for consumers to deliver opinions and information.
- (2) Building a website for this innovative hat and selecting social media for advertisement.
- (3) By word of mouth marketing.

#### 7. Conclusion

The academic contribution in this paper reveals the whole process of innovation of the Versatile Hat including analysis to the prior arts, STP strategic marketing analysis, SWOT analysis, and developing strategies for Marketing Mix. The purpose of the Versatile Hat is to provide a new option for consumers who are looking for fashion trend. The basis of this new option is to provide a hat with benefits of space efficient and easy storage. When the consumers purchase one Versatile Hat, they own multi-pattern hats at one-time purchasing. Users are able to match their garments by selecting one proper hat from various patterns and fit in with different occasions accordingly. Moreover, the storage space needs to be only for one Versatile Hat rather than for several conventional hats, that is to say, the Versatile Hat is also of convenient maintenance.

Nowadays, the living expense has been rising continuously while people's salaries have been stagnating for years. In such period of economic downturn, this innovative hat offers a choice for consumers to reduce spending on hats without diminishing hat patterns. To stay in the lead in highly competitive industry, good products need to get ahead not only in the markets, but also in costs, and services aspects. This innovation has obtained patent number M416353 from the Utility Model Patent in Taiwan, and also won several prizes in international contests. The Versatile Hat will not only remove the disadvantages of current conventional hat products, but also add advantages that cannot be found in conventional hat products. With the explanation and illustration in above-mentioned paragraphs, the benefits of this innovative hat can conclude as:

(1) By the design of attaching parts on the crown and corresponding attaching parts on the brim, the crown can match various brims to become multi-pattern hats. This interchangeable structure enables this

innovative hat to be greatly practical accessory in different occasions.

(2) Due to the interchangeable structure of this innovation, consumers can save spending on purchasing several different patterns of conventional hats, and also can save storage space for too many hats.

To be a good product with competitive advantages in the market, differentiation and sales skill are no longer enough. Service needs to be regarded as one main product so as to maintain in the lead in the market as well. By continuous enhancement of products' value is the only way to satisfy customers. Innovation is beyond one idea or concept. We aim to develop this Versatile Hat to the market through industry-academy cooperation or transfer of technology in the near future, and cooperate with the manufacturer in the aspects of design and sales.

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