A physical menu has been considered as the primary tool to increase sales in a restaurant. It functions as the visualization on F & B products and services of restaurants. The availability of the physical menu design in restaurants is becoming essential to create memorable experiences for customers. Such memorable experience potentially improves the level of customer satisfaction. Owners and managers should start considering the vital role of the physical menu in restaurants

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Physical Menu Design



Aditya Nova Putra Pudyotomo A. Saroso Samuel P. D. Anantadjaya

Physical Menu Design

One Important Marketing Tool

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Dhysical Menu Design

One Important

Marketing Tool



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INTRODUCTION

In the recent years, the success of foodservice businesses may have been due to only few vital factors encircling on products, services, atmosphere, and pricing (Wilson, 2009; Success Factors, 2015; Mamalis, 2009). Nonetheless, business owners have also identified the major challenge for businesses, which is mainly the attempt to continuously increase the quality of products and services to constantly exceeding customers' needs and wants. When this is appropriately performed, businesses become more competitive, and margin-maximizing endeavors are continued (Okumu, 2012).

For restaurants, the meal experience is regarded as the most important aspects. Of course, this is supported by several factors, mainly product (food and beverages), service (including service delivery), atmosphere, social factors and management. The overall positive dining experience is crucial to become the everlasting memories. Whether or not customers have positive experience, the actual presentation of the restaurants' menus is one essential part in the dining experience, not only from making orders, but also during the consideration on making the selection on restaurants and cuisines (Ozdemir & Caliskan, 2013).

In fact, many restaurateurs or business owners presume that the menu is the actual major marketing tool of foodservice operation. It takes far more than just a list of dishes that a restaurant offers. A physical menu that is presented to customers serves as a visual guide. This may become the best sales tool to introduce the restaurant's products, services, and atmosphere. It is a valuable marketing opportunity to boost potential revenue attainment. Since a physical menu plays a crucial role of information sharing for restaurants, it should have some degrees of influence toward the level of customer satisfaction (Hsu & Wu, 2013).

When customers have made decision to visit a particular restaurant, they are expecting a positive experience since they are ready to spend money on the food and services offered. It is one of the restaurateur's duty to create continuous positive vibrations for customers (Shock, Bowen, & Stefaneli, 2004). The physical menu of the restaurants becomes the first powerful marketing tool that every diners see. The physical menu establishes the restaurant's first impressions. Baiomy, Jones, Elias & Dinana (2013)

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have stated that menu presentation, its design and its descriptions of menu items, contribute to the overall guest experience. The physical menu is considered the initial opportunity to try surpassing guests' expectations during their dining experience.

The actual design on the restaurant's physical menu consists of both a visual format and copy. Relying on services of a professional designer may be necessary in designing a superb physical menu to successfully portray the perspective of potential diners that any restaurants hope to attract. According to Scanlon (1985), she found that appropriate layouts, typefaces, illustrations and graphic designs, papers, and color choices are all basic components in reflecting characteristic of restaurants. The appropriate combination of those characteristics is expected to boost potential sales. How far these components work is based on by how well the customers can actually read the menu, whether the choices of colors excite and create customers' interests, whether the choice of paper on the physical menu is relatively durable, and whether illustration and photograph appear professional (Scanlon, 1985). This is to say that if the menu items and details are easy to read, the chances on being considered and eventually selected increase. When the colors are used interactively in conjunction with the overall layout, the presentation of the physical menu becomes more attractive. The choice of papers also contribute the level of attractiveness. Also, when the pictures are done professionally, the level of attractiveness swells.

The second major part, where physical menu design plays a big role as the single most important advertisement is the menu copy. Merchandising, accent, and descriptive wording are the 3 components of menu copy, which are assumed as the primary marketing tools for the menu planner. It is essential to create these components of menu copy since those components enable the owners of restaurants to portray the restaurant's image into the customer's mind. The primary purpose of menu copy consists of clear explanation of the menu items to highlight the menu selections, promote the restaurant image, and also give essential information about the services the restaurant offers (Scanlon, 1985).

RESEARCH PROBLEM

Many restaurants put effort in offering new and different concepts of their establishments, which are usually followed by the offering of products, services and

atmosphere to attract and expect to extend some sort of satisfaction to customers. Providing good menu design for customers could also be one factor in trying to achieve overwhelming satisfaction in restaurants. Given this circumstances, the research problems are:

- 1. There is no definite indicators that determine the connections between physical menu design and customer satisfaction, other than products, services, and atmosphere in restaurants.
- 2. The management team of restaurants may not have fully acknowledged the role of the physical menu design as one of the important marketing tools in restaurants.

RESEARCH QUESTIONS

- 1. Is there any significant positive relationship between visual format and menu copy of the physical menu design in restaurants?
- 2. Is there any significant positive relationship between visual format of the physical menu design and customer dining satisfaction in restaurants?
- 3. Is there any significant positive relationship between menu copy of the physical menu design and customer dining satisfaction in restaurants?

RESEARCH PURPOSE

This research focuses on attempting to identify the relationship between physical menu design, which could potentially represent the necessary characteristics to achieve customer dining satisfaction, and the actual level of customer satisfaction during the dining experience. To do so, there are several purposes to attain in relation to this research:

- 1. To identify the relationship between visual format and menu copy of the physical menu design in restaurants
- 2. To identify the relationship between visual format of the physical menu design and customer dining satisfaction in restaurants. Some of the queries concerning the

visual format may include;

- a. Does the menu format easy to read?
- b. Do each elements of the visual format in the physical menu design including color, typefaces, illustration and graphic, paper, and layout reflect the restaurants' concepts?
- c. Does the visual format lead to a higher level of satisfaction?
- 3. To identify the relationship between menu copy of the physical menu design and customer dining satisfaction in restaurants. Some of the queries concerning the menu copy may include;
 - a. Does the menu copy in the physical menu design provide a valuable information?
 - b. Does the valuable information on the menu copy lead to a higher level of satisfaction?

These issues need to be addressed in this research. The results of these findings will be of great use to the company in order to find out how important their menu design would be in achieving one factor of customer satisfaction in their restaurant.

SIGNIFICANCE OF STUDY

This study is significant for three reasons:

- 1. This research may benefits restaurants, particularly if the physical menu design is found to be statistically important as a marketing tool. Restaurants may pay a closer attention to the physical menu design to try to secure positive influences in pushing for a higher customer satisfaction.
- This research may be valuable for some restaurateurs, or business owners, who want to establish and/or upgrade their restaurants with the help of professionals in menu design.

SCOPE AND LIMITATIONS

Some limitations in this study are:

- 1. During the period of a few months, this study obtains only primary data directly from customers, who visited one particular restaurant in Jakarta, Indonesia.
- 2. This study focuses on the examination on the likelihood of physical menu design influence onto the level of customer dining satisfaction in a particular restaurant in Jakarta, Indonesia.
- 3. The term "customer satisfaction" in this study is relative limited to the "level of customer dining satisfaction".

THEORETICAL FRAMEWORK

FRAMEWORK OF THINKING

To better understand the development of the research in relation to the physical menu design and customer satisfaction, the following illustration shows the steps in research processes.



Figure 1: Framework of Thinking

THE IMPORTANCE OF RESTAURANT PHYSICAL MENU

The word "restaurant" is defined as an establishment where people can come, sit, and eat the pre-ordered and served meals. Based on the menu, preparation method, and certainly pricing schemes, there are categories/types of restaurants. Those types of restaurants are; fast-food restaurants, fast-casual restaurants, casual-dining restaurants, and fine-dining restaurants.

Fast-food Restaurants

Fast-food restaurants may be the most-familiar type of restaurants. These type of restaurants focuses on speed of service delivery and consider convenience as the utmost importance. The common set-up is simply a counter-based services, where customer can make the orders, make payments, and take the meals directly from the service counter. Most of fast-food restaurants are a part of international restaurant chains, and may likely fall-in the franchising agreements. This pushes for standardized ingredients across regions, whose foods may be partially preprepared and distributed to various locations via a closely-controlled supply channel.

Fast-casual Restaurants

Fast-casual restaurants are slightly more upscale than the regular fast-food restaurant. These type of restaurants are likely offering better quality food and a more upscale dining atmosphere. In these type of restaurants, customers place orders from the table, and waiters will attend the orders and deliver the orders to the table.

Casual-dining Restaurants

Casual-dining restaurants are typically offer full-table services. However, the level of quality of food, services, and decoration slightly less than fine-dining restaurant. Casual-dining restaurant usually have a full-set of bar with separate bar staffs with choices of alcoholic beverages.

Fine-dining Restaurants

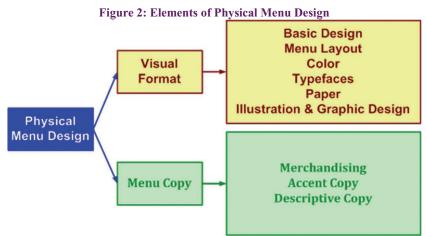
Fine-dining restaurants are in the top position when it comes to food quality and services. These restaurants also often to offer unique and beautiful decorations. Fine-dining restaurants usually employ world-class chefs and experienced staff.

Because of the ever-changing expectation following the changes in lifestyle, customers and diners are always looking for new dining experiences (Marković, Raspor, & Šegarić, 2010). It is restaurateur's duty to ensure customers' overall dining experience

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will always be remarkable. Marković, Raspor & Šegarić (2010) stated tangible and intangible elements are parts of customers' dining expectation and experience. Restaurant physical menu may be the most important tangible element that restaurant possess. Having a good menu in restaurants is beneficial to lead customers in assisting the selection of cuisines to satisfy customer preferences (Kotschevar & Withrow, 2008).

Physical menu design has two important elements, the visual format and menu copy, which potentially sustain the physical menu as the marketing tool, as illustrated in the following figure. Generally, presenting the list of available food, beverages and services is the primary purpose of the menu. Moreover, the menu also introduces the customer the whole aspect of a restaurant and its design should be suitable with the décor, concept, ambience, and price range of restaurant (Pavesic D. V., 2005). The menu should be pleasing to the eyes of customers, and customers should immediately catch or understand what are being offered by the restaurants. Hence, a good cooperation with menu planners or designers is truly necessary for restaurateurs.



Source: (Scanlon, 1985; Buchanan, 2011; Kotschevar & Withrow, 2008)

As stated, physical menu design plays an important role to infiltrate ideas into the customers' heads. It works similar to television commercial or newspaper advertisements, whose purposes are to increase awareness and the likelihood on becoming the top-of-the-mind considerations to fuel the intention and/or willingness

to buy. Customers should be able to visualize what they are going to have in restaurants with the price they are willing to pay (Ozdemir & Caliskan, 2013). Menu is the way to relay the information. Menu provides descriptions on food and beverages of the restaurants. Restaurateurs should ensure that the descriptions are matched to customers' expectation. This means that the details should stimulate the appetite in the customer's mind. Too much descriptions may ruin the meaning of the dishes. Also, too much descriptions could create confusion customers (Buchanan, 2011).

VISUAL FORMAT OF MENU DESIGN

A menu's visual format is the most important physical aspect of the menu's design format. It should be well planned by the writers to give the highest impact to its legibility that reacts to patron expectation. Assuming the menu has its roles as a profit generator and marketing tool, restaurateurs need to concentrate on the appearance of the menu itself (Buchanan, 2011). If menu items are placed strategically on the menu, restaurateurs have a better chance to boost sales than if those menu items are randomly placed. Scanlon (1985) emphasized the first component of menu appearance is basic design, which is sustained by other components, such as; color, typeface, layout, paper, illustration and graphic design. Those combinations should be concerned with how well each element satisfy the overall function of the overall menu design (Scanlon, 1985).

Restaurateurs must ensure those elements as the fundamental factor in the development of restaurant menu design. A poorly-designed menu may bring about negative first impressions (Buchanan, 2011). However, a well-designed menu may also able to enhance menu's appearance, make a great impression on customers, and represent the overall operation of an establishment. With these aspects clearly defined, the actual design of the menu should assist the restaurant management to reach their goals in securing customers' positive experiences (Kotschevar & Withrow, 2008).

BASIC DESIGN

The basic design of the menu is determined by the type of physical menu format, which may take in various ways in terms of size, shape, and number of pages

and panels. Whether or not the customers are able to handle the menu, may also become a consideration in designing the physical format of the menu. For instance, suppose the menu is too large, it overcrowds a relatively small table. If a menu has many pages, it could confuse customers with a wide-arrangement of food selections. The term "panel" implies to the shape of the outer cover of the menu, as explained below. In order to present creativity, menu formats can be varied in shapes, for example; rectangular, circular, or triangle.

MENU LAYOUT

Layout indicates the arranged placements of menu items that are presented to customers within the physical menu design. The layout of the final structure is identified as the key indicator of marketing the menu (Scanlon, 1985). The primary purpose of menu layout is based on determining on customer selection of menu items through the ordering process, and highlights the special items that generate high margin (Baiomy, Jones, Elias, & Dinana, 2013). All food choices on the menu might be subdivided based on classifications to impress customers. By using 'course headings' on the menu layout, the categorizations can be easily identified. This includes appetizers, salads, entrees, and desserts. A larger and bolder type is necessary to use in those headings. This ensures customers attention onto the categorizations of available food choices.

Category	Descriptions				
Single Panel	Present limited menus, such as luncheon and breakfast menu or				
	special selection.				
Classic-Two	The most popular format for menus that offer a basic number of				
Panel Fold	courses (appropriate if menu selections are limited).				
Two-Panel	Offers an adequate space for menus if items in the menu offer				
Multipage	lengthy selections.				
Single-Panel Fold	This format has the standard one page format with an extra fold				
	added to one side (appropriate for adding beverage or desert				
roid	menu).				
Vertical Two-	A vertical adaption of the classic two panel-fold menu which offers				
Panel Fold	a variety and can also be expanded to a multipage format.				
Tri-Panel Fold	The panel in this format is rectangular and offers an interesting				
	presentation of an extensive menu.				

Table 1: Menu Layout

Aditya Nova Putra, Pudyotomo A Saroso & Samuel PD Anantadjaya Page 18 of 109 Physical Menu Design: One Important Marketing Tool in Restaurants

Category	Descriptions			
Multi-Panel	This format can accommodate a number or different menu			
Fold	selection or list too many items in the menu.			
Source: (Baiomy, Jones, Elias, & Dinana, 2013)				

After the arrangement of categorization is done, menu items must follow specific categorizations (Shock, Bowen, & Stefaneli, 2004). Menu items are usually accompanied with descriptive wording encircling the food ingredients and preparation method. Such descriptive wording ensure comprehensive understanding on the dishes. Menu items should look bigger than the descriptive wording, but smaller than the course headings. Involving prominent position on the menu is necessary such as, the name of the restaurant, operational hours, address, phone number, and website address (Shock, Bowen, & Stefaneli, 2004). In the attempt to create a unique menu layout, guests should always be assumed that they are patrons of a trend-setting operations. The layout should be designed so that it can be clearly and easily followed. This is likely heightening sales on high margin menu items since customers may not experience difficulties during the ordering process (Scanlon, 1985).

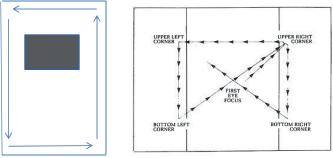
FOCAL POINT

A menu should be centered symmetrically for customer aesthetic appeal. Symmetry means pleasing the eye and tends to allow for enough blank space to be attractive rather than filling the page with prints and illustrations (Shock, Bowen, & Stefaneli, 2004). Focal Point simply refers to the area that eyes tend to focus. This is essential in a menu design. A poorly-designed menu creates a confusing feeling to customers. Customers may order different items than what they originally look for. Bowen & Moris (1995) emphasized on the gaze-motion study. Their study are targeted to learn the movement of people's eyes when they look at the menu. Moreover, gaze-motion study has a purpose of identifying the number of times the reader's eyes focus on a particular location of the menu. This is an important factor to promote the items that restaurant offers which have a high profit margin (Bowen & Morris, 1995; Pavesic D. V., 2005)

Gaze-motion is illustrated in the following illustration (Kotschevar & Withrow,

2008; Pavesic D. V., 2005). In a single menu layout, which is a mere single page, the first focal point on a one-page menu layout is the top portion in the middle of the page, and then to the upper right, left and down, then across to the lower right and then back to top again. In a two-page menu layout, the eyes have a tendency to travel from the middle portion to the upper right-hand corner, moves counter clockwise to the upper-left corner, the down to the lower-left corner before diagonally return to the menu center to the upper right-hand side and onto the bottom right-hand corner. Then, the gaze-motion usually ends up here, or to center of the page (Bowen & Morris, 1995). Another important aspect is the use of creativity in the menu layout since it refers to the placement of typeface and illustration on the design format. It is essential for management to increase the likeness of a menu items being ordered and also create a memorable experience for a guest during ordering process (Buchanan, 2011).

In the previous study by Bowen & Morris (1995), they found that placing menu items in the "sweet spot" would enhance sales. Entrees and Chef specialties are usually the most highlighted items to be inserted in the most strategic place on the menu layout. If the restaurant offers the two-page menu layout, the upper right-hand side is the most visible spot to place the items to attempt the maximum generation of orders. As mentioned above, the upper right-hand corner is the initial location that the customers' eyes tend to move once the menu is presented.





Source: (Kotschevar & Withrow, 2008; Pavesic D. V., 2005)

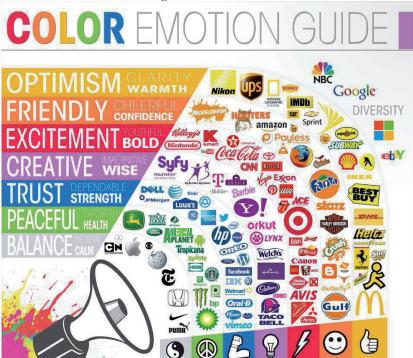
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When designing the menu, the choices on colors should be considered objectively. Colors can have an impact on the mood of customers. Colors can also be one crucial factor in creating the atmosphere for the dining experience. This ultimately impacts the level of customer satisfaction (Buchanan, 2011). More than any other aspects on the menu layout, color has a strong correlation in affecting customers' psychological stages (Honigman, 2013). Besides, making an artistic contribution, color can actually contribute in affecting legibility and speed of reading (Kotschevar & Withrow, 2008).

According to the National Restaurant Association (2013), the appropriate color represented on the menu can be used to create a mood or reflect the restaurant image, including firing-up customers' appetites, and drawing attention to particular food items to boost sales of high margin items. When selecting colors, a menu planner should notice what the desired impact on customers is. If the purpose of putting color is to influence customers' mood, color should be used as decoration, trim, illustrations and background. However, when color is aimed to promote sales, colors should be concentrated more on type fonts and borders, including underlines to enrich accents on specific course or items (Scanlon, 1985). Once the purpose of using different colors on the menu is understood, the menu planner should wisely and carefully choose the combination of colors on the menu. Though colors are useful in increasing the attractiveness of the physical menu, the use of too many colors can potentially distract the customers' attention altogether. This is mainly due to the psychological effect on the simultaneous use of competing colors on the menu.

Three primary colors known are red, yellow, and blue. The combination thereof are widely known to create the full-set rainbow in the printing process (Singh, 2006). Complimentary colors usually appear from the same primary colors of either red, yellow, and blue, whereas some contrasts are sourced-out from combining different primary colors slightly. For instance, red and green can be blended together to produce an attractive color combination. According to Buchanan (2011), red reflects an individual's metabolism. Restaurants should use red to stimulate appetites. Yellow is able to potentially attract customers' attention, including encouraging them to eat. This improves the likelihood of higher sales. Some restaurants are interested in using blue to portray relaxation for customers. The more relax the customers, the more positive their attitudes toward the restaurants. As their attitudes become more positive, customers tend to believe that they are having a good quality time in the restaurant. This increases the potentials in generating orders and higher sales.

Figure 4: Color Guide



Source: (Honigman, 2013)

The combination of colors and the menu design should be balanced with type of cuisines, which are associated with the theme of the restaurants. Obtaining the balance requires an ability to objectively blend colors to stimulate good taste. Scanlon (1985) emphasized that some cuisines may use a particular color to identify its personalities. German cuisines, for example, with ligneous browns

and greens, Italian dishes with red, white, and green, seafood cuisines with blue color, Mexican cuisines with more fiesta colors, Chinese food with red and black, and French with yellow and gold. Because the customers' minds already acknowledge these natural associations, the menu planner could take this opportunity to match the color with theme of the restaurant (Scanlon, 1985).

TYPEFACES/FONTS

Selecting suitable style of type or typefaces, sometimes called "fonts", in the menu design should be done wisely because it reflects the personality of the restaurant (James & Baldwin, 2003). Typefaces are supported by other elements, such as; color, size, and background. With the vastly different types of fonts, management should acknowledge the easier-to-read fonts in comparison to those fonts, which are rather difficult to read (Kotschevar & Withrow, 2008).

Today, menu planner can choose from hundreds of readily available different fonts to establish the mood of a customer (Shock, Bowen, & Stefaneli, 2004). Similar to menu layout, the use of fonts or typefaces targets for the maximum large-margin items, which are usually the restaurants' specialties, or chef's menu choices. The focal point in choosing the right typefaces is to ease customers in reading the menu, and promptly determine the chosen dishes. The level of contrast on the menu is also necessary. Otherwise, it clutters the menu and confuse the customers in making choices. This has a tendency in diminishing sales.

The choices of prints come in either plain/regular, bold/heavy print, italics, and script. Sometimes, italics or scripts tend to be more difficult to read. However, italics and scripts may be the best choice for some restaurants as they are trying to show the desired special impacts to customers (Kotschevar & Withrow, 2008). A fine-dining restaurant may want to use italics and scripts in their menus to add a relatively classy touch of elegance in the customers' dining experience.

Type Size

The rule is actually simple. To make everyone feel at ease in reading the menus,

font size should be easily readable. When customers cannot read the menu properly, they cannot make orders. Considering the customers' eyesight is important. For instance, if restaurants have lots of elderly diners, the size of typefaces/fonts should be larger than normal (James & Baldwin, 2003). In this particular situation, the size of typefaces is beneficially affecting both customers' reading ability and understanding. Small fonts may be challenging for older customers to read. At the same time, larger fonts take-up valuable spaces on the menu. Due to the font sizes, misunderstanding in choosing particular menu items might occur. Occasionally, menu items listed on 10-point, or 12-point type, with 9-point to 10-point type used for any descriptions below the menu items. An 18-point type is commonly used for the headers, or names of categories (Kotschevar & Withrow, 2008).

Spacing of Type

Type spacing means the amount of room between each letter in each word which influences the legibility of the type. The menu planner needs to also emphasize this on the menu. Customers may face difficulties in reading the menu if the chosen letters and words are spaced-out too closely together, or too far-apart (Kotschevar & Withrow, 2008).

ILLUSTRATION AND GRAPHIC DESIGN

The placements of illustrations and graphics are very significant in menu design. This provokes visual attractiveness, and grab customers' attention to actually review the menu (Buchanan, 2011). Illustrations refer to drawing or diagrams of particular subjects/objects. Graphic designs refer to the decorative patterns, borders or designs on the physical menu. As mentioned above, the challenge of restaurateurs is to satisfy the need and wants of customer. Here, management of restaurants should create the attractive and visible menu to potentially grab the maximum amount of customers' attention.

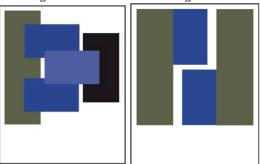


Figure 5: Effective Menu Design

Source: (Pennisi & Winder, 2011)

Illustration has a huge influence on representing the atmosphere of a restaurant. Illustrations also extend the restaurants' images on what they could be expecting and experiencing from visiting the restaurants. Graphic design is beneficial when there is a contrast in the design. For example, incorporating two different elements/objects may result in a greater emphasis on particular menu items. Emphasizing elements/objects in this way may likely provoke visual interests, but also relay the message on importance menu items, while directing the customers' eyes onto the particular menus with high margins (Pennisi & Winder, 2011; Chartrand, 2010). The purpose of using graphic design is to force customers to receive the relayed messages instantaneously (Pennisi & Winder, 2011). The use of graphics and illustrations on the menu should also be wellstructured and organized to minimize the chances on becoming too overcrowded. Indeed, use of illustrations and designs on the menu has been demonstrated to be of great importance in the development of restaurant menus.

The above illustration provides a simple design on whether owners/managers of restaurants prefer to keep the balance and relatively symmetrical (see the illustration on the right). Alternatively, attempting to draw customers' eyes onto specific points (see the illustration on the left). As previously mentioned, the use of colors has the potentials in draw customers' attention. In the following illustration, light colors have the tendency to have less weight than darker colors. Likewise, bigger letters/pictures tend to weight more than smaller



Source: (Pennisi & Winder, 2011)

The cardinal rules on the use of design and illustration on menus are as follows;

- 1. The interior design of the restaurants should be represented by artworks. All elements, such as, designs, illustrations, consistency, borders, and typefaces, should be sustained with the similar theme of illustrations to create pleasing impression of the overall elements.
- Menu design should be visually clean and simple at a first glance. The rule of thumb is simply creating a balanced-design for easier reading (Scanlon, 1985). Complex and crowded menu design may jeopardize the selection of menu items by the customers.

Photograph

Professional photographs are the most important graphical element in designing attractive menus. If restaurateurs plan to use food in photographs, it is necessary to adopt close-up finished product to clearly visualize the items. The incorporated professionally-photographs food and beverages can potentially attract customers' attention onto particular food/drinks. This increases the chances on selling (Shock, Bowen, & Stefaneli, 2004). A good-quality photograph reflects a good-quality food item. Fish, fruits, and vegetables must appear "fresh" on the menu. This stimulates customers' appetites. Restaurateurs may have to hire a professional photographer to do so. Poor reproduction of photographs may ruin the nicely done physical menu, otherwise. Likewise, unnecessary photos may interrupt the primary purpose in promoting particular items on the menu.

The qualities of good photos, which are basically based on using the full spectrum of colors (Shock, Bowen, & Stefaneli, 2004) may intrigue customers' interests. The four-color separation using filters (black, yellow, magenta, and cyan), though developed separately (Kotschevar & Withrow, 2008), otherwise, can still be recognized by human eyes. The appearance of the color on the photograph, as a result of the four-color filtering processes, may appear closer to the original.

PAPER

In designing the physical menu, choosing the appropriate paper is vital. Various materials from fabric, wood, rice, chemical, and fiber compounds can be used to make papers (Scanlon, 1985). Shock, Bowen & Stefaneli (2004) stated that for the professionally-printed physical menus, approximately 40% of the cost covers the cost of paper. Matte-finish, or coated-paper, and shiny-finish are two types of selecting paper (Shock, Bowen, & Stefaneli, 2004). When a decision is made, the chosen type of paper determines the menu characteristics – overall size and design, the actual use of colors and illustrations, durability, and printing expenses.

Identifying basic facts about papers may assist the menu planner to make consideration which paper is the most suitable one for the menu design. This is essential in communicating appropriately with the printer shops/outlets to obtain the best possible result at a reasonable cost (Scanlon, 1985).

The Menu Cover

To give a better impression, heavier paper is required. A heavy paper, or known as the cover stock paper, is common used for menu covers. Soil resistant materials, such as plastics, may be used to laminate the cover so it becomes longer-lasting. The weight of the cover stock paper should be thicker than the normally used papers for the menu items, say about 0.006 inches thick (Kotschevar & Withrow, 2008). Type of laminating for the menu cover should either be thin or thick, and either doff or glossy. The appropriate choice on cover Physical Menu Design: One Important Marketing Tool in Restaurants

stock paper may show brighter (for glossy lamination), or less-bright (for doff lamination).

If the menu is represented to have a classical look and is highly decorative, it may reflect accidentally that the operation is overly expensive because the restaurants may have used-up lots of money on a publishing the physical menu. To provide softness sensations like silk, linen, or leather, some covers may be padded with strong plastic or other materials. It is possible to use a less-expensive printed menu paper that usually comes from lighter-weight paper inside the heavy cover. If the menu is discard-able, such as the placemat-type menu, it requires only a lightweight stock paper (Kotschevar & Withrow, 2008).

The first thing that customers see is the menu cover. This menu cover should reflect the identity of the restaurant's image. A well-designed menu cover should attempt to present the image, style, and cuisines of the restaurant (Reid & Bojanic, 2009). Management attitude may also be determined by both the cover design and the restaurant physical menu. Hence, a good cover design is important to relay influence on the overall menu and all menu items contained within. This is to say that if the physical menu is actually covered with some sorts of stains, for instance, immediate assumptions may likely emerge that the restaurants are unclean and may also be unorganized.

Characteristic of Paper

Based on the physical format of menu, variation of papers may be required. For example, if the restaurants would like to have a two-panel-multipage format, two type of papers may have to be considered. The type of ink and printing process may direct the type of paper to be used on the physical menu (Kotschevar & Withrow, 2008). The weight between 210 to 310 gsm is the most suitable paper to be used as menu. Less than the 210 gsm, the paper may feel like pages in magazines, books, or brochures. The paper's potential shelf-life is also another significant factor to be considered. Coated-paper, for example is undoubtedly attractive. However, it cracks when folded.

Figure 7: Characteristics of Papers					
Type & Weight of Paper					
Weight (in gsm ¹)	A2	Weight (in gsm)			
310, 260, 210	AP	170			
150, 100	AC	200			
150	Coated paper	170			
220,120	Albatross	85			
220, 120	Glossy Photo Silky	180			
118	Glossy photo Premium	180			
118, 270	Korean Cloth	260			
118	Canvas Matte	180			
250	Sticker Vynil Glossy	118			
150	Sticker Vynil Transparent	118			
250	Sticker Vynil Matte	118			
100	Flexi Korea	120			
	Type & We Weight (in gsm ¹) 310, 260, 210 150, 100 150, 100 220, 120 220, 120 118 118, 270 118 250 150 250 100	Type & Weight of PaperWeight (in gsm1)A2310, 260, 210AP150, 100AC150, 100AC150Coated paper220,120Albatross220, 120Glossy Photo Silky118Glossy photo Premium118, 270Korean Cloth118Canvas Matte250Sticker Vynil Glossy150Sticker Vynil Transparent250Sticker Vynil Matte			

Physical Menu Design: One Important Marketing Tool in Restaurants

Source: (StuCo, Ltd, 2012; Micro Format, Inc, 2014)

Paper Textures

Analyze the texture and the opacity of the paper is also menu planner's responsibility. Since customers will likely hold the physical menu in their hands, texture is one important factor to ponder. Paper texture can range from slight rises, such as the one in a wood grain, to a rough/coarse surface, including other desirable texture, such as in velvet or suede. For example, parchment has a lush texture, which has a power to convey some sorts of elegance.

Opacity of paper, on the other hand, means inability to see through. The strength of the ink, or the use of color may be the reason to consider the opacity of the chosen paper. Highly opaque paper may have to be used against heavy/bold ink. Transparent, or less-opaque paper, tend to create artistic effects on the physical menu (Kotschevar & Withrow, 2008).

¹ "gsm" stands for "grams per square meter". The higher the gsm, the heavier the paper (StuCo, Ltd, 2012).

MENU COPY

Once the physical menu design with the lists of items and prices is completed, the management may now consider the menu copy of the physical menu. According to Scanlon (1985), menu copy simply means the written descriptions on the menu items. Such descriptions are essentials in trying to provide some explanations on the menu items individually. Of course, this is to promote the restaurants as well while attempting to inform the customers on the available products/services. The actual descriptions, known as the menu copy, are regarded as one avenue toward promotional activities. The best descriptions on the menu items may likely trigger interests and stimuli willingness to try (Scanlon, 1985). Well-written menu copy definitely assists customers in making the proper purchase decision (Shock, Bowen, & Stefaneli, 2004). As the categorizations of the menu copy elements, merchandising, accents, and descriptions, have the potentials in showing how well the restaurants use the physical menu as one possible marketing tool.

MERCHANDISING COPY

Merchandising copy refers to the written sections on a menu that promote the restaurants. It provides several important information included on menu copy such as the name, address, and telephone number of the restaurants. This includes type of available services, such as credit card acceptance, private rooms, take-outs, catering facilities, entertainment, and special events. Displaying other additional information may also catch customers' attention. For example, historical events, cultural events, maps, stories on local characters, the history of the restaurant, or even the story behind specific cuisines.

The decision to implement merchandising copy will rely on the management, style, location, and available cuisines of any particular restaurants. It should be noted, however, the general format on the physical menu and the availability of space may have to be considered to accommodate the intention on making merchandising copy. As stated in the previous studies, successful restaurants use menu merchandising to define the concept of restaurants, assign customer expectation to match the dining experience, and emphasize a powerful marketing tool that catch customer attention (Scanlon, 1985).

ACCENT COPY

The advantage to put accent copy is to indicate particular interests or individual menu selection through creative names and headings. Accent copy also used for merchandising, when appropriate, as long as the accent copy is kept interesting, clean, and simple. Especially important is to avoid confusing customers with the list of items on the menu. For instance, instead of stating "Assorted Cheeses", it would be more attractive to say "An Array of Creamy Brie, Tangy Muenster, and Sharp of Cheddar Cheeses". It is necessary to list the names of items appropriately as if to increase customers' understanding (Scanlon, 1985). Several outlets in Indonesia, accent heading use selected terms, which are directly connected to the ocean as a way to introduce ocean-based food. Restaurants like "Saung Telaga", "Bandar Djakarta", or "Dinar Seafood", for instance, are just a few examples on Indonesian-based oceanic food. Continuing with the themes of the restaurants, accent copy is defined to develop particular names for entrees, such as: shrimp, crab, fish, or squid for barbeque, steamed, roasted, or marinated. For Indonesian entrees, the accent copy could be stated as Udang Galah Goreng Mentega (hand-buttered marinated prawn), Kepiting Soka Saus Tiram (oyster-sauced mussles), or Ikan Asar Maluku (Asar fish from Maluku) for instance.

DESCRIPTIVE COPY

The list of items on the physical menu is usually accompanied with descriptions to give a clear explanation of the items to the customers. Since accent copy only lists the name of individual dish without an explanation, a descriptive copy is important to introduce such an item. As the name of items stand out, descriptions on menu items should include the main ingredients, secondary ingredients, and method of preparation. The intention is to intrigue customers' interests toward making immediate willingness to purchase. In turns, this pushes-up sales generation. Descriptions on menu items tend to create images in the customers' minds, both on the concepts of the restaurants, and the perceptions of value. The better the descriptive copy, or the descriptions on menu items, the higher the

perception of value.

Baiomy, Jones, Elias & Dinana (2013) confirmed that explanation on the menu that described in more details tend to raise favorable feeling. Research show that an average of 27% sales increase is experienced by restaurants with detailed descriptive copy. As mentioned, the better descriptions on the menu, the higher the customers' perception on value. This includes not only on the particular menu items that the restaurant offers, but also on the overall value of the restaurant. Like it or not, the better descriptions on the menu impact future repeat purchases. Hence, restaurants may want to enhance their descriptions on menu to start experiencing returning customers. Some explanations may contain the embedded selling power to enhance the customers' meal experience. For example, rather than stating "fried" in method of preparation, it is better to state "hand-battered". The descriptive words, such as "marinated", "roasted, or "cooked on wood" tend to be more attractive from the customers' perspective (Baiomy, Jones, Elias, & Dinana, 2013).

Truth in Menu Laws

If the written descriptive words on the menu items are targeted to potentially increase sales, restaurateurs have a right to advertise restaurant product in the best possible manner as well. Claiming a dish is something that it is actually not, can lead to violation of the truth in advertising. This fuels false expectations in the customers' mind (Scanlon, 1985). Ensuring accuracy in the descriptive words on the menu items is important as an adherence to the local consumer protection laws and regulations on truth in menu. It is crucial that restaurants should objectively enact the "Truth in Menu" policy, or may be better described as "Accuracy in Menu" to avoid potential lawsuits and/or fraudulent claims on food and beverages from customers (Barth, 2001).

Accuracy in menu should fully reflect the dishes pictured, and the price charged on the customers' bills conform to the physical menu. If the menu price is included mandatory service charges, these must be well-informed on the menu. Descriptive copy is one area to be closely-monitored since descriptions on food attributes, including the preparation style, ingredients, origins, and nutritional figures are explicitly mentioned here (Barth, 2001). Accurate descriptions of menu items are the critically significant aspect on meeting customers' expectations and boosting potential level of satisfaction (Scanlon, 1985)



Source: (Barth, 2001)

(1) Preparation Style

A menu should accurately reflect the preparation technique in the kitchen. Aside from legal requirements, it helps to confirm the operation's credibility to the customers. The way that the dishes are prepared is becoming a growing consideration of customers' decisions. Brolied-based dishes may become the favorable choices than fried-based dishes. Moreover, terms of product, such as "homemade", or "fresh", has also become one of marketing efforts in enhancing particular products on the menu. The term of "homemade" is commonly referred to any products, which are produced on the premises. The term of "fresh" implies that the products are fresh, not canned, dried, frozen, or previously processed, otherwise (Barth, 2001).

(2) Ingredients

As mentioned above, lists of ingredients on the physical menu shares a lot of knowledge to customers. These ingredients may hold the key on customers' choice. When arranging the items on the menu with a list of ingredients, the actual product should be precisely matched with those illustrated on the physical menu. For example, when a menu offers steaks, which are served with accompaniments of fries, salad and a small bowl of barbeque sauce, upon delivery, the steak should resemble the prime beef, and the accompaniments should also be similar. The customers shall be informed upon ordering when substitutions may have to be made. Since customers are increasingly health-conscious, including those who are vegetarians, for instance, the menu planner

and restaurateurs may not have any choice, but to provide accurate lists of ingredients (Barth, 2001).

(3) Geographical/Local Origin of Food

A great impact on potential sales can be achieved through the fact whether an item and/or ingredients are imported or domestic. Baiomy, Jones, Elias & Dinana (2013) stated local food dishes and national specialties from particular countries and regions can be used as the basis of food origins. These types of food may become the iconic products that capture the essence of the restaurants. While promoting a region in Indonesia, the customers' culinary experience can be enhanced through reflecting the culinary traditions of a region. *Sup Konro Makasar, Ayam Betutu Bali, Nasi Gudeg Jogjakarta,* or Jakarta's own *Kerak Telor,* are some examples on regional-based food in Indonesia. Describing similar menu items, which are actually coming from other regions, and may cost less to purchase, may be deceptive. This may be dangerous if the customers realize that the food may not be originally sourced-out from the stated regions. It may jeopardize the level of customer satisfaction and their likelihood in returning to the restaurants. To make the story worse, those dissatisfied restaurants may likely inform their friends and relatives about the incidents.

(4) Size and Weight of Food

If dishes on the menu are described by size or weight, upon delivery, an appropriate amount must be served. The customers' willingness to pay for a meal are often determined by the size of the product. Various cuts of beef should be set up at an appropriate price, For example, 8 ounces steaks might be displayed for \$17.95, while the 12 ounce might be tagged for \$23.95 (Reid & Bojanic, 2009). It is important for restaurant operations to deliver what were displayed in the physical menu (Scanlon, 1985).

(5) Dietary and Nutritional Claims

With the numbers of health chronic conditions and diseases increasing, customers may have significant concerns on nutritional information in restaurant menus. According to recent statistics, the number of obesity has jumped from

12% in 2007 to 21% in 2010. This has also become as a trend in Indonesia. The statistics in Indonesia indicated that there are than 30 million people who are considered overweight (The Jakarta Globe, 2013). Consciousness toward sugar, sodium, caffeine, and cholesterol level in many foods have already been familiarized by the general public. Products with certain nutritional benefits, or limited amounts of additives may have to be planned carefully by both menu planner and restaurateurs.

Labeling menu becomes the major requirement on providing nutritional information and calorie/fat content (Pulos & Leng, 2010). Increasing demand on calorie and fat may originally provoke by the health literacy. Health literacy is simply defined as the ability of customers in obtaining and using pertinent information to control their health (Pulos & Leng, 2010). Longevity has affected individual's eating patterns. Hence, there is an increase in the need for the nutritional information on restaurant menus. In a study conducted by Buchanan (2011), providing nutritional information on the menu would create a positive impact for restaurants. This is to say that the menu which provides nutritional information describes the quality of a product indirectly.

MENU AS MARKETING TOOL

Marketing implies series of efforts in reacting to customer demands and understanding certain trends in the demographic area to develop customer sales. In terms of this restaurant study, such series of efforts attempt to understand how customers would want to spend their money when they have decided to come to restaurants. In this case, it becomes obvious that marketing refers to efforts to ensure proper operation to improve turnover, sales, and eventually the percentage of margin (Scanlon, 1985).

The main concern in marketing is to satisfy both customer needs and wants. If customers are satisfied, there are higher chances that restaurants can increase the sales volume (Kotler & Keller, 2009). Marketing as an important efforts toward sales development. In restaurants, the physical menu plays as a critical role as one marketing tool that restaurants must possess (Marković, Raspor, & Šegarić, 2010). As previously stated, the physical menu becomes the tangible marketing tool in trying to increase sales while enhancing interactive communication with customers.

CUSTOMER SATISFACTION

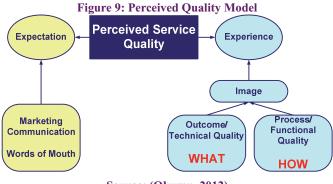
Providing high value to customers has been the goal for businesses. If the products and services can actually exceed customers' expectations, customers tend to have higher level of satisfaction. The contrary is also true, if any businesses fail to satisfy the customers, there are high chances that customers will not return to the same business establishment again. Also, those customers will likely look for other businesses. If a customer is satisfied, he/she is likely returning and becoming regular patrons for the business. The returning customers increase the potential margin for the businesses since no promotional efforts are necessary to lure them back into the companies. In fact, those satisfied customers may likely promote their experience through word of mouth to friends and relatives, and invite them to also visit the business establishments (Okumu, 2012). This story is also applicable to restaurants, undoubtedly.

THEORY OF CUSTOMER SATISFACTION

Over the years, hospitality industry has effortlessly applied the necessary knowledge to maintain customer retention and further establishing long-term competitiveness. The ability to accurately judge customer satisfaction poses the challenge in hospitality industry (Hsu & Wu, 2013). The judgment on the level of customer satisfaction represents the results in making the necessary comparisons between customer expectations and customer perceptions. If the level of customer perception falls-short of the expectation, the expectation is negatively disconfirmed, which means that the customer is dissatisfied. On the other hand, if the overall products/service performance in the restaurants is relatively superb, the customer perception exceeds the expectation. This pushes-up the satisfaction level of customers.

According to Kotler & Keller (2009), customer satisfaction is defined as the overall customer feeling whether pleasure (or disappointment, otherwise) from comparing a product/service performance with the customer's initial expectations. Service quality, product quality, and value-based prices represent 3 major factors to secure good customer value. If one of these is ignored, poor

outcomes may be the results. Though the price and product are relatively good, but if customers' experience is somewhat unsatisfactory, the overall "image" of the restaurant's aspects become negative. This chains of events may eventually lead to customer dissatisfaction (Okumu, 2012). The above figure shows the perceived service quality model to connect customers' expectations and experiences.



Source: (Okumu, 2012)

According to the above perceived quality model, customers may eventually findout the comparisons between expectations and their direct experience, including the level of service quality performed by the restaurants. As mentioned earlier in the above paragraphs, when the quality of experience exceeds the quality of expectation, this brings-about a positive outcome to customers. Ultimately, the level of customer satisfaction rises (Okumu, 2012).

Business establishments rely so much on customers because customers become the crucial factor in creating sales. With higher sales, margin and profitability are expected to rise as well. The main responsibility of the business owners are to think of ways in achieving customer satisfaction (Ghimire, 2012). Of course, the only way is to concentrate on the needs and wants of customers. Customer loyalty can only be achieved when organizations have successfully satisfied the needs of customers. Such level of satisfaction is parallel to the willingness to continue their purchases from the same organizations. With the word of mouth, those customers are willingly recommend to associates, colleagues, friends and relatives (Lovelock & Wirtz, 2011). Retaining customers is, of course, a big challenge. Not only due to the tight competition, but also due to the skills, knowledge and attitude of business owners and employees to constantly offering best quality of products/services around the clock. Unless the organizations are natural monopoly, otherwise, unsatisfied customers will definitely leave any organizations that pay no attention to the quality (Tayyab & Rajput, 2014). Restaurateurs should always aim toward customer satisfaction and customer loyalty (Lovelock & Wirtz, 2011).

Customer satisfaction helps the organization to maximize profit for the business. Satisfied customers may well be automatically visiting the restaurants repeatedly. Perhaps, such visits not only include repeat buying, but also purchasing more products/services that those customers may not be thinking otherwise. Leveraging on those satisfied customers, marketing/promotional costs can be obviously reduced. With the lower marketing/promotional costs, the organizational margin increases. The customers' word-of-mouth has certainly relayed benefits to restaurants (Ghimire, 2012).

CUSTOMER EXPECTATIONS VIA MENU INFORMATION

Menu information is simply defined as the assumption of customers in measuring the actual service received from a service provider (Buchanan, 2011). The successful restaurants are immensely affected by overall customer expectation of service. The menu information acts like the service provider. Eventually, customers' decisions to purchase are heavily influenced by the information provided on the menu.

The information provided on the menu plays an integral role in assisting customers to establish a general idea of the products they are looking forward to receive. The menu serves as the visualization object to influence the customers' brain. Visualization object is defined as the part of the visual area of the brain that is able processing visual information about appearances of object in terms of color, size, shape, and size. (Kozhevnikov, Blazhenkova, & Obana, 2010). The physical menu in restaurant assists customers to be able to visualize the

product if the menu item is followed by photographs and short descriptions. The visualization process becomes complete upon product delivery; whether or not the products are similar to what was originally displayed on the menu (Kotschevar & Withrow, 2008).

A lot of consideration of aesthetic appeal is usually used as significant factor in the menu creation processes. Besides, its function as a sales instrument, the menu information has an additional function to provide nutritional information. The amount and quality of information on the menu is related to nutritional information has made a significant contribution for consumers with health awareness. Since customers are living in an information sensitive environment, a value consideration of items on the menu is required before the customer makes their final purchasing decision (Buchanan, 2011).

CUSTOMER SATISFACTION VIA MENU INFORMATION

The primary source of information for customer when dining in a restaurant depends on the physical restaurant menu. It is crucial to design the physical restaurant menu as attractive as possible to get the close engagement from the customers. As previously mentioned, menu descriptions, nutrition facts, and visual format are the particular elements that customers are mainly looking for. According to Hsu & Wu (2013), customers are expected to see the nutrition fact, production information and food preparation on the menu. These sets of information are commonly referred to as Customer Information Expectation of the Restaurant Menus (CIERM). The actual content of the physical menu is ultimately holding the major effect on customer satisfaction (Hsu & Wu, 2013).



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Constantly measuring overall customer dining satisfaction is part of restaurateurs' duties to ensure that their restaurant operation is on the right track to meet customer needs. In measuring customer satisfaction, restaurateurs look at all aspect that may potentially affect the dining experience; from the initial ordering experience to presenting the bill to customers (Buchanan, 2011). Customers have tendencies to have different perspectives on satisfaction by simply comparing restaurants with good physical menu designs and those restaurants with not so good physical menu designs. Although restaurants with not so good menus are also able to gain sales due to the delicious dishes, however, the customer satisfaction is shaped after the products is delivered. As mentioned earlier, the restaurant should create a positive continuous vibration from beginning until the customer perceives the quality of the product and service (Shock, Bowen, & Stefaneli, 2004). A good and attractive physical menu design creates some degrees of satisfaction for customers during their ordering process. The level of satisfaction may likely sustain when the products are actually delivered and the products appear similar to the pictorial illustration on the physical menu.

Though many authors have provided different definitions and measurements on customer satisfaction, the expectancy disconfirmation theory has been widely accepted to explain customer satisfaction and dissatisfaction. If the performance of a specific product/service is able to exceed the initial proposed expectation, there is positive disconfirmation which leads to customer satisfaction. Ironically, however, if the performance does not match the initially proposed expectation, there is negative disconfirmation, which jeopardize the level of satisfaction (Bakrie & Elkhani, 2012). The above illustration describes the expectancy disconfirmation theory with the inter-relationship among expectation, perceived performance, disconfirmation, and satisfaction.

EFFECT OF CUSTOMER SATISFACTION ON CUSTOMER LOYALTY

When satisfaction occurs, it should eventually be a continuous manner. Customers, who are totally satisfied with performance, tend to build loyalty over time (Deng, Lu, Wei, & Zhang, 2010). Since customer satisfaction indicated the

degree of a customers' positive feeling toward the service provider in restaurants, it is important for the service providers to also understand the customers' vision on their services. A high-level of customer satisfaction may likely positively impact customer loyalty (Deng, Lu, Wei, & Zhang, 2010). Of course, for every businesses, customer loyalty becomes the lifeblood toward sustainability. Since loyalty is commonly measured by the intention to make repurchases, including willingness to make recommendations (Lovelock & Wirtz, 2011), it is apparent the vital life-line of customer loyalty to businesses, in general.

The primary goal of ensuring customer satisfaction is customer loyalty since loyal customers are the best advocate for businesses. Employees could also be encouraged to become advocates for businesses by learning the customers' needs and wants. Instead of merely offering products/services to customers, personal relationships with customers certainly add value (Kandampully, 2007). In the Japanese management approach, employees are informed constantly to maintain good relationships with customers. This personal relationships with customers help businesses to maintain their existence even during the most turbulent market conditions (Kandampully, 2007).

PREVIOUS STUDIES

The following table shows some studies pertinent to the physical menu design as the tool on restaurants' marketing activities.

Title	Variables	Findings
1. Menu Design: Can Menu Sell? (Bowen & Morris, 1995)	Menu Design: gaze- motion studies Menu Study: menu treatment	Menu design can increase sales of accompanying items to the main course meals. Positioning the visualization of products on the menu influences sales
2. An Examination of	Physical Restaurant	Electronic tablet-based menu is
Electronic Based	Menu: appearance on	increasing customer satisfaction
Menus For	the menu, use of color,	during ordering experience than

Table 2: Previous Empirical Research

Title	cal Menu Design: One Important Marketi Variables	Findings
Restaurant Industry	layout on the menu,	the paper-based traditional menu.
(Buchanan, 2011)	typeface, illustration	···· ····
	and graphic design.	Users experienced greater
		usability from the use of the
	Changes in menu:	electronic tablet-based menu
	kiosk, and electronic	than paper-based menus
	menu	
	Customer Satisfaction: usability, perceived control, and novelty	
3. Menu as Marketing		Menu is an important marketing
Tools: Developing a	Menu as Marketing	tool and through the use of rich
Resort Hotel	tool: menu	descriptions of menu items
"Restaurant Menu	merchandising, menu	indicating provenance and a
Typology" (Baiomy, Jones,	design and layout, description on the	sense of place, a resort hotel restaurant can communicate to
Elias, & Dinana,	menu, menu trends	guests the promise of a unique
2013)	intena, intena a entas	experience and add value
4. A Review on Literature on Restaurant Menus: Specifying the Managerial Issues (Ozdemir & Caliskan, 2013)	Menu Management Issues: menu design, menu pricing, menu operating, menu analysis, and menu development	Menu management issues consist of menu design, menu pricing, menu operating, menu analysis, menu development influences the meal experience of customers in restaurant.
5. Importance of Customer Satisfaction in Waskia Restaurant	Total Quality Management: customer relationship management	Customers of Waskia restaurant were either satisfied or very satisfied with the Waskia restaurant performance, particularly in terms of restaurant
(Okumu, 2012)	Measuring Customer Satisfaction: ServQual, instrument, quality	portion size and the taste of the portions.
	function employment,	Customer satisfaction brought a
	and voice of customer	positive impact onto customer
	analysis	loyalty.

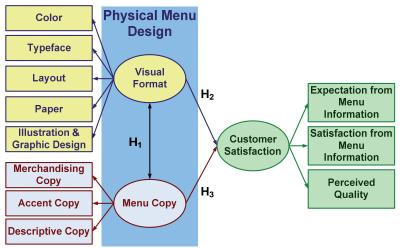
Source: various

DIFFERENCES IN RESEARCH

The differences between those previous studies and the current study are as follows;

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- This study concentrates on one seafood restaurant in Jakarta, Indonesia. As a mere comparison of the physical menu design, another smaller-scaled café in BSD City, Serpong, Tangerang is used.
- 2. This study attempts to provide an empirical evidence on the inter-relatedness of the variables, which are based on visual format, menu copy, and customer satisfaction.
- 3. This study attempts to provide an empirical evidence on the explanatory power of the selected indicators of color, typeface, layout, paper, illustration and graphic design (to approximate visual format), merchandising copy, accent copy, and descriptive copy (to approximate menu copy), expectation from menu information, satisfaction from menu information, and perceived quality (to approximate customer satisfaction).
- 4. As a qualitative comparison, another smaller-scaled café in Tangerang, Indonesia is used to evaluate the potential differences in their physical menu design.



RESEARCH MODEL

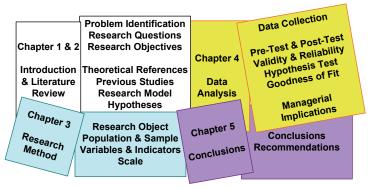
HYPOTHESES

Referring to the research model, as illustrated above, the hypotheses in this study are encircled on the following:

- H_1 : There is a significant positive relationship between visual format and menu copy of the physical menu design
- H_2 : There is a significant positive relationship between visual format of the physical menu design and customer satisfaction.
- H₃ : There is a significant positive relationship between menu copy of the physical menu design and customer satisfaction.

RESEARCH METHOD

This section lays-out the research method in analyzing the available data pertinent to the physical menu design and customer satisfaction. The following section provides an illustration on the research process.



RESEARCH PROCESS

TYPE OF STUDY

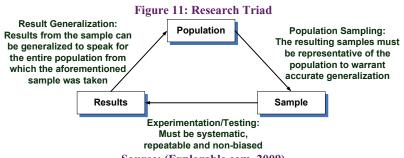
This research relies on a descriptive approach. A descriptive approach could be identified as an attempt to gather knowledge about particular objects. A descriptive approach is also identified as a statistic method which attempts to analyze data using descriptions (Cooper & Schlinder, 2013; Hale, 2015). A descriptive study, generally, provides information on variables in certain conditions (Hale, 2015).

This research seeks to find the relationship between physical menu design, which are separated into visual format and menu copy, and customer satisfaction with their respective indicators. The relationship between the variables and the indicators are explored and described based on the available data. This study also incorporates both quantitative and qualitative approaches to identify the significance of influence of the physical menu design onto the level of customer satisfaction in restaurants.

POPULATION AND SAMPLE

The target population in this study is all people, who have visited, are visiting, and will visit the chosen restaurant to dine-in. Since that is the targeted population in this study, the actual number of the total population may not be known precisely.

Since this research is a case study, which is aimed only at one particular restaurant in the Northern part of Jakarta, in the Gading Food City, the sampling method may not be fully conforming to the probability sampling method, of either simple random, cluster, stratified, or systematic (Cooper & Schlinder, 2013). Instead, a non-probability convenience sampling is incorporated in distributing the questionnaire during certain days and hours of the restaurant's operational activities.



Source:	(Exnl	lorah	le com	2009)
Source.	(LAP)	101 401		200 /

Table 3: Sample Size Determination		
Data		
Estimate of True Population	0.5	
Sampling Error	0.1	
Confidence Level	95%	

Intermediate Calculation	
Z-value	-1.9600
Calculated Sample Size	96.0365

Result	
Sample Size Needed	97
Source: PHSt	at

Though this research may not be conforming to the parametric study, a sample size approximation based on PHStat is used. As shown, with the 50% estimate that the true proportion from the population is drawn, at a tolerable sampling error of 10%, but still reaching for the 95% level of confidence, the minimum number of respondents should be at least 97.

METHOD OF DATA COLLECTION

Both from primary and secondary data are obtained to support the intention in performing the quantitative and qualitative analysis.

Primary data represents to all data, which are primarily obtained by the researcher. In this study, the primary data relies on responses on the distributed questionnaire inside the chosen restaurant (Sarwono, 2014). The scale used is mainly nominal and Likert scale to note the responses.

The primary function of the nominal scale is to gather categorical data, which in this study is about demographical information on the respondents. As an illustration, female or male respondents are categorized as "1" to represent "female", and "2" to represent "male".

The Likert scale, on the other hand, is used to measure the respondents' attitude concerning the statements on the questionnaire. Though it is highly debated, the most-common Likert scale relies on 5 different choices; "1" to "5" to denote "strongly disagree" to "strongly agree", or any other combinations otherwise. The question design is as follows;

Table 4: Question Design						
Variables, Definition & Author(s)	Dimensions	Indicators	Statements			
		Color	 The use of overall color on the menu is attractive. The choice of color on the menu reflects the overall restaurant character, such as; type of cuisine, interior, concept. 			
Physical Menu Design: The most important aspect of the actual	Visual Format of Menu Design:	Typefaces	 The use of font in the menu is attractive. The size of the lettering helps me to read and understand the material on the menu easily. 			
marketing in which restaurant items are presented and determine how well these items will sell.	A number of components from the graphics and printing crafts.	Layouts	 The categorization or composition of the dishes on menu could be identified easily. The information that listed on the menu is well-structured and organized. 			
		Illustrations & Graphic Design	 Pictures of dishes on the menu help me to decide my selection of food more quickly. 8. Illustration & graphic design on the menu is well-presented. 			

Table 4: Question Design

Variables,			
Definition &	Dimensions	Indicators	Statements
Author(s)			
		Paper	 9. It is necessary for the restaurant concept to be put on the menu cover. 10. The type of paper used for the menu needs to complement the concept of restaurant.
	Menu Copy: the written description on the menu that is used	Merchandising	 It is important to place the restaurant's background on the menu. If, plenty of restaurant information put on the menu, it will distract me from selecting food.
	to sell the individual food selection, promote the restaurant, and inform the customer of the	Accent Copy	 13. The names of the dishes match the theme of restaurant. 14. The dishes sold on the menu match the name of the restaurant.
	services the restaurant has to offer (Scanlon, 1985)	Descriptive Word	15. Menu descriptions enable me to determine my food selection.16. The explanation of dishes on the menu is easy to understand.

	Physical Menu Design: One Important Marketing Tool in Restaurants					
Variables, Definition & Author(s)	Dimensions	Indicators	Statements			
		Truth in Menu	 I am notified of the menu ingredients of the food that I order. I understand how my food selection will be prepared. Knowing the local origin of food is important The food portion size is recommended to be displayed on the menu. 			
Customer Satisfaction The overall		Expectation through Menu Information	21. I am confident with what I order from the menu22. I am able to visualize what my order will look like.			
customer feeling whether pleasure or disappointment from comparing a product and service performance with the customer		Perceive Quality	23. The dishes I order on the menu matches with service provided.24. I am pleased with the dishes that I selected from the menu.			
initial expectation. (Kotler & Keller, 2009)		Satisfaction through Menu Information	25. I am satisfied with the ordering process.26. In general, I feel clearly informed about the dishes listed on the menu.			

The qualitative-based data collection is conducted via interview with the professional menu designer. This qualitative data could be used as additional information to support the data for better understanding on the topics on physical menu design and customer

satisfaction.

The sets of questions for the interviews are as follows;

- Q₁: Why do you think physical menu design is one of the important factors for restaurants?
- Q₂: What are the important considerations in creating menu design?
- Q₃: Do you think elements such as; color, typefaces/fonts, illustration and graphic design, and paper are able to reflect the restaurant's concept? What additional features are you going to implement?
- Q4: Why is it necessary to display photographs of food products on the menu?
- Q₅: Why do you think it is necessary to put restaurant's background, such as; history of restaurant, signature items, and important personalities on the menu?
- Q₆: Do you think the menu is a major marketing tool in a restaurant? Are there any marketing tools that you could think as a part of the menu?
- Q₇: How would a good physical menu design able to achieve customer satisfaction in restaurants?
- Q₈: What do you think about restaurants that do not care about their physical menu design because they have already a pool of loyal and growing customer base?

Secondary data is obtained from books, journals, magazines, newspapers, electronic sources, websites, government records, including the company profile.

RESEARCH QUESTIONS AND HYPOTHESES

As previously mentioned, the research questions and hypotheses are as follows;

	Filysical wenu Design. One important warketing Tool in Restaurants				
	Table 5: Research Questions & Hypotheses				
_	Questions	Hypotheses			
	Is there any significant positive	There is a significant positive			
#1	relationship between visual format	relationship between visual format			
# 1	and menu copy of the physical menu	and menu copy of the physical menu			
	design in restaurants?	design in restaurants.			
	Is there any significant positive	There is a significant positive			
# 2	relationship between visual format of	relationship between visual format of			
# 2	the physical menu design and	the physical menu design and			
	customer satisfaction in restaurants?	customer satisfaction in restaurants.			
	Is there any significant positive	There is a significant positive			
#3	relationship between menu copy of	relationship between menu copy of			
# 3	the physical menu design and	the physical menu design and			
	customer satisfaction in restaurants?	customer satisfaction in restaurants.			

DATA TESTING

The following section lays-out the process in data tests, which cover the pre-test and post-test

PRE-TESTING

Before conducting the actual research, it is advisable to conduct pre-testing. Pretesting may rely on 30 respondents. The primary purpose of conducting pre-test is to verify the level of validity and reliability of the data. Validity and reliability are 2 different issues. Validity does not guarantee reliability, and of course, reliability does not even guarantee validity. This pre-test ensures whether the respondents are responding properly to the sentences on the questionnaire (Cooper & Schlinder, 2013).

POST-TESTING

When pre-testing results can show the satisfactory levels on validity and reliability, the distributions of questionnaire can be continued to reach the targeted sample, as initially planned. Similar to what have been performed for the pre-test, the post-test also calculates the level of validity and reliability of

VALIDITY AND RELIABILITY TESTS

VALIDITY TEST

Validity test measures whether the data collected can be used in the research. In fact, the accuracy of any research is determined via the level of the validity test (Cooper & Schlinder, 2013).

The measurement of this validity relies on the SPSS' KMO & Bartlett's test. The steps for the validity test are follows (Ghozali, 2004; Santoso, 2009; Schumacker & Lomax, 2004; Wijaya, 2009):

- In SPSS, click "File" > "Open" > "Data", and choose the correct file to be computed
- 2) Click "Analyze" > choose "Dimension Reduction" > "Factors"
- 3) Select and move all variables into the variables table column. This means moving from the left side to the right side
- Click "Descriptive" > choose "KMO & Bartlett's test of Sphericity" in "Correlation Matrix" > click "Continue"
- 5) Click "Extraction" > check "Factor to Extract" > change to value "2"
- 6) Change number of iterations for convergences to "100" > click "Continue" > Click "OK"
- 7) On the output screen, scroll down to the section entitled "KMO & Bartlett's test". If value is above 0.5, it means that the data set is considered valid (Ghozali, 2004; Santoso, 2009; Schumacker & Lomax, 2004; Wijaya, 2009).

RELIABILITY TEST

Reliability test refers to the degree to the available data is relatively consistent across different respondents. Cronbach's Alpha is utilized to note the level of reliability (Ghozali, 2004; Santoso, 2009; Schumacker & Lomax, 2004; Wijaya, 2009);

- In SPSS, click "File" > "Open" > "Data" and choose the correct file to be computed
- 2) Click "Analyze" > "Scale" > "Reliability Analysis"
- 3) When the reliability analysis dialogue box appears, transfer the listed items from left to right side.
- Click on "Statistic Box" > Select "Item", "Scale", and "Scale if Item Deleted", then click "Continue"
- 5) On the output screen, scroll down to the header "Reliability Statistics". If the standardized value is shown above 0.7, it means that the data set is considered reliable (Ghozali, 2004; Santoso, 2009; Schumacker & Lomax, 2004; Wijaya, 2009).

METHOD OF ANALYSIS

After the pre-test and post-test are done, the data must be analyzed further using AMOS to develop a path diagram from the collected data. Structural Equal Modeling ("SEM") targets to determine how far the theoretical model can be actually supported empirically. SEM is known to have the ability to combine regression models, path analysis, confirmatory factor, variance structure, and correlation structure (Schumacker & Lomax, 2004). This means that as a statistical technique, SEM can be used to analyze the simultaneous strengths of hypothesis relationships among variables, both directly and indirectly via intervening variables. The results are compared with the set of criteria to ensure that the data set forms an acceptable factor and path analysis, as shown in the research model.

In SEM, there are 2 commonly-referred-types of variable definitions; latent and observed variables (Schumacker & Lomax, 2004);

- Latent variables, which are also known as constructs, factors, unobserved, latent exogenous (for independent latent variable), or latent endogenous (for dependent latent variable), are variables that cannot be directly measured and calculated. Due to the limitations on these types of variables, these latent variables need assistance from other types of variables to provide values to provide some approximations.
- Observed variables, which are also known as measured, indicators, or endogenous, are variables that can be directly measured and calculated. These types of variables provide the necessary supports toward latent variables.

Some of the advantages of using SEM as compared with the regression analysis are (Mustafa & Wijaya, 2013; Schumacker & Lomax, 2004);

- SEM requires less time in trying to determine the level of overall fitness of the research model's variables and indicators.
- With SEM, only one test is required to ensure the inclusion of all data, including the explanatory power on each of the indicators and hypothetical relationships among variables. In comparison to the regression analysis, multiple steps are necessary to reach at the similar conclusion, particularly on the results of the hypothesis tests.

GOODNESS FIT CRITERIA

The results on SEM's hypothetical relationships among variables and indicators are usually measured against several set of criteria. Such criteria determines how good the available data fits the prescribed research model. Some competing criteria on the goodness of fit are shown below;

Table 6: Criteria on Goodness of Fit					
Recommended Standard Values/Parameters					
Criteria	According to Schumacker and Lomax, 2004; Wijaya, 2009	According to Ghozali, 2004; Santoso, 2009			
χ^2 (Likelihood ratio chi square statistic) as a testing tool to check the overall fitness of a model)	Smaller χ ² value from a model is better	Smaller χ^2 value from a model is better			
p-value	p-value ≥ 0.05 is better	Bigger p-value is better			
CMIN/df (normed chi square)	$CMIN/df \le 2$ is better	CMIN/df \leq 5 is better			
RMSEA (Root Mean Square Error of Approximation)	RMSEA ≤ 0.08 is better	RMSEA \leq 5 is better			
GFI (Goodness Fit Index)	GFI value closer to 1 is better	GFI value closer 1 is better			
AGFI (Adjusted Goodness of Fit Index)	AGFI value closer to 1 is better	$AGFI \ge 0.09$ is better			
TLI (Tucker Lewis Index)	TLI value closer to 1 is better	$TLI \ge 0.09$ is better			
CFI (Comparative Fit Index)	CFI value closer to 1 is better	CFI value closer to 1 is better			
NFI (Normal Fit Index)	-	$NFI \ge 0.09$ is better			
PNFI (Parsimonious Normal Fit Index)	-	Higher PNFI value is better			
PGFI (Parsimonious Normal Fit Index)	-	Higher PGFI value is better			
RMR (Root Mean Squared Residual)	$RMR \le 0.05$ is better	$RMR \le 0.05$ is better			
Reliability	Reliability ≥ 0.70 is better	Reliability ≥ 0.70 is better			

Source: (Ghozali, 2004; Santoso, 2009; Schumacker & Lomax, 2004; Wijaya, 2009)

In general, the matrix notations used in this study are; $\eta = \beta \eta + \Gamma \xi + \zeta$, where;

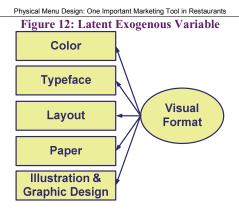
- η = "eta" to show a vector of the endogenous concept
- β = "beta" to show a matrix of the structural coefficients
- Γ = "gamma" to show a matrix of the structural coefficients
- $\xi =$ "xi" to show a vector of the exogenous concept
- $\zeta =$ "zeta" to show a vector error of the theoretical model

The matrix notations for the latent exogenous of the visual format of the physical menu design in this study are; $X = \Lambda_x \xi + \delta$, where;

- X = a vector of the observed exogenous indicator
- Λ = "lamda" to show a matrix of the structural coefficients
- $\xi =$ "xi" to show a vector of the exogenous concept
- $\delta =$ "delta" to show a vector error of the theoretical model

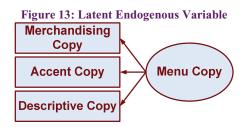
With those general matrix notations for the latent exogenous of the visual format of the physical menu, details can be formulated for each of the indicators of the visual format;

- $X_1 = \lambda_{11}^{(x_1)} \xi + \delta_1$ to show the relationship between color and visual format of the physical menu design
- $X_2 = \lambda_{21}^{(x_2)} \xi + \delta_2$ to show the relationship between typeface/font and visual format of the physical menu design
- $X_3 = \lambda_{31}^{(x_3)} \xi + \delta_3$ to show the relationship between layout and visual format of the physical menu design
- $X_4 = \lambda_{41}^{(x_4)} \xi + \delta_4$ to show the relationship between paper and visual format of the physical menu design
- $X_5 = \lambda_{51}^{(x_5)} \xi + \delta_5$ to show the relationship between illustration and graphic design and visual format of the physical menu design



The matrix notations for the latent endogenous of the menu copy of the physical menu design in this study are; $Y = \Lambda_x \eta + \epsilon$, where;

- Y = a vector of the observed endogenous indicator
- Λ = "lamda" to show a matrix of the structural coefficients
- η = "eta" to show a vector of the exogenous concept
- $\varepsilon =$ "epsilon" to show a vector error of the theoretical model



Likewise, with those general matrix notations for the latent endogenous, details can be formulated for each of the indicators of the menu copy of the physical copy design;

- $Y_1 = \lambda_{11}^{(Y_1)} \eta_1 + \varepsilon_1$ to show the relationship between merchandising copy and menu copy of the physical menu design
- $Y_2 = \lambda_{21}^{(Y_2)} \eta_1 + \varepsilon_2$ to show the relationship between accent copy and menu copy of the physical menu design

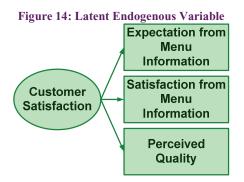
• $Y_3 = \lambda_{31}^{(Y_3)} \eta_1 + \varepsilon_3$ to show the relationship between descriptive copy and menu copy of the physical menu design

For the customer satisfaction, as this variable also follows the pattern of the latent endogenous, the matrix notations are similar to the previous equation; $Z = \Lambda_x \eta + \epsilon$, where;

- Z = a vector of the observed endogenous indicator
- Λ = "lamda" to show a matrix of the structural coefficients
- η = "eta" to show a vector of the exogenous concept
- $\varepsilon =$ "epsilon" to show a vector error of the theoretical model

Likewise, with those general matrix notations for the latent endogenous, details can be formulated for each of the indicators of the customer satisfaction used in this study;

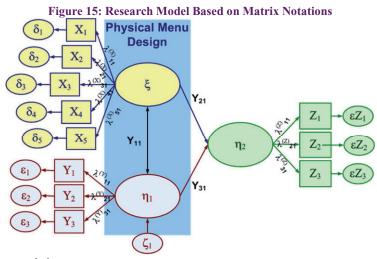
- $Z_1 = \lambda_{11}^{(Z_1)} \eta_2 + \varepsilon Z_1$ to show the relationship between expectation from menu information and customer satisfaction.
- $Z_2 = \lambda_{21}^{(Z_2)} \eta_2 + \varepsilon Z_2$ to show the relationship between satisfaction from menu information and customer satisfaction.
- $Z_3 = \lambda_{31}^{(Z_3)} \eta_2 + \varepsilon Z_3$ to show the relationship between perceived quality and customer satisfaction.



From the following matrix notations, the research model in this study can re-drawn by incorporating the applicable matrices to conform to SEM. As seen in the following

illustration, the applicable matrices are as follows;

- 1. $X_1 = \lambda_{11}^{(x_1)} \xi + \delta_1$ indicates that color = a function of visual format of the physical menu design + error.
- 2. $X_2 = \lambda_{21}^{(x_2)} \xi + \delta_2$ indicates that typeface/font = a function of visual format of the physical menu design + error.
- 3. $X_3 = \lambda_{31}^{(x_3)} \xi + \delta_3$ indicates that layout = a function of visual format of the physical menu design + error.



- 4. $X_4 = \lambda_{41}^{(x_4)} \xi + \delta_4$ indicates that paper = a function of visual format of the physical menu design + error.
- 5. $X_5 = \lambda_{51}^{(x_5)} \xi + \delta_5$ indicates that illustration and graphic design = a function of visual format of the physical menu design + error.
- 6. $Y_1 = \lambda_{11}^{(Y_1)} \eta_1 + \varepsilon_1$ indicates that merchandising copy = a function of menu copy of the physical menu design + error.
- $\frac{7. \quad Y_2 = \lambda_{21}^{(Y_2)} \eta_1 + \varepsilon_2 \text{ indicates that accent copy} = a \text{ function of menu copy of the}}{\frac{\text{Aditya Nova Putra, Pudyotomo A Saroso & Samuel PD Anantadjaya}}{\text{Page 60 of 109}}$

physical menu design + error.

- 8. $Y_3 = \lambda_{31}^{(Y_3)} \eta_1 + \varepsilon_3$ indicates that descriptive copy = a function of menu copy of the physical menu design + error.
- 9. $Z_1 = \lambda_{11}^{(Z_1)} \eta_2 + \varepsilon Z_1$ indicates that the expectation from menu information = a function of customer satisfaction + error.
- 10. $Z_2 = \lambda_{21}^{(Z_2)} \eta_2 + \varepsilon Z_2$ indicates that the satisfaction from menu information = a function of customer satisfaction + error.
- 11. $Z_3 = \lambda_{31}^{(Z_3)} \eta_2 + \varepsilon Z_3$ indicates that the perceived quality = a function of customer satisfaction + error.

The next step is to evaluate the unidimensionality² of constructs and reliability of constructs based on the criteria of goodness of fit (Ghozali, 2004; Santoso, 2009; Schumacker & Lomax, 2004; Wijaya, 2009), particularly on chi-squares (as low as possible), p-value (more than 5%), RMSEA (less than 1), GFI (closer to 1), AGFI (closer to 1), TLI (closer to 1), CFI (closer to 1), NFI (closer to 1), PNFI (higher), and PGFI (higher).

Once the model conforms to the criteria of goodness of fit, it is also important to test the normality of the structural model. To do so, the parameters on critical ratio skewness value is used at approximately \pm 2.58 at the level of significance of 0.01. This simply means that the data set is normally distributed if the critical ratio skewness value lies between -2.58 and +2.58 (Ghozali, 2004; Schumacker & Lomax, 2004; Wijaya, 2009).

Multicollinearity test is another step in the data analysis. Covariance matrix with a relatively small determinant can be used to note the presence of multicollinearity (or

² The unidimensionality simply refers to the underlying assumptions toward calculating the level of reliability. This is shown in indicators of construct with acceptable fit of one single factor (one dimensional) model. The general acceptable level of reliability is at least 0.70 for exploratory studies. It should be understood that the level of reliability does not guarantee validity. Validity denotes the measurement to note whether or not the indicators have accurately approximate what they were intended to calculate.

singularity) in the data set. This signals that the data set cannot be used for further statistical processes (Ghozali, 2004; Schumacker & Lomax, 2004; Wijaya, 2009).

DATA ANALYSIS & RESULTS

RESTAURANT OVERVIEW

The chosen restaurant in this study is Sari Laut Ujung Pandang. This restaurant is originally established in 1997 at the Gading Food City, in the Northern part of Jakarta. The location at the Gading Food City is really a culinary destination, which is clustered with more than 20 restaurants; Western food, Chinese food, Indonesian food, and countless of seafood. As the name of this restaurant explicitly implies, Sari Laut Ujung Pandang is a family-based restaurant, which focuses on authentic and original Makassar-based seafood. The signature dishes include *Ikan Bakar Kudu Kudu* (Barbeque Kudu Kudu fish), *Ikan Pecah Kulit* (fish), *Otak-Otak Makassar* (grilled fish cake from Makassar), and *Es Pisang Ijo* (green banana ice), all with reasonable prices.

This restaurant has more than 120 outdoor seats, and 70 indoor seats. With the daily business hours from 4 PM to 11 PM, this restaurant caters for dinner hours while also offering the perfect place to hang-out with colleagues and friends immediately after office hours. This restaurant targets families and office employees, particularly employees of the nearby offices. Over the weekend, this restaurant is usually packed with families. On the weekdays, however, office employees often hang-out in this restaurant.

This restaurant offers tasty food and beverages. With the presence of the good physical menu design, it becomes easier for people to make decisions on the type of food they are going to have. The physical menu may have become the magnet to this restaurant.

RESPONDENT PROFILE

The following graphs are solely based on the 100 responses on the categorical demographic responses.

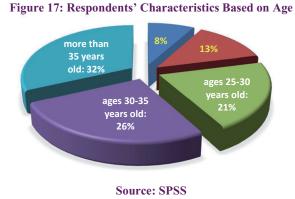
As shown in the graph, the majority of respondents are males at 57%.

Figure 16: Respondents' Characteristics Based on Gender



AGE

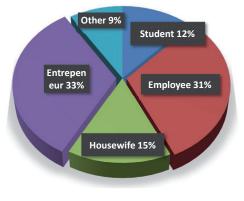
From the total of 100 respondents, the majority of the respondents are above 25 years old. This supports the target market of the restaurant, which are family and office employees.



OCCUPATION

From the total of 100 respondents, 33% of respondents are entrepreneurs.

Figure 18: Respondents' Characteristics Based on Occupation

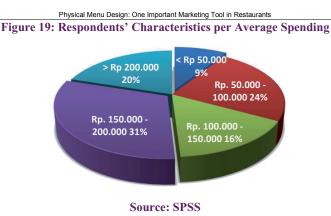


Source: SPSS

There are 31 respondents, who are employees, 15 respondents are housewives, 12 respondents are students, and 9 respondents are holding other types of jobs.

AVERAGE SPENDING PER VISIT

From the total 100 respondents, there are only 9 people who spent less than Rp. 50.000 in the restaurant. In addition, there are 24 respondents, who spent between Rp. 50.000 - Rp. 100.000, 16 of them spent between Rp. 100.000 - Rp. 150.000, 31 respondents spent between Rp.150.000 - Rp. 200.000, and 20 respondents spent above Rp.200.000 in the restaurant.



STATISTICAL ANALYSIS

As previously mentioned, this study relies on the distribution of questionnaires to respondents, who are the visitors to the restaurant Sari Laut Ujung Pandang in Gading Food City, in the Northern part of Jakarta. Once the responses are obtained, the data is analyzed for its validity and reliability. Eventually, the relationships among variables and indicators are tested to see the level of fitness of the available data onto the research model, which was originally developed based on theory, literature and previous studies.

PRE-TESTS & POST-TESTS

Reliability Tests

The purpose of using a reliability test is to identify whether the data is reliable to be used in this study. Based on 30 data (for pre-test) and 100 data (for post-test), the table below shows that 100% of data is considered reliable for both pre-test and post-test. Since the acceptable value of Cronbach's Alpha is at least 0.6, it shows that the 26 indicators used in this study are considered 97% reliable for the pre-test result, and 94% for the post-test result. This results indicate that further statistical tests can be carried-out.

Table 7: Reliability Tests (Pre-Test & Post-Test)					
		Pre-Test		Post-Test	
		Ν	%	Ν	%
Cases	Valid	30	100,0	100	100,0
	Excluded ^a	0	.0	0	.0
	Total	30	100.0	100	100.0

a Listwise deletion based on all variables in the procedure.

	Pre-Test	Post-Test	
N of Items	Cronbach's Alpha	Cronbach's Alpha	
26	.969	.939	

Source: SPSS, modified

Validity Test

The following table shows the results on validity test for both the pre-test and post-test. Based on KMO and Bartlett's tests, the level of validity increased from 61.9% for the pre-test to 77.6% for the post-test.

Table 8: Validity Test (Pre-Test)

		Pre-Test	Post-Test
Kaiser-Meyer-Olki Adequacy.	Meyer-Olkin Measure of Sampling cy.		.776
Bartlett's Test of	Approx. Chi-Square	698.100	1338.622
	Df	325	325
Sphericity	Sig.	.000	.000

Source: SPSS, modified

DESCRIPTIVE ANALYSIS

Since the level of validity and reliability on the post-test are relatively satisfactory, hypotheses tests can be processed. The first step is to analyze the basic statistics on the data set previously obtained from the questionnaire.

Table 9: Descriptive Statistics						
	Ν	Minimum	Maximum	Mean	Std. Deviation	
CLR	100	1.50	5.00	3.8500	.80560	
TPF	100	1.50	5.00	3.9200	.77759	
LYT	100	1.50	5.00	3.8850	.81605	

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Ν	Minimum	Maximum	Mean	Std. Deviation
100	1.50	5.00	3.9750	.82992
100	1.00	5.00	3.8700	.86638
100	1.50	5.00	3.8800	.79810
100	1.00	5.00	3.8950	.78591
100	1.67	4.83	3.8550	.65805
100	1.50	5.00	3.8950	.74296
100	1.00	5.00	3.8550	.84774
100	1.50	5.00	3.8000	.77525
	100 100 100 100 100 100 100	100 1.50 100 1.00 100 1.50 100 1.60 100 1.67 100 1.50 100 1.67 100 1.50	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	100 1.50 5.00 3.9750 100 1.00 5.00 3.8700 100 1.50 5.00 3.8800 100 1.00 5.00 3.8800 100 1.00 5.00 3.8950 100 1.67 4.83 3.8550 100 1.50 5.00 3.8950 100 1.50 5.00 3.8950 100 1.50 5.00 3.8550

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Source: SPSS

The above table shows the basic descriptive statistics on the data. From the averages, it can be derived that respondents tend to relatively agree to all of the indicators used in this study. This means that all indicators used in this study are perceived to have some degrees of approximation onto the prescribed variables.

DATA ANALYSIS

With the results of reliability and validity are considered acceptable, hypotheses tests are possible. The following illustration shows the interconnections among variables used in this study, including the explanatory power of each of the chosen indicators to approximate the respective variables.

The abbreviations used in the above SEM are as follows; CLR: Color, TPF: Typefaces, LYT: Layout, ING: Illustration and Graphic Design, PPR: Paper, MRCH: Merchandizing, AC: Accent Copy, DC: Descriptive Copy, EMI: Expectation through Menu Information, PQ: Perceived Quality, and SMI: Satisfaction through Menu Information

Below are the relationships among variables:

1. Visual Format to Customer Satisfaction

From the result above, it shows that the relationship between Visual Format and Customer Satisfaction is 82%. Visual Formats is one of the important elements in physical menu design, which consists of several components, such as; paper, colors, illustration and graphic design, typefaces and layout. The positive correlation means that visual format of the restaurant's physical menu design influences the level of customer satisfaction, as much as 82%. At this rate, it may be concluded that the

appearance of the physical menu may be attractive enough for the customers (Hsu & Wu, 2013). A good appearance of the menu gives high contribution onto creating good first impression to customers. This relays the positive vibrations to customers that their experience in restaurant may be positive (Shock, Bowen, & Stefaneli, 2004).

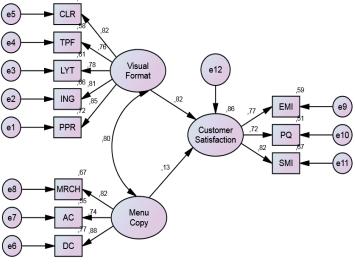


Figure 20: AMOS Model

Source: AMOS

2. Menu Copy to Customer Satisfaction

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The relationship between the Menu Copy and Customer Satisfaction is shown at 13%. Though it is relatively weak than originally expected, it still shows some degrees of relationship. It appears that the written descriptions on the menu may not affect the level of customer satisfaction in Sari Laut Ujung Pandang. Although the restaurant attempts to establish communication with customers, this may not be seen as a factor that boosts memorable experience in that restaurant (Baiomy, Jones, Elias, & Dinana, 2013). This means that visualization of the food and beverages contribute more to the level of customer satisfaction than the detail description that the restaurant may have attempted to provide. Customers appear to feel satisfy when they can know what their food and beverages may look like (Baiomy, Jones, Elias,

& Dinana, 2013). Unfortunately, this result also shows that though the descriptions of dishes are considered necessary, and the descriptions of restaurant background should also increase value, such theory does not conform empirically.

3. Visual Format

In this study, the visual format is a dimension to represent the elements of the physical menu design. Based on AMOS' structural model, the model shows relationship between visual format and the indicators.



Figure 21: Examples on Visual Format

Source: (Restoran Sari Laut Ujung Pandang, 2014)

- Color has 82% explanatory power toward Visual Format. At this rate this is considered high. This is to say that the choice of color on the menu contributes to the formation of visual format as much as 82%. Perhaps, the use of blue, which reflects relaxation, customers feel at home and enjoy themselves during their dining experience (Buchanan, 2011). Also, since the types of cuisine in Sari Laut Ujung Pandang focuses on seafood, the color blue appears to have suited well in reflecting the intended seafood concept and types of cuisine.
- Typefaces has 76% explanatory power toward Visual Format. This means that the use of typefaces contribute to the formation of visual format as much as 76%. This finding corresponds to what Kotschevar & Withrow (2008) has previously studied. They stated that the appropriate size of typefaces is 10 or 12 for the

menu items, 9 or 10 for the descriptions below each of the items, and 18 for headings/categories.



Figure 22: Comparison of Examples on Visual Format

Source: (Tutup Panci, 2015)

- Layout has 78% explanatory power toward Visual Format. This means that layout contributes 78% toward the formation of visual format. The use of categories and segregations of food and beverages appears to have contributed to the ease of identifying the chosen items. This result conforms to what has been previously studied by Pavesic (2005), who stated that the menu items will sell more if menu items are laid-out strategically than randomly placed (Pavesic D. V., 2005).
- Illustration and Graphic Design have 81% explanatory power toward Visual Format. This means that the presence of illustration and graphic design contribute 81% toward the formation of visual format of the physical menu design. The use of drawings, decorative patterns, and pictures on the menu may have been visualized as simple, yet attractive. The use of professionally-taken pictures of food and beverages are important to introduce how the real presentation of the product will look like. This assists customers in visualizing food and beverages in their mind (Shock, Bowen, & Stefaneli, 2004).

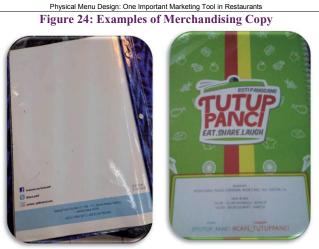


Figure 23: Examples on Layout, Illustration & Graphic Design

Source: (Tutup Panci, 2015)

- Paper has 85% explanatory power toward Visual Format. This means that the choice of type of papers for the physical menu contributes 85% toward the formation of visual format. As studied in Sari Laut Ujung Pandang, the menu cover uses a heavier paper. This seems to conform to the previous studies as a way to extend a good impression and conveys elegance to customers when they hold the physical menu in their hands (Kotschevar & Withrow, 2008).
- 4. Menu Copy

As stated earlier, Menu Copy is an indicator used to approximate the physical menu design. Based on AMOS' structural model in the above figure, the model shows correlations between visual format and its indicators.



Source: (Restoran Sari Laut Ujung Pandang, 2014; Tutup Panci, 2015)

• Merchandising Copy has 82% explanatory power toward menu copy. This means that use of merchandising copy contributes 82% toward the formation of menu copy of the physical menu design. Realistically, the history of restaurants and specific cuisines shown on the menu are able to better define the concept of restaurants, and enable the physical menu design to become a powerful marketing tool. Some important information, such as name, address, telephone number, and social media support the ways how menu copy promotes restaurants.

Figure 25: Examples on Accent Copy



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Source: (Restoran Sari Laut Ujung Pandang, 2014)

- Accent Copy has 74% explanatory power toward menu copy. This means that accent copy contributes 74% toward the formation of menu copy of the physical menu design. The names of dishes listed on the physical menu are matched with the name of the restaurant and type of cuisines offer. Names of dishes, such as; *kerang hijau khas Lombok* (mussels from Lombok), *ikan baronang* (baronang fish), and *udang* (prawns) are the names of dishes that correspond to the seafood-based cuisines.
- Descriptive Copy has 88% explanatory power toward menu copy. This means that descriptive copy contributes 88% toward the formation of menu copy of the physical menu design. At this rate, descriptive copy represents the highest explanatory power on menu copy in comparison to other indicators mentioned above in estimating menu copy, which are accent copy and merchandising copy. The accompanied descriptions on every dish to explain the ingredients and how the dishes would likely to be prepared appear to be showing the greatest impact on the customers, who are trying to make decisions on what they are going to have from the restaurants. Since the descriptive copy aims to better introduce each of the foods and beverages that restaurants attempt to offer, it may have provided the empirical evidence on the importance of the menu descriptions.



Figure 26: Examples on Descriptive Copy

Source: (Restoran Sari Laut Ujung Pandang, 2014; Tutup Panci, 2015)

5. Customer Satisfaction

To approximate the level of customer satisfaction, this study incorporates 3 indicators, which are; expectation via menu information, customer perceived quality, and satisfaction via menu information. From the results of the structural model, it is known that the overall values of each of the indicators are relatively showing adequate level of explanatory power toward customer satisfaction.

• Customer expectation via menu information has 77% explanatory power toward customer satisfaction. This means that the customer expectation based on the available menu information contributes 77% toward the formation of customer satisfaction. When customers make decisions based on the menu information,

somehow such decisions are shaping the customers' expectations on what the foods and/or beverages would actually look like. Upon delivery, if the appearance of foods and/or beverages mirror to what have been illustrated and described on the physical menu, customers' expectations are relatively met. This increases the level of satisfaction. Hence, it is safe to conclude that when restaurants are able to deliver the foods and/or beverages as close to what have been illustrated, the chances are 77% of the time, customers are satisfied.

- Customer perceived quality has 72% explanatory power toward customer satisfaction. This means that the customer perceived quality based on the available menu information contributes 72% toward the formation of customer satisfaction. When customers make decisions based on the menu information, somehow such decisions are shaping the customers' perceived quality on what the foods and/or beverages. Upon delivery, if the appearance of foods and/or beverages mirror closely to what have been illustrated and described on the physical menu, customers' perceived quality are fulfilled. This means that what was originally perceived, upon delivery, such a perception has become a reality. Undoubtedly, this increases the level of satisfaction. It is safe to conclude that when restaurants are able to deliver the foods and/or beverages as close to what have been illustrated, the chances are 72% of the time, customers are able to transform their perception of quality into actual experience. This boosts the level of satisfaction.
- Satisfaction via menu information has 82% explanatory power toward overall customer satisfaction. This means that satisfaction via menu information contributes 82% toward the formation on overall customer satisfaction. In this case, customers are able to visualize the foods and beverages based on the physical menu. Customers' expectations commence as they begin to take a look for dishes they are going to order from physical menu. Once the customers choose particular dishes from the menu, they would place an order, and expect something similar to what they have visualized from the physical menu. Upon delivery, if the foods and beverages are different, customer dissatisfaction occurs. The first satisfaction occurs when customers are able to order any dishes upon arrival into the restaurant. The second satisfaction occurs when the foods and beverages are delivered consistently match to what have been illustrated on the physical menu. In trying to continuously measure the overall level of

customer satisfaction, the restaurant Sari Laut Ujung Pandang have taken a closer look into all aspects that potentially influence the overall dining experience; from the initial ordering experience when the menu is presented, the products and services offering, and until the bills are presented to customers. Such initiatives certainly conform to what have been previously researched by Buchanan (2011), to simply note all aspects of the restaurant to enhance customers' memorable experience (Buchanan, 2011).

MODEL FIT SUMMARY

The following table shows the criteria to determine the goodness of fit of the research model based on the empirical data, which are taken at Restaurant Sari Laut Ujung Pandang

Criteria	According to Schumacker and Lomax, 2004; Wijaya, 2009	According to Ghozali 2004; Santoso, 2009	Model Value	Goodness Fit
_ CMIN/df	≤ 2 is better	\leq 5 is better	2,998	Acceptable
RMSEA	\leq 0.08 is better	\leq 5 is better	0,143	Acceptable
GFI	closer to 1 is better	closer 1 is better	0,882	Acceptable
AGFI	closer to 1 is better	\geq 0.09 is better	0,809	Acceptable
TLI	closer to 1 is better	\geq 0.09 is better	0,856	Acceptable
CFI	closer to 1 is better	closer to 1 is better	0,893	Acceptable
NFI	-	\geq 0.09 is better	0,850	Acceptable
PNFI	-	Higher value is better	0,634	Marginal
Reliability	\geq 0.70 is better	\geq 0.70 is better	0,939	Acceptable

Table 10: Goodness of Fit & Results

Source: (Ghozali, 2004; Santoso, 2009; Schumacker & Lomax, 2004; Wijaya, 2009)

Based on the verification on the recommended standard value of the model fit, as shown above, it is safe to conclude that the available data gathered from questionnaire distributions to customers of Sari Laut Ujung Pandang are nicely on the theoreticalbased research model.

HYPOTHESES TEST RESULTS

The hypothesis testing uses path analysis using AMOS. The following table are the result of path analysis, the regression weights and standardized regression

			Р
Customer_Satisfaction	←-	Visual_Format	***
Customer_Satisfaction	←-	Menu_Copy	.371
PPR	←-	Visual_Format	
ING	←-	Visual_Format	***
LYT	←-	Visual_Format	***
TPF	←-	Visual_Format	***
CLR	←-	Visual_Format	***
DC	←-	Menu_Copy	
AC	←-	Menu_Copy	***
MRCH	←-	Menu_Copy	***
EMI	←-	Customer_Satisfaction	
PQ	←-	Customer_Satisfaction	***
SMI	←-	Customer_Satisfaction	***

Table 11: P-Values

Source: AMOS

According to the terms and condition of SEM, a relationship is considered significant if the p-value is actually less than 0.05 (Mustafa & Wijaya, 2013). The regression weights, as presented in the above table, shows that:

- The p-value of visual format toward customer satisfaction is indicated with ***, which means that the p-value is less than 0.05. Hence, it is safe to conclude that visual format significantly influences customer satisfaction.
- The p-value of menu copy toward customer satisfaction is at 0.371. Since this rate is more than 0.05, it is safe to conclude that menu copy insignificantly influences customer satisfaction.

The interpretation based on result above, there is only one hypothesis that indicates a significant influence. However, all of each indicator has shown significant influence to each of the variables. The results are summarized in the following table.

Table 12: Standardized Regression Weight			
Estimate			
Customer_Satisfaction	←-	Visual_Format	.817
Customer_Satisfaction	←-	Menu_Copy	.132
PPR	←-	Visual_Format	.847
ING	←-	Visual_Format	.810
LYT	←-	Visual_Format	.780
TPF	←-	Visual_Format	.761
CLR	←-	Visual_Format	.823
DC	←-	Menu_Copy	.875
AC	←-	Menu_Copy	.740
MRCH	←-	Menu_Copy	.818
EMI	←-	Customer_Satisfaction	.771
PQ	←-	Customer_Satisfaction	.717
SMI	←-	Customer_Satisfaction	.818

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Source: AMOS

HYPOTHESIS #1

The first hypothesis test reveals that there is a significant positive relationship between visual format and customer satisfaction. Knowing that the p-value is indicated with ***, which indicates a significant influence, the visual format of the physical menu design has a significant positive relationship with customer satisfaction. This means that H_1 is accepted. This conforms with what Buchanan (2011) has studied earlier that the appearance of the menu has a crucial role in restaurants' satisfaction. Hence, it is important that restaurants design attractive physical menus to catch customers' attention.

Table 1	3: H	ypothesis	Testing	Results
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	Hypothesis	Standardized Estimate	p-value	Result
H_1	$\begin{array}{c} \text{Visual} \\ \text{Format} \end{array} \longrightarrow \begin{array}{c} \text{Customer} \\ \text{Satisfaction} \end{array}$.817	***	accepted
H ₂	$\begin{array}{ccc} Menu & & Customer \\ Copy & \longrightarrow & Satisfaction \end{array}$.132	.371	rejected

HYPOTHESIS # 2

The second hypothesis test reveals that there is no significant positive relationship between menu copy and customer satisfaction. According to above table, at the p-value of 0.371, menu copy has a relatively weak influence and insignificant positive relationship with customer satisfaction. This means that H₂ is not accepted. Though the the previous research, Baiomy, Jones, Elias & Diana (2013) have stated that written descriptions should be able to enhance customer experience in assisting customers to choose their preference of dishes in restaurants, unfortunately, this does not occur in Sari Laut Ujung Pandang.

With that result, it is important to note that descriptions on menu items may not be regarded as important. Customers of Sari Laut Ujung Pandang may perceive visualization on foods and beverages as more influential, otherwise. On the other side, it can be concluded as well that Sari Laut Ujung Pandang may have to add more descriptions on menu items to stimuli the relationship between menu copy and customer satisfaction.

CURRENT CONDITION

The following graph shows the trend in terms of the growth rate on customer visits into the restaurant. In general, this graph shows the evidence on the existence of cyclical sales in Indonesia. The significant drop of customer visits occurred during the Islamic fasting month of Ramadan. Since people are fasting during the day, lunch hours are relatively empty in most restaurants. When those people are about to break their fast, dinner time appears to be the only time that most restaurants can start experiencing traffic-inflows. Once the fasting month is over, it is usually followed by a week-long holiday of Eid al-Fitr. Though the official holidays are only 2 days, nonetheless, employees tend to take a week-long holidays by taking advantage of their annual leaves to head for their home towns and spend time with family members. Since lots of workers/employees are away during this period, restaurants like Sari Laut Ujung Pandang experiences substantial drop in its customer visits during such a period.

Toward the end of the year, as well as the beginning of the year, the numbers of customer visits drop again. One of the reason is the Christmas season and new year

holidays. Approaching December, as people plan to spend time with families and relatives during the Christmas and new year breaks, the numbers of customer visits drop again. With the necessity in purchasing Christmas holidays and/or traveling during the new year holidays, spending budgets on dining-out have become less-prioritized. Entering January, household budgets may have been set aside toward school requirements for the children's brand new semester. From here, the trend is rising.



Source: (Restoran Sari Laut Ujung Pandang, 2015)

The following list shows the milestones and improvements that the restaurant has made since 2011 to anticipate the rise in customer visits.

Year	Activities & Improvements	Total New Investment (excluding labors, permits, and other necessary construction materials)
2011	Expanding to 50 tables with a maximum	• 12 tables at about Rp. 1 million/table = Rp. 12 million
2011	occupancy of 300 customers	 72 chairs at about Rp. 350,000/chair = Rp. 25.2 million

Table 14: The Restaurant's Milestones

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Year	Activities &	Total New Investment (excluding labors, permits, and other
	Improvements	necessary construction materials)
2012	Installing more air- conditioner, setting-up an air-conditioned room, and expanding to 60 tables with a maximum occupancy of 360 customers	 Total new investment = Rp. 37.2 million (about US\$ 3,500) 10 tables at about Rp. 1 million/table = Rp. 10 million 60 chairs at about Rp. 350,000/chair = Rp. 21 million 5 air-conditioner at about Rp. 3.5 million/unit = Rp. 17.5 million Wall-paper at about Rp. 8 million Glass windows at about Rp. 30 million Utensils, plates, and cutleries at about Rp. 9 million
		Total new investment = Rp. 95.5 million (about US\$9,550)
2013	Expanding to 70 tables with a maximum occupancy of 420	 10 tables at about Rp. 1 million/table = Rp. 10 million 60 chairs at about Rp. 350,000 = Rp. 21 million
	customers	Total new investment = Rp. 31 million (about US\$3,000)
2014	Feasibility study to open-up	another location in May 2015
2015	A second location is due to	open for public by May 25, 2015
Source: (Restoran Sari Laut Ujung Pandang, 2015)		

Source: (Restoran Sari Laut Ujung Pandang, 2015)

Due to the confidentiality nature of the data, the following graphical illustration is developed based on a mere approximation on average sales during the given months since 2014. Some of the assumptions used are as follows;

- 1. The average sales per table of only 4 customers/table is approximately Rp. 200,000 for the weekdays, and Rp. 350,000 for the weekends.
- 2. There are 70 available tables within the restaurant's premises in 2014. The additional 120 outdoor tables outside the restaurant's premises are excluded as those

tables belong to management of the building at Gading Food City. The use of those tables are relatively shared with other restaurants, cafes, and tenants.

Tuble 101 Hiteruge Hitehenry Sures			
		Average Daily Sales	Average Monthly Sales
		(in Rupiah for 70 available tables)	(in Rupiah in 18 weekdays/month, or 12 weekends/month)
Average Sales/table (18 weekdays – in Rupiah)	200,000	14,000,000	252,000,000
Average Sales/table (12 weekends – in Rupiah)	350,000	24,500,000	294,000,000
	Aver	age Monthly Sales	546,000,000

Table 15: Average Monthly Sales

Average Monthly Sales 546,0 Source: (Restoran Sari Laut Ujung Pandang, 2015)

With the total new investment of about Rp. 163.7 million, the average monthly sales of about Rp. 546 million, and assuming 90% applicable costs and charges of about Rp. 491.4 million, the average return on investment (ROI) is about 33.35%.

 $\frac{Net \ Income}{Total \ Investment} = \frac{\frac{Revenue - Cost}{Total \ Investment}}{\frac{546 \ million - (90\% * 546 \ million)}{163.7 \ million}} = \frac{\frac{546 \ million - (90\% * 546 \ million)}{163.7 \ million}}{\frac{54.6 \ million}{163.7 \ million}} = 0.33353$

Source: (Restoran Sari Laut Ujung Pandang, 2015)

At this rate, it is obvious that even at 90% assumed costs and charges, the restaurant is able to generate a relatively hefty ROI.

Equation 2: Average ROI with Fea	asibility Study & New Location
54.6 million	$=\frac{54.6 \text{ million}}{0.08226}$
163.7 million + 500 million	$-\frac{1}{663.7 \text{ million}} - 0.08220$

Source: (Restoran Sari Laut Ujung Pandang, 2015)

Assuming that the associated cost on feasibility study and opening the second location is about Rp. 500 million, for a total of Rp. 663.7 million, the restaurant's ROI drops to 8.23%, as shown in the above equation.

INTERVIEW RESULTS

The following section provides the results on interview with a professional menu designer to gather insights on the importance of physical menu design as a marketing tool in achieving customer satisfaction in restaurants.

The profile of the professional menu designer is as follows:

Name: Arto Soebiantoro, BSc, BFA Education: Academy of Art, San Francisco, California, USA Company: Gambaran Brand Indonesia Position: Managing Director

1) Why do you think physical menu design one of the important factors to the restaurant business?

It is absolutely important for restaurant business because it plays a role as one of tool that restaurant possesses to sell the product which is food and beverage. Basically, people have 5 sensory; sight, hear, taste, smell, and touch. In restaurant business, visual becomes the most important sensory aspect to create a memorable experience. Due to the visual impacts to the brain works, it is necessary to have a good physical menu design in restaurants since it will be the first attribute that customers see before they start shaping their perception on foods and beverages in any restaurants.

2) From your point of view, what are the most important considerations in creating good menu design?

Vision and mission of the restaurant should be clearly explained before designing a physical menu. The owners of restaurants should provide brief explanations on what kind of cuisines they are trying to offer, which market segment that they want to pursue on, and what the concept of restaurant would be. The products and services must be consistently delivered in accordance with what have been displayed on the menu.

3) Do you think elements such as; color, typefaces, illustration and graphic design, and paper are able to reflect the restaurant's concepts? What additional effort are you going to implement?

Yes, because the menu reflects all of the restaurant characteristics in terms of product, service, and atmosphere, other visual elements, such as; signage, entrance door, music, tables, and chairs represent also a communication tool in restaurant. This combination should be blended as one major consideration in creating good physical menu design. It is important that all of elements in restaurants should be related to each other as a way to enhance a good memorable experience to any customers.

4) Why is it necessary to display photographs of product on the menu?

The photographs are necessary to be featured on the menu because those photographs have positive impacts in stimulating the customers' appetites. One part of people's brain is called *mid brain/mesencephalon*, which functions as the visualization media. *Mesencephalon* starts working when individual sees the photographs of dishes, and it will send signals to the parts of the body that responsible in creating the sensation of appetite.

5) Why do you think it is necessary for restaurant to put restaurant background, such as; history of restaurant, signature items, and important personalities on the menu?

Today's reality, it is not just a matter of seeking a food when people go to restaurants. People have a perception to seek a good dining experience when they come to restaurants. This experience is part of people's lifestyle in this era. The stories in restaurants also become parts of the experience because there are always reasons why people come to restaurants. It is one opportunity to put a restaurant background on the menu, such as; history of restaurants, signature dishes/items, and important personalities from the Chefs. Those restaurant background indirectly increases the tastes of the foods and beverages. The increased tastes toward foods and beverages establish people's experience in the restaurants.

6) Do you think the physical menu design is a major marketing tool in a restaurant? Are there any marketing tools that you could think of to support the physical menu in restaurants?

Yes, menu is one of major marketing tools in a restaurant. But, it is not 100% marketing tool that restaurants may have possessed. Branding in restaurants may have to rely on multiple marketing tools. Hence, the physical menu presented should be designed appropriately to increase the chances of sales in restaurants. Waiters and/or waitresses in restaurants should also engage as the marketing people in trying to increase sales, perhaps, by offering signature dishes on the menu to customers.

Another way to establish branding in restaurants, include: uniforms, brochures, the use of social media, and the overall layout in restaurants. These have chances to build stronger brand awareness for the restaurants. That is the major reason why the physical menu in restaurants should be complementing the restaurants' other marketing activities to foster repeat patronage.

7) How does a good physical menu design able to achieve customer satisfaction in a restaurant?

Customers tend to be more satisfied if the menu assists them in placing orders. The satisfaction may well be prolonged if the restaurants are able to deliver products similar to what have been displayed on the physical menu. A physical menu in restaurants also should be combined with any other marketing tools to better communicate with bigger market and different criteria of customers. Menu a might be promoted through modern social media because these days, most people have relied on the use social media to search for restaurants. A delivery service is one of the examples where people can look at the menu online and place orders. This increases chances of more sales and grabbing wider markets that the restaurants may not able to serve, otherwise.

8) What do you think about the restaurants that do not care about their menu because they already have a loyal and growing customer base?

The primary function in designing the physical menu is one part of the supporting element to build branding in restaurants. The presence of the physical menu implies one tool to offer foods and beverages to customers. This is rather important, particularly when customers are visiting the restaurants for the first time. If customers have already visited the restaurants, and/or they may have some ideas what to order, they may not need such a physical menu to choose any dishes. As a rule of thumb, unless the restaurants just have few choices of dishes, they may not need a good physical menu. It may be beneficial to have a good physical menu,

particularly when the restaurants have more than 10 items to offer. When restaurants have signature dishes/drinks to offer, it is recommended to provide a good physical menu as a way to encourage innovation and creativity from the employees, and to maximize potential sales.

CONCLUSIONS & RECOMMENDATIONS

CONCLUSIONS

Based on the analysis on the importance of physical menu design in achieving customer satisfaction in restaurants, the following conclusions can be proposed:

1. Statistically, visual format of the physical menu design has a strong significant positive relationship towards customer satisfaction in restaurant Sari Laut Ujung Pandang. The strength of the relationship is 82%. This indicates that visual format of physical menu in Sari Laut Ujung Pandang restaurant has 82% chances in boosting customers' dining satisfaction.

Based on interview, the professional menu designer admits that the physical menu in restaurant has a crucial role in as a visualization tool to better communicate with the customers. This is important to influence customers' selection on foods and beverages, particularly those foods and beverages, which are not going to be chosen on the absence of the physical menu design. The visual format is a part of individual's visual distribution since individual's visual becomes an essential sensory in shaping memorable experiences. Thus, it is important in designing the appropriate visual format of the physical menu to introduce the restaurants' characteristics, concept, and cuisines.

2. Statistically, menu copy of the physical menu design has insignificant positive influence towards customer dining satisfaction in Sari Laut Ujung Pandang restaurant.

Based on interview, the professional menu designer assumes that written descriptions, such as; history of the restaurant, important personalities, the list of menu items, and clear explanation of dishes are essential to put on the menu in order to create better dining experience. Menu copy, or written descriptions on the menu, includes the main ingredients, interesting secondary ingredients, and method of preparation, with the purpose of providing explanations, but also to catch customers' interests in introducing the available foods and beverages. The presence

of menu copy also helps customers in assessing the best food/beverage preferences.

RECOMMENDATIONS

This research has successfully found the relationship between the visual format of the physical menu design and customer dining satisfaction in Sari Laut Ujung Pandang. Based on the analysis, the following are recommended;

- Referring to the importance of physical menu design, it is always recommended that business owners or restaurateurs should have good physical menu designs as their restaurants' marketing tool. This is essential to relay better communication between the restaurants and customers. A physical menu must be designed appropriately. It may be valuable to maintain cooperation with menu designers in creating good physical menu. Since the visual format of the physical menu influences 82% of the level of customer dining satisfaction, it is important for restaurants' owners and management to pay attention to the appearance of the physical menu. The physical menu should resemble the restaurant's image.
- 2. Based on the analysis, the visual format element of the physical menu in Sari Laut Ujung Pandang restaurant has reflected well the restaurant's image as a seafood restaurant. Generally, the physical menu should be updated twice a year. Hence, it is necessary for Sari Laut Ujung Pandang restaurant to put an effort to continuously improve the physical menu design to be increasingly attractive over time. Apart from possibility in adding more dishes on the physical menu, design on the visual format also should be modified, say, from its color combination, the use of different fonts, layouts, illustrations and graphic designs, and the choice of papers.
- 3. Statistically, the element of menu copy of the physical menu design has an insignificant influence toward the level of customer dining satisfaction in Sari Laut Ujung Pandang restaurant. Though the strength of the influence is not as strong as originally expected, it does not mean that menu copy is not important. It remains essential for the management to consider inserting clear written descriptions on the dishes for easy reading and understanding.

GLOSSARY

- Accent copy: The use of creative names for dishes or the headings of courses to highlight or draw attention to these sections on the menu.
- Basic menu design: The shape and size of a physical menu as well as the number of menu pages and panels used.
- Coated Paper: Paper stock that has been treated with a layer of chemicals to form a coated surface
- Colors of the rainbow: Three color vision based on the three primary colors of red, yellow, and blue on printing.
- Contrast: Initial technique used in highlighting and the use of different color, typefaces, and blank space in render the advantage in legibility to read.
- Customer Satisfaction: The overall customer feeling whether pleasure or disappointment from comparing a product and service performance with the customer initial expectations.
- Customer Expectation: Assumption of customer about service delivered and it is with this assumption that customers measure the actual service.
- Descriptive Copy: The written account of an individual dishes, describing the item's Ingredients or style of preparation.

Focal Point: Where the eyes focus on location on the menu

Gaze Motion studies: The way how someone looks at a menu

Homemade: The products have been produce on premises or in the kitchen

Illustration: Drawing or diagrams of particular subjects

- Health literacy: The ability of consumers to obtain and use information which will concern carefully to control their good health.
- Layout: The arranged placement of all the graphic and mechanical elements of a physical menu.
- Lightening: The amount of white space that surrounds a letter or line of type; a technique used to highlight or draw attention to a section of the menu.
- Menu Copy: The written description on the menu that is used to sell the individual food selection, promote the restaurant, and inform the customer of the services the restaurant has to offer.
- Merchandising copy: The written sections on a menu that provides basic information about the restaurant, such as the restaurant's address, hours of service, telephone number, and restaurant history
- Panel: The shape of the cover of the physical menu. A two panel menu has the form of an open book; a tri panel menu resembles a page folded into thirds.
- Perceived Quality: Customer satisfaction formed from their expectation of the service by comparing with the actual service encountered.
- Truth in Menu laws: Implementation to ensure accuracy in the wording on menus given from various laws and regulation defined.
- The Four Color Separation: The original photographed four times through different filters that are black, yellow, magenta, and cyanide (bright blue).

Typeface: The name designated to a style of type, such as Helvetica, Arial, and so on.

ABBREVIATIONS

AC:	Accent Copy
CIERM:	Customer Information Expectation of Restaurant Menus
CLR:	Color
DC:	Descriptive Copy
EMI:	Expectation through Menu Information
GSM:	Gram per Square meter
ING:	Illustration and Graphic Design
LYT:	Layout
MRCH:	Merchandising
PPR:	Paper
PQ:	Perceived Quality
SMI:	Satisfaction through Menu Information
TPF:	Typefaces

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APPENDIX A – QUESTIONNAIRE

Respondent's Background

Please mark (X) in the appropriate box corresponding to your answer.

Gender	() Male () Female
Ago	() 15-20 () 20-25 () 25-30
Age	() 30-35 () above 35
Occupation	() Student () Employee () Housewife
Occupation	() Entrepreneur () Other
Spending	() Below 50.000 () 50.000 – 100.000
Power per	() 100.000-150.000 () 150.000-200.000
visit	() Above 200.000

Please mark (X) in the appropriate box corresponding to your rank score, as follows:

3: Neutral

1: Strongly Disagree	2: Disagree
4: Agree	5: Strongly Agree

No	Statements	Po	ssib	le A	nswe	ers
110	Statements	1	2	3	4	5
1.	The use of overall color on the menu is attractive.					
2.	The choice of color on the menu reflects the overall restaurant character, such as; type of cuisine, interior, concept.					
3.	The use of typefaces on the menu is attractive.					
4.	The size of the lettering helps me to read and understand the material on the menu easily.					
5.	The categorization/composition of the dishes on the menu can be identified easily.					
6.	The information that listed on the menu is well structured and organized.					
7.	Pictures of dishes on the menu help me to decide my selection of food more quickly.					
8.	Illustration and Graphic design on the menu is well presented.					
9.	It is necessary for the restaurant concept to be put on the menu cover					

No	No Statements 0. The type of paper used for the menu needs to	Po	ssib	le A	nsw	ers
		1	2	3	4	5
10.	complement the concept of restaurant.					
11.	It is important to place the restaurant background on the					
	menu.					
	If, plenty of restaurant information put on the menu					
	distracts me in food selecting.					
13	The names of the dishes match with the theme of					
	restaurant.					
14	The dishes sold on the menu match with the name of the					
	restaurant.					
	Menu descriptions enable me to determine my selection					
	of food.					
16	The explanation of dishes on the menu is easy to understand.					
	I am notified of the menu ingredients of the food that I order					
	I understand how my order will be prepared.					
	Knowing the local origin of food is important.					
	The food portion size is recommended to be displayed					
201	on the menu.					
	I am confident with what I order from the menu					
-	I am able to visualize what my order will look like.					
	The dishes I order on the menu match with service					
23	provided.					
24	I am pleased with the dishes that I selected from the					
24.	menu.					
25	I am satisfied with the ordering process.					
26.	In general, I feel clearly informed about the dishes listed					
20.	on the menu.					

APPENDIX B – DATA

No	IJ	Ag	Oc	Sp	Q 1	Q 2	Q 3	Q 4	Q 5	Q 6	Q7	Q 8	Q 9	Q 10	Q 11	Q 12
1	1	3	2	2	3	4	4	5	4	3	4	4	4	4	5	4
2	1	2	1	2	5	4	4	4	5	4	4	5	5	5	5	4
3	2	3	2	3	5	4	4	4	4	3	5	5	5	5	5	3
4	1	5	4	4	3	3	4	2	3	3	4	4	3	2	3	5
5	2	4	4	3	4	5	5	5	4	5	5	5	4	4	5	5
6	2	3	2	2	3	5	5	5	3	5	5	5	4	4	4	4
7	2	3	2	2	2	3	2	2	2	2	3	3	3	2	4	3
8	1	3	3	4	3	4	4	3	4	5	3	4	5	3	5	3
9	1	1	1	2	5	5	3	4	5	4	4	5	5	5	4	4
10	1	2	1	2	4	5	3	4	3	4	4	4	5	4	5	4
11	1	5	5	4	4	3	4	4	3	3	4	4	3	5	4	3
12	2	1	1	1	5	4	4	3	4	4	5	5	5	5	5	4
13	2	4	2	4	5	5	3	4	5	3	4	5	4	4	5	5
14	1	5	4	4	3	2	3	2	2	2	3	3	1	3	2	3
15	2	3	2	2	5	4	4	4	5	4	5	5	5	3	4	4
16	1	5	4	5	3	4	5	4	4	4	5	4	4	4	5	4
17	1	5	5	4	2	2	2	2	3	2	1	3	3	2	3	2
18	1	4	4	5	5	4	5	5	5	5	4	5	5	4	5	5
19	2	3	3	2	2	2	4	3	3	3	3	3	4	3	3	4
20	1	1	1	1	3	4	5	5	3	4	4	4	3	4	4	5
21	2	2	2	3	3	2	3	4	3	3	4	4	2	3	3	4
22	2	2	2	2	4	4	4	5	4	5	3	3	4	4	3	4
23	1	5	4	5	4	3	3	5	3	4	5	3	3	3	3	4
24	1	4	4	4	4	3	5	4	4	4	4	5	4	5	4	5
25	1	2	2	2	4	5	4	4	5	4	4	3	5	3	4	4
26	2	5	3	3	4	4	5	4	5	5	4	5	4	4	5	5
27	2	3	2	3	5	5	5	5	5	4	5	5	4	5	4	5
28	1	4	4	4	4	3	4	5	4	4	5	3	5	4	3	4
29	2	4	3	3	5	4	5	4	5	5	4	4	4	5	3	5
30	2	1	1	1	4	5	4	5	3	5	4	5	5	3	5	5
31	1	5	4	4	3	4	4	5	5	4	5	3	5	5	5	3
32	1	5	4	5	4	4	4	4	5	5	4	5	5	5	4	5
33	1	4	4	4	3	4	5	4	3	4	4	2	3	5	1	2
34	2	4	4	4	4	4	4	4	3	3	5	3	4	4	3	4
35	1	5	5	4	4	5	5	4	5	5	3	5	4	5	3	4

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No	G	\mathbf{Ag}	Οc	$\mathbf{S}\mathbf{p}$	Q 1	Q 2	Q 3	Q 4	Q 5	Q 6	Q7	Q 8	0 9	Q 10	Q 11	Q 12	
36	1	3	2	4	3	3	4	4	4	5	5	4	5	5	3	5	
37	1	3	2	3	5	4	4	3	5	4	5	4	5	4	4	4	Ì
38	2	5	4	2	4	4	5	4	4	4	5	4	4	5	5	3	Ì
39	2	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
40	2	4	4	3	3	5	3	4	3	5	4	3	3	3	5	3	
41	2	2	3	3	4	3	2	2	3	3	3	3	4	2	3	5	
42	1	3	2	3	5	5	4	5	5	5	5	5	5	5	4	5	
43	2	1	1	1	2	1	1	3	2	3	1	2	1	2	2	1	
44	1	5	4	5	4	4	3	4	4	5	3	4	4	5	4	4	
45	1	5	5	4	4	4	3	4	4	4	5	5	3	5	4	3	
46	2	5	4	5	4	4	5	4	3	4	4	3	4	4	2	3	
47	2	4	3	4	3	3	4	4	5	4	3	4	4	4	4	2	
48	1	4	4	5	4	3	5	5	4	4	5	4	3	5	5	4	
49	2	3	2	2	4	5	5	4	5	4	5	4	5	4	5	4	
50	2	3	2	2	1	3	2	2	1	2	3	1	1	1	3	3	
51	1	4	2	4	4	4	4	5	4	5	4	5	3	4	5	5	
52	1	4	4	4	4	4	4	4	4	5	4	3	3	5	3	4	
53	1	3	2	2	3	4	4	3	4	3	3	3	2	3	4	3	
54	1	3	5	5	5	4	3	3	3	5	5	5	4	4	5	5	
55	2	5	3	4	2	2	3	2	2	3	2	3	2	3	3	3	
56	2	2	1	1	4	4	3	5	5	3	4	5	5	4	4	5	
57	1	2	1	2	4	4	4	5	4	5	3	4	3	5	4	4	
58	2	4	4	4	4	4	4	5	4	4	5	5	5	4	5	5	
59	1	4	4	5	4	4	3	4	4	4	5	3	4	5	4	3	
60	1	5	4	4	4	5	3	5	3	3	4	4	4	5	5	3	ļ
61	2	3	3	3	5	4	5	4	5	4	5	4	5	5	3	4	ļ
62	1	5	4	5	5	5	5	5	4	4	5	5	3	5	4	5	ļ
63	1	2	2	2	3	3	5	5	3	5	5	4	4	4	5	4	ļ
64	1	4	4	4	4	5	4	4	5	3	3	4	3	4	5	4	ļ
65	1	1	1	1	5	5	4	4	5	5	5	5	3	4	5	4	ļ
66	2	5	5	3	3	3	3	3	3	2	3	4	2	3	5	5	ļ
67	1	5	4	4	5	3	3	5	3	4	4	5	4	3	3	5	ļ
68	2	3	2	3	5	3	4	4	5	4	5	5	4	4	4	3	ļ
69	1	5	4	5	3	4	4	5	3	3	5	5	5	3	3	4	ļ
70	2	2	2	2	5	5	5	3	5	5	5	5	4	5	4	5	ł
71	1	5	4	4	4	5	5	3	4	5	4	4	5	5	4	3	ļ
72	1	4	2	2	4	3	4	3	4	4	4	3	4	3	4	5	ł
73	1	5	5	4	3	4	2	4	3	3	3	3	2	3	3	4	ł
74	2	1	1	1	3	4	4	4	5	5	4	4	5	5	4	5]

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			FIL	ysical iv		esign. c	Jue imp	Jontanit I	Marketii	ig 100	iii ixea	lauran	.5			
No	G	\mathbf{Ag}	Oc	$\mathbf{S}\mathbf{p}$	Q 1	Q 2	Q 3	Q 4	Q 5	Q 6	Q7	Q 8	Q 9	Q 10	Q 11	Q 12
75	2	3	2	2	4	5	3	5	3	4	5	4	3	5	3	5
76	1	4	4	5	4	5	5	4	5	5	4	4	5	4	4	4
77	2	5	3	3	4	5	5	5	4	5	3	5	4	3	4	3
78	2	4	3	2	5	5	4	5	5	5	4	5	4	4	5	5
79	1	2	2	3	1	2	1	2	2	2	1	2	1	1	1	3
80	1	1	1	1	3	5	4	5	5	3	4	5	4	4	5	5
81	1	2	2	3	4	4	3	5	3	4	4	5	4	4	4	4
82	1	3	5	4	5	3	4	5	3	3	5	5	5	5	4	3
83	2	5	3	4	4	4	4	5	3	4	4	3	3	5	4	2
84	1	4	5	5	4	2	4	4	3	4	2	3	3	3	4	3
85	2	5	4	5	4	4	3	4	4	3	5	5	4	3	3	5
86	1	2	2	1	4	5	5	4	4	5	5	5	5	5	3	4
87	1	4	4	5	2	3	3	3	1	3	2	3	2	2	1	3
88	1	5	4	5	5	3	5	5	4	3	3	5	4	4	4	3
89	2	4	3	4	3	2	3	4	4	3	3	4	3	3	3	5
90	1	3	2	2	4	4	3	5	4	4	4	5	5	4	5	5
91	2	5	3	4	3	4	3	2	3	2	3	3	4	3	1	2
92	1	5	4	4	5	3	4	4	5	3	4	4	5	3	5	4
93	2	4	4	5	4	4	4	3	4	4	3	5	4	4	4	4
94	1	3	2	2	4	3	3	3	3	5	3	3	3	4	4	5
95	1	5	2	4	4	5	4	3	3	3	3	3	4	4	2	3
96	1	5	4	4	5	5	5	4	4	5	4	3	4	4	4	3
97	2	5	3	2	4	4	4	5	4	5	3	5	5	4	5	3
98	1	3	2	5	4	4	5	3	3	3	5	5	4	4	4	4
99	1	4	2	2	4	3	4	4	3	5	4	3	4	4	3	3
100	1	4	4	5	5	5	3	5	5	5	4	3	3	4	4	3
No	Q 13	Q 14	0 15	0.16		Q 17	Q 18	Q 19	Q 20	0 21		77 2	Q 23	Q 24	Q 25	Q 26
1	4	4	3	4		4	5	5	3	5	2		5	4	4	4
2	4	4	5	4		4 5	3	5	3	5	2		3	4 5	4	4
3	4	4	3	5		5	3 4	5	3 4	4	2	-	4	3	5	4
4	3	4	4	5		3 4	4	4	4	3	2		4	3	2	4
5	5	4	4	5		4	4	4	5	5	4		4 5	3 4	5	4
6	4	5	5	5		4 3	5	4	3	4	2		5	4	4	5
7	4	2	2	3		3 2	3	4	2	4			2	4	4	2
8	4	2 5	4	5		2 3	3 4	5	5	4	2		4	5	5 5	2 4
8	3 4	3 4	4	4		5 5	4 5	3 4	3	5	4		4	5 4	5	4
-	4	4	4	4		5 5	3	4	5	4	2			4	5 4	5 5
10	Э	Э	4	2	,	5	3	3	Э	4	2	t	3	4	4	3

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	3	4					portant M		_			4	5	9
No.	Q 13	Q 14	Q 15	Q 16	Q 17	Q 18	Q 19	Q 20	Q 21	Q 22	Q 23	Q 24	Q 25	Q 26
1.1			-			_			•	-		-		
11	3	4	5	5	4	3	4	5 5	5 5	4	3	4	4	5 5
12 13	4	5	3	3	4	3 4	4	3 4	3 4	3 4	5	3 4	5 5	3
13	3	4	2	1	2	4	4	4	4	4	3	4	3	<u> </u>
15	4	5	4	4	5	5	3	3	4	4	5	5	4	3
16	4	3	4	4	4	4	4	4	5	4	4	3	4	3
17	3	4	4	4	3	4	3	2	3	2	1	1	1	3
18	4	5	4	4	5	4	3	5	5	5	5	3	5	5
19	4	2	4	3	4	3	3	3	3	2	3	2	2	3
20	4	4	3	3	5	4	4	4	4	4	4	4	5	4
21	3	5	5	4	5	5	3	5	3	4	4	2	2	3
22	2	2	4	3	4	2	3	4	4	5	3	4	3	4
23	4	4	3	5	3	5	5	4	4	4	3	4	4	3
24	4	5	4	4	5	4	5	3	5	4	5	3	5	4
25	5	4	3	5	3	5	3	5	4	3	4	5	3	5
26	5	5	5	4	4	3	4	4	3	4	3	4	3	4
27	5	5	5	5	5	3	3	4	4	4	4	5	5	5
28	5	4	4	5	4	4	4	5	3	5	4	3	5	3
29	4	5	5	4	3	5	5	3	3	5	3	5	3	5
30	3	5 5	4	4	5	4	5	5	4	3	4	5	5	4 5
31 32	3	3 4	5	4	5	4 5	4	5	3	3 4	4	3 4	3	3
33	2	3	2	3	3	2	2	1	3	5	3	4	3	3
34	2	4	2	3	4	4	2	3	5	3	3	5	5	4
35	5	5	3	5	5	5	4	4	5	3	5	5	5	5
36	5	4	4	5	4	4	5	4	5	5	5	5	5	4
37	5	5	3	3	4	5	4	5	3	3	4	5	4	3
38	4	4	3	5	4	5	3	5	3	5	4	4	4	4
39	5	4	4	4	5	3	5	5	4	3	5	5	5	3
40	4	4	3	4	3	4	4	4	5	5	4	5	4	4
41	3	5	5	5	4	5	3	5	4	3	3	4	4	4
42	4	3	4	4	4	5	5	3	4	3	5	4	3	4
43	1	3	3	2	1	2	3	1	3	2	2	3	1	3
44	4	4	3	5	5	4	5	4	3	5	4	3	4	3
45	4	5	4	4	4	5	5	3	5	4	5	5	3	4
46	4	2	4	2	4	3	3	4	3	5	4	3	4	3
47	4	4	2	3	3	4	3	2	3	4	5	5	3	3
48	4	3	5	5	3	4	3	3	5	4	3	4	3	4
49	5	4	3	5	4	5	5	5	5	5	3	5	5	5

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	3	4					portant I					4	5	9
No	Q 13	Q 14	Q 15	Q 16	Q 17	Q 18	Q 19	Q 20	Q 21	Q 22	Q 23	Q 24	Q 25	Q 26
50	3	3	-	1	3	-	3		3	3	-	-		3
51	3 4	3	3	5	4	3	5	23	3 4	3 4	3	2	3	3
52	3	3	3	5	4	5	3	5	4	4	3	4	4	3
53	5	3	3	3	4	5	5	4	3	3	4	2	3	3
54	5	3	4	5	5	5	3	5	5	4	5	3	4	4
55	4	2	2	3	3	4	2	3	2	2	2	2	2	2
56	5	4	4	4	5	5	4	5	3	3	5	5	5	4
57	4	4	5	4	4	3	5	5	3	5	4	3	5	3
58	3	5	4	4	4	4	4	3	4	5	3	3	3	4
59	5	3	4	4	3	5	4	3	4	4	5	5	4	4
60	3	4	4	4	3	5	3	4	3	5	4	3	5	5
61	5	4	4	4	4	3	4	3	4	5	4	4	5	3
62	4	5	4	3	5	4	4	4	3	5	3	4	4	5
63	4	3	5	3	5	4	5	3	4	5	5	3	3	4
64	4	3	4	3	4	4	3	5	4	3	3	5	5	3
65	5	5	4	3	3	4	5	3	4	4	5	5	4	3
66	4	3	5	5	4	4	3	5	4	4	3	4	4	4
67	4	3	5	5	4	5	5	4	4	5	5	3	3	5
68	5	4	3	4	4	5	4	4	4	4	5	5	3	3
69	4	4	4	2	3	3	3	3	4	5	4	4	4	3
70	4	5	3	3	5	4	3	5	4	3	5	5	3	5
71	5	4	3	3	4	3	3	4	5	4	3	2	4	3
72	3	3	4	3	4	4	4	4	4	2	4	4	2	4
73	4	4	3	4	5	4	3	4	3	3	4	4	3	4
74	3	5	3	3	5	3	5	5	4	5	5	4	4	4
75	5	4	5	4	3	4	4	5	4	4	5	4	5	5
76	3	5	4	4	5	4	4	4	4	4	4	5	4	4
77	5	5	3	3	4	4	5	4	4	4	4	4	3	5
78	3	5	4	4	3	4	5	5	5	5	5	3	4	5
79	2	1	2	1	2	2	2	1	2	1	2	1	2	3
80	5	5	3	4	5	4	5	4	5	3	4	3	5	4
81	5	4	3	5	5	5	3	4	4	4	5	3	5	3
82	4	5	4	5	4	5	3	5	4	5	3	3	5	4
83	4	2	2	3	3	3	3	4	4	4	4	4	4	5
84	3	4	3	2	3	3	4	2	2	3	4	4	4	3
85	5	4	3	4	4	4	4	3	3	4	4	4	3	3
85	5	4	4	3	4	5	4	4	5	4	4	3	4	3
00	5	4	4	3	4	5	4	4	5	4	4	3	4	3

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No	Q 13	Q 14	Q 15	Q 16	Q 17	Q 18	Q 19	Q 20	Q 21	Q 22	Q 23	Q 24	Q 25	Q 26
87	1	1	3	3	3	3	3	2	1	3	2	1	1	2
88	4	4	3	3	5	4	4	4	3	4	4	5	5	4
89	4	5	4	4	4	4	4	4	4	4	4	3	3	5
90	4	5	5	5	5	4	3	5	4	3	5	4	5	4
91	3	2	2	2	2	3	2	3	3	3	3	4	3	3
92	4	3	4	3	5	4	3	4	4	4	5	5	4	4
93	4	5	5	5	4	4	4	5	3	3	4	4	3	4
94	3	4	3	5	5	5	5	3	3	3	3	4	3	3
95	3	2	1	2	2	3	3	3	4	3	5	4	3	4
96	4	5	4	4	4	4	4	4	5	5	3	4	5	5
97	4	4	5	4	5	4	3	4	5	3	4	4	5	3
98	3	3	5	5	5	5	3	4	5	3	4	5	5	3
99	3	4	2	4	4	3	3	3	5	4	4	5	4	4
100	5	3	4	5	4	4	5	4	5	4	5	4	3	5

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	APPENDIX C - AMOS OUTPUTS											
			Estimate	S.E.	C.R.	Ρ	Label					
CustSat	<	VisualFormat	,638	,132	4,844	***	par_9					
CustSat	<	MenuCopy	,131	,147	,894	,371	par_10					
PPR	<	VisualFormat	1,000									
ING	<	VisualFormat	,916	,094	9,733	***	par_1					
LYT	<	VisualFormat	,867	,093	9,270	***	par_2					
TPF	<	VisualFormat	,806	,090	8,952	***	par_3					
CLR	<	VisualFormat	,903	,090	10,064	***	par_4					
DC	<	MenuCopy	1,000									
AC	<	MenuCopy	1,009	,126	8,038	***	par_5					
MRCH	<	MenuCopy	1,134	,114	9,951	***	par_6					
EMI	<	CustSat	1,000									
PQ	<	CustSat	1,061	,152	6,967	***	par_7					
SMI	<	CustSat	1,106	,130	8,482	***	par_8					

CMIN

Model	NPAR	CMIN	DF	Р	CMIN/DF
Default model	25	122,928	41	0	2,998
Saturated model	66	0	0		
Independence model	11	818,756	55	0	14,886

RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	0,035	0,882	0,809	0,548
Saturated model	0	1		
Independence model	0,328	0,232	0,079	0,193

Baseline Comparisons

Madal	NFI	RFI	IFI	TLI	CFI
Model	Delta1	rho1	Delta2	rho2	CFI
Default model	0,85	0,799	0,895	0,856	0,893
Saturated model	1		1		1
Independence model	0	0	0	0	0

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	0,745	0,634	0,665
Saturated model	0	0	0
Independence model	1	0	0

NCP

Model	NCP	LO 90	HI 90
Default model	81,928	52,377	119,111
Saturated model	0	0	0
Independence model	763,756	674,895	860,045

FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	1,242	0,828	0,529	1,203
Saturated model	0	0	0	0
Independence model	8,27	7,715	6,817	8,687

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	0,142	0,114	0,171	0
Independence model	0,375	0,352	0,397	0

AIC

Model	AIC	BCC	BIC	CAIC
Default model	172,928	179,825	238,058	263,058
Saturated model	132	150,207	303,941	369,941
Independence model	840,756	843,79	869,413	880,413

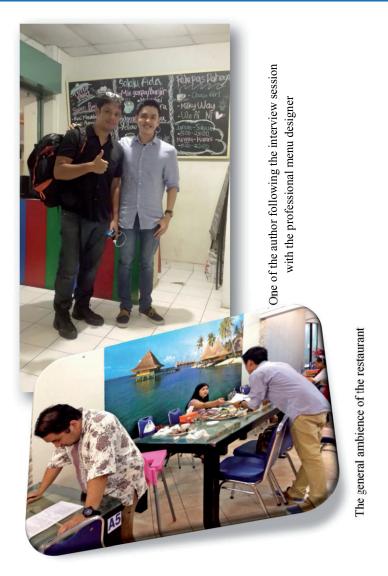
ECVI

Model	ECVI	LO 90	HI 90	MECVI
Default model	1,747	1,448	2,122	1,816
Saturated model	1,333	1,333	1,333	1,517
Independence model	8,492	7,595	9,465	8,523

HOELTER

Model	HOELTER	HOELTER
Model	.05	.01
Default model	46	53
Independence model	9	10

APPENDIX D – SUPPORTING PICTURES



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