An Innovative Approach to Selling
Wood Material to Makerspaces
A practice-based research of Woomall

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Abstract—
Taiwan has become a country underline on both afforestation and substantial reduction of deforestation, since the policy reform in 1991. The wood self-sufficiency rate nowadays is merely 0.45%.
On the other hand, the foreign imports are multiple sources and adequate supplying. Therefore, the demand for local market matter-of-course tends to the imported wood material rather than the insufficient domestic supply. Thus, it is a chance for Woodmall, the only on-line wood material supplier that sells foreign countries material to designers and makers. They try to seek out a better change for the whole industry and solve the wood material demand problem.

This study aims to focus on Woodmall starting strategies and explore their innovative approach to selling to makerspaces, while Woodmall is a start-up since 2016. For Woodmall first phase of strengthen-up strategies, they plan to establish the downstream market, especially the new trend of makerspaces. Not only do they attach makerspaces to develop and increase the brand awareness, but also import the products suit to target users. On the other hand, makerspace is a new type of co-working and design area that mainly blooms in Taiwan since 2015. Woodmall tends to dig in the makerspace market while the market is still a blue ocean. As the strategy is different from the previous that a startup company tends to match a blue ocean, “how can Woodmall make an innovative approach as a sale character?” is worth to be observed.

Go on with the structure, the researcher reaches an outcome for both Woodmall and the industry. Woodmall and makerspaces are making mutual benefit. Woodmall, as an upstream supplier, offers wood materials to downstream consumers, while makerspaces are the blue ocean market with a great demand that can create a new flow chart model. For such interaction, makerspaces can further transform into a co-creation community and even establish an industrial innovation system. As a whole, it is a so-called innovative approach brought about by Woodmall.

Keywords—Wood Material Industry; Innovative Approach; Startup Supplier; Blue Ocean Market

I. INTRODUCTION

A. Background
Since 1991, the central theme of Taiwan’s forestry policy reforms has been the conservation of forest resources [1]. Taiwanese output of wood material has been highly restricted. In recent years, the domestic harvest volume has remained far below the timber harvest limit. Research result in 2012 indicated that the wood self-sufficiency rate is only 0.45%, even less than 1% [2]. It is a situation for the domestic wood material manufacturer and importers to face the reality of insufficient supply sources from Taiwan. On the other hand, the foreign imports are multiple sources and adequate supplying. The situation contribute to the new company Woodmall, importing foreign products to local markets.

B. Woodmall
Woodmall is a start-up since 2016 that they try to seek out a better change for the industry and solve the wood material demand problem. They play the role of the only on-line seller in Taiwan and separate their goals in two phases. First, increasing the brand awareness, they plan to establish the downstream market of makerspaces. Second, extending to the midstream market for the big amount order, they will extend and stabilize the consumer demand through the market of construction and architecture companies. This study aims to focus on Woodmall starting strategies and explore their innovative approach to selling to makerspaces.

C. Makerspaces
Maker is a concept of DIY through your hand that born from American garage culture [3]. The trend then spread worldwide through Maker Faire. We can see that how the trend bloom in the following statistic chart [4].
II. LITERATURE REVIEW

A. Makerspaces in Taiwan

Makerspace is a community center follows the technology development. It provides technology, manufacturing equipment and educational opportunities to the public [6].

For the makers, they can use makerspaces tools, such as 3D printer and laser cutter, which would otherwise be inaccessible or unaffordable. It makes the maker save more cost and co-create together.

At the side of makerspace, it provides creative time and space for people of all ages to build prototypes, explore questions, fail and retry, bounce ideas off one another and build something together. In other words, it is an area for creativity and risk-taking practice where people can make curiosity and imagination come to life [7].

The common and popular facilities in makerspace, according to Chung-Yueh Lee(2015) [8], are listed in the shown matrix.

<table>
<thead>
<tr>
<th>Name of Facility</th>
<th>Function &amp; Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>3D Printer*</td>
<td>3D printer is a machine making 3D printing, refers to processes used to synthesize a three-dimensional object in which successive layers of material are formed under computer control to create an object. Objects can be of almost any shape or geometry and are produced from digital model data 3D model or another electronic data source such as an Additive Manufacturing File (AMF).</td>
</tr>
<tr>
<td>Laser Cutter*</td>
<td>Laser cutter is a machine that uses the output of a high-power laser to cut materials. The focused laser beam is directed at the material, which then either melts, burns, vaporizes away, or is blown away by a jet of gas, leaving an edge with a high-quality surface finish. Industrial laser cutters are used to cut flat-sheet material as well as structural and piping materials.</td>
</tr>
<tr>
<td>CNS machine</td>
<td>Computer Numeric Control (CNC) is the automation of machine tools that are operated by precisely programmed commands encoded on a storage medium (computer command module, usually located on the device) as opposed to controlled manually by hand wheels or levers, or mechanically automated by cams alone. Most NC today is computer (or computerized) numerical control (CNC), in which computers play an integral part of the control.</td>
</tr>
<tr>
<td>Arduino</td>
<td>Arduino is an open-source prototyping platform based on easy-to-use hardware and software. Arduino provides an open-source and easy-to-use programming tool, for writing code and uploading it to your board. It is often referred to as the Arduino IDE (Integrated Development Environment).</td>
</tr>
</tbody>
</table>

* Woodmall is acting as agent for 3D printer and laser cutter in Taiwan

The case Woodmall is agent for 3-D printer and laser cutter that are corresponding to wood material design. For sale strategy, the makerspaces with these facilities may have the interest in wood material to diversify their design products, while the makerspaces demand for wood material can be promoted both materials and facilities. That is, wood materials and the facilities complement each other for market demand.
B. Sale for Blue Ocean

Research on improving the effectiveness of salespeople in the marketing role has largely focused on developing a customer orientation in salespeople (e.g., Saxe and Weitz 1982 [9]; Sigauw, Brown, and Wilding 1994[10]) and encouraging salespeople to practice adaptive selling (e.g., Boorman, Goolsby, and Ramsey 1998[11]; Spiro and Weitz 1990[12]). It supports the idea for Woodmall to start with the connection with maker demand. Since makerspace offers cost-reducing materials and facilities that flourish the maker trend, wood material selling strategy can be tackled with reason of relatively low price material than others, like acrylic, and be suitable for the consumers of makerspace. Also, the wood material is the most common one to do prototype that makers mainly rely on such material to design.

To make an insight for sales-man, the researcher should change into a sale vision. Weitz, B. & Bradford, K. (1999) [13] stated that the sales role is to stimulate, rather than satisfy, demand for products. To persuade customers that they need a supplier’s product, sales-man in such role should focus on achieving short-term results for their companies by using aggressive selling techniques to persuade customers to buy products. Thus, Woodmall as a case should use their advantages and analyze the different market to stir up the consumers’ willingness. For the different types of makerspaces, we can develop different types of strategies through dynamic procedure and make proper strategies as the right approaches.

Comparing to previous researches focusing on attempts to isolate the determinants of an individual salesperson’s performance and resulting in low levels of explanation, E. Babakus et al (1996)[14] made a deeper description for the relationship with managing sale. The key implication is that relevant salesforce behavior activities (e.g., sales planning, sales presentation, etc.) when performed well should lead to favorable outcome performance. The point arouses the researcher to take part in the Maker Faire 2017 (official annual maker exhibition) to make a broader and more specific participant observation after 6 months of manipulating sale in makerspace market. With a blue ocean market circumstance and lack of competitors supplying such materials, the researcher believes that outcome of these strategies can soon be seen. Salespeople often have a production role when competition is limited and demand is greater than supply (Weitz, B. & Bradford, K., 1999)[15]. As a further interpretation, the research not only intends to make the sale between a start-up and a blue ocean possible, but also expects to produce a new system for Woodmall really engaged into the makerspace market. It can therefore become an innovative approach rather than simply expand the business through selling.

III. Method and Tactic

A. Method

The researcher is using a practice-based aspect to conduct the examination through Woodmall. As Woodmall was set in June 2016 and in the first phase of service blueprint, they strive to keep a foothold on the market. They set aside the very beginning strategy of selling to regular customers and break into the brand new market of maker trend.

Follow up with the reason, Woodmall founder Mr. Shui offers chances for the researcher to not only be as a sales-man of Woodmall but also manipulate makerspace selling with a flexible discretion. The research can then be conduct through a participating process.

Moreover, to make the better insight, researcher can consult with the coach Mr. Shui due to his role in the industry. Mr. Shui plays roles as founders of both downstream design studio and upstream supplying company that he may give precise strategy advices. For a practiced-research, combining the research procedure with coach advices, rather than only researcher opinion with supervisor guiding, is the appropriate way to carry out such a research.

Therefore, Woodmall tends to dig in the makerspaces market while the market is still a blue ocean. The researcher expects to complete a research as extending the maker trend and connecting with material supplying chain. Moreover, to use a specialist vision, the coach engaged in wood material chain is giving guidance to assist the research into an accurate and objective direction.

B. Tactic
Shun-Fen Chang (Jul, 2015)[16] conducted a statistic investigation for makerspaces in Taiwan, based on integrated data from Ministry of Economic Affairs and Ministry of Education, R.O.C. There are 48 makerspaces in Taiwan, including 24 private ones and 24 public ones. Considering target makers and industries, we can separate the data into different orientations. It is shown in Figure 3 as follow.

![Figure 3: Different Orientations of Taiwanese Makerspaces](image)

For culture and creativity orientation, there are 33 out of 48 (68.75%) and it is the main stream for makerspaces and makers. For education orientation, there are also 8 among all (16.67%). The two orientations are related to craft design, which means Woodmall can not only sell the material for maker to do prototype, but expand market of culture and creativity through makerspaces.

IV. FINDING AND DISCUSSION

Blue Ocean refers to businesses that are just emerging, i.e. are unknown markets that competitors still have not entered and the rules for such environment have not yet been developed (Gandellini, G. 2011)[17]. The circumstance of makerspaces for Woodmall is exactly a blue ocean. In a blue ocean, there are high potentials for expansion, profitability and demand for goods and services. The people engaging can determine the rules and make the boundaries of the industry, to design an approach fit in with the potential factors (Kim & Mauborgne, 2005)[18]. Researcher follows up the concept and implements strategies into a makerspaces. It includes a sequence of idea that is innovation. Innovation is either to create new demand or to create a replacement for customers of current markets. Thus, the researcher comes up with a flow chart model of innovation. The flow chart model is suitable for either change of different shape or evolution of different content. It is shown in Figure 4 as follow.

![Figure 4: Innovation Structure of Blue Ocean](image)

The structure can also apply to five important strategies for blue ocean listed by Kim:
- Creating a non-competitive market
- Making competition meaningless
- Aligning entire system of organization's activities to achieve diversification and low cost
- Breaking substitution between value – cost
- Reaching new demand

Welch, S. J., & Edmondson, B. (2012)[19] stated that, “the sentinel idea in blue ocean strategy is that of “Value Innovation”. Value innovation is something that is all about activities and strategies which companies try to achieve value and add value for their customers (Chang, 2010)[20]. Integrated above, a Woodmall firstly develops the blue ocean strategies and these strategies collectively become as a process of value innovation. During the process, the company, Woodmall, interacts with the target, makerspaces, for value exchange. After all, Woodmall acquires the market value and gains its brand awareness.

Researcher further establishes a general concept for the interaction. The concept is shown in the following picture.

![Figure 5: The Holistic Innovative Approach](image)
Wood mall plays an important role in the wood material industry that they serve the products to downstream customers. Meanwhile, Woodmall is a key factor to make an impact to makerspaces. They change makerspace system progressively. The developing process just fits in what 傅孝暘, Founder of The Maker Workshop, said. “Maker community leads a revolution from bottom to top that may overturn the industry and change the existing business model.”

V. CONCLUSION

Woodmall and makerspaces are making mutual benefit. Woodmall, as an upstream supplier, offers wood materials to downstream consumers, while makerspaces are the blue ocean market with a great demand that can create a new flow chart model. For such interaction, makerspaces can further transform step-by-step. Makerspace is a special area gathered by makers. Makerspace then promote into a co-creation community that can exchange and communicate fluently. Eventually, the system may become an industrial innovation system. As a whole, it is a so-called innovative approach brought about by Woodmall.

REFERENCES