

Business Model Canvas for Smart Tailor Platform

Zahurin Mat Aji, Nor Iadah Yusop, Rohaya Dahari and Haslina Mohd

Universiti Utara Malaysia, Malaysia, {zahurin@uum.edu.my, noriadah@uum.edu.my, roha@uum.edu.my, haslina@uum.edu.my}

ABSTRACT

A Smart Tailor Platform is proposed as a venue to integrate various players in garment industry, such as tailors, designers, customers, and other relevant stakeholders to automate its business processes. In Malaysia, currently the processes are conducted manually which consume too much time in fulfilling its supply and demand for the industry. To facilitate this process, a study was conducted to understand the main components of the business operation. The components will be represented using a strategic management tool namely the Business Model Canvas (BMC). The inception phase of the Rational Unified Process (RUP) was employed to construct the BMC. The phase began by determining the basic idea and structure of the business process. The information gathered was classified into nine related dimensions and documented in accordance with the BMC. The generated BMC depicts the relationship of all the nine dimensions for the garment industry, and thus represents an integrated business model of smart tailor. This smart platform allows the players in the industry to promote, manage and fulfill supply and demands of their product electronically. In addition, the BMC can be used to assist developers in designing and developing the smart tailor platform.

Keywords: Smart tailor, business model canvas, garment industry, business process, value creation

I INTRODUCTION

Most fashion house and boutique owners in Malaysia that focuses on tailor-made clothes are facing the never ending challenge on getting adequate numbers of skilled local tailors in fulfilling the high demand from customers for tailoring-related jobs. In order to overcome this issue, they have to employ foreign workers, or simply accept the jobs and then sub-contract the job to other tailors that have the required expertise. In 2014, it was reported in a local newspaper that the competition between local and foreign tailors is normal (Berita Harian 2014). This is unhealthy to the country as at the same time, the local skilled tailors were left jobless for their presence was not visible to those in needs of their services. Somehow, there is another reason for hiring foreign workers, especially the Bangladeshi. The reason is that they are more loyal compared to the local

workers. Furthermore they produce better quality tailoring products, as they are known to be very meticulous in their jobs even though the payments received per job done were similar to their local counterparts.

The difficulties in hiring local skilled tailors should not be an issue in Malaysia since the government has established various Technical Education and Vocational Training (TEVT) institutes with the aim to provide qualified skilled or semi-skilled workforce needed by the country. The graduates from the TEVT institutes should not only qualify with the trained skills, but they also will be equipped with other employability skills to ensure their readiness for the job market (Bakar and Hanafi, 2007). The government has allocated a huge amount of fund for investment in TEVT institutes, and thus expects the institutes to produce the required outcomes in return. If this is achieved, the national economy will improve (Kamis et al. 2014), and the country will move positively towards becoming a developed nation (Omar et al. 2011).

However, Omar et al. (2012) point out that the graduates from the TEVT institutes have moderate level of employability skills that become a hindrance towards being employed. Though they are supposed to be self-employable and job creators, they opted for wage-earning jobs by becoming an employee for others. Worse than that, they opt for jobs that do not require them to apply the skills that they were trained in such as clerical and other administrative jobs (Azlan Zakaria, 2014). Similar situation happens for graduates in tailoring-related industry or sectors. With this, it is presumed that the TEVT graduates seem do not have a proper plan and need more guidance in applying their trained skills including the tailoring-related skills.

In order to resolve the issues and challenges highlighted above, it is deemed important to find ways on how the TEVT graduates, especially those trained with tailoring-related skills, can be better employed. Looking into the perspective of their marketability that is to ensure that they are employable in an appropriate job market, there is a need to devise a mechanism for how they could be visible by their potential employers. This is in-line with the recommendation made by Malem (2008)

who indicate that further research is required to innovate the way tailoring-related industry players in doing business. This can be more promising with the advent of smart computing technologies and supporting infrastructures. With smart computing technologies and infrastructure, the way of providing businesses and services will evolve through various sophisticated applications. Furthermore, the demand of the smart applications is expected to rise due the declining cost of smart technology such as smartphones, and advocated by the growing number of smartphone and Internet users (Vashist et al. 2014). Perner (2016) highlights the idea of providing smart spaces for the production of tailor-made clothes since fashion is a serious business and can have a big economic impact especially for rural communities. In addition, a repository that acts as a pool of skilled tailors can be developed. Using certain applications, the information in the pool shall be visible to the potential employers, thus allowing the potential employers to choose the skilled tailors as the wish. Eventually, these graduates can be marketable in a more systematic and effective way, thus resulting in the government's plan to increase the number of highly skilled workers towards becoming a developed nation can be realized.

With these in mind, this paper presents a business model canvas which is used as a tool to conceptualize the strategies that can be undertaken to relate various components of a business on achieving the value proposition especially in commercializing new ideas. In the canvas, it will be obvious on how various stakeholders such as tailors, designers, and customers in a garment industry are integrated into a garment industry ecosystem.

II BUSINESS MODEL CANVAS

A business model is a description of the intention of a business operation. The model is used by most researchers and business strategists in explaining organizational value creation, performance, and competitive advantage (Chesbrough 2010; Zott and Amit 2010; Cavalcante et al. 2011; Lambert and Davidson 2013; Bocken et al. 2014). Academically, the business model is defined as (i) a “blueprint” of running a business (Osterwalder et al. 2005), (ii) “an abstraction of the principles supporting the development of the core repeated standard processes necessary for a company to perform its business”(Cavalcante et al. 2011), (iii) “a new unit of analysis, offering a systemic perspective on how to “do business,” encompassing boundary-spanning activities (performed by a focal firm or others), and focusing on value creation as well as value capture” (Zott and Amit 2010) and (iv) “a bundle of specific

activities (an activity system) conducted to satisfy the perceived needs of the market, along with the specification of which parties (a company or its partners) conduct which activities, and how these activities are linked to each other” (Amit and Zott 2012). Moreover, the business model concept supports in gathering information related to certain industry perspective (Lambert and Davidson, 2013) and a means for companies to ‘commercialize new ideas and technologies’ (Chesbrough 2010; Zolnowski, Weiß, & Bohmann, 2014). In facing the current competitive business market, various strategies are required to promote products and attracting more customers worldwide. Among the widely used strategies is the Business Model Canvas (BMC).

BMC consists of nine basic *components* or building blocks of a business model (Osterwalder and Pigneur 2010) as shown in Figure 1. The components are Key Partnerships, Key Activities, Key Resources, Customer Segments, Value Propositions, Customer Relationships, Channels, Cost Structure, and Revenue Streams. The BMC can be used as a mechanism in helping users to map, discuss, design and invent new business models.



Figure 1. The Business Model Canvas (Osterwalder & Pigneur (2010))

III METHODOLOGY

The Smart Tailor application was developed following the steps stipulated in the adopted Rational Unified Process (RUP) methodology proposed by Jacobson (2002). In the RUP methodology, the processes are structured into set of phases consisting of Phase I (Inception), Phase II (Elaboration), Phase III (Construction), and Phase IV (Transition). However, to construct the BMC, only the Inception phase is relevant and thus applied. In this phase, the basic idea and structure of the business process were identified by determining the baseline requirements of the proposed platform. This was

conducted through a series of focus group discussions with relevant stakeholders and analyses of literature. During the focus group discussion, the stakeholders' roles were identified. In addition, current practices, online reports and company profiles were also studied. Results of the activities were then documented in the business model canvas as suggested by Osterwalder and Pigneur (2010).

IV BUSINESS MODEL CANVAS FOR SMART TAILOR PLATFORM

In this section, all the nine components of the business model canvas for the intended Smart Tailor Platform will be presented. Subsequently, based on the descriptions, a business model canvas represented as summary as suggested by Osterwalder and Pigneur (2010) is proposed (Figure 2).

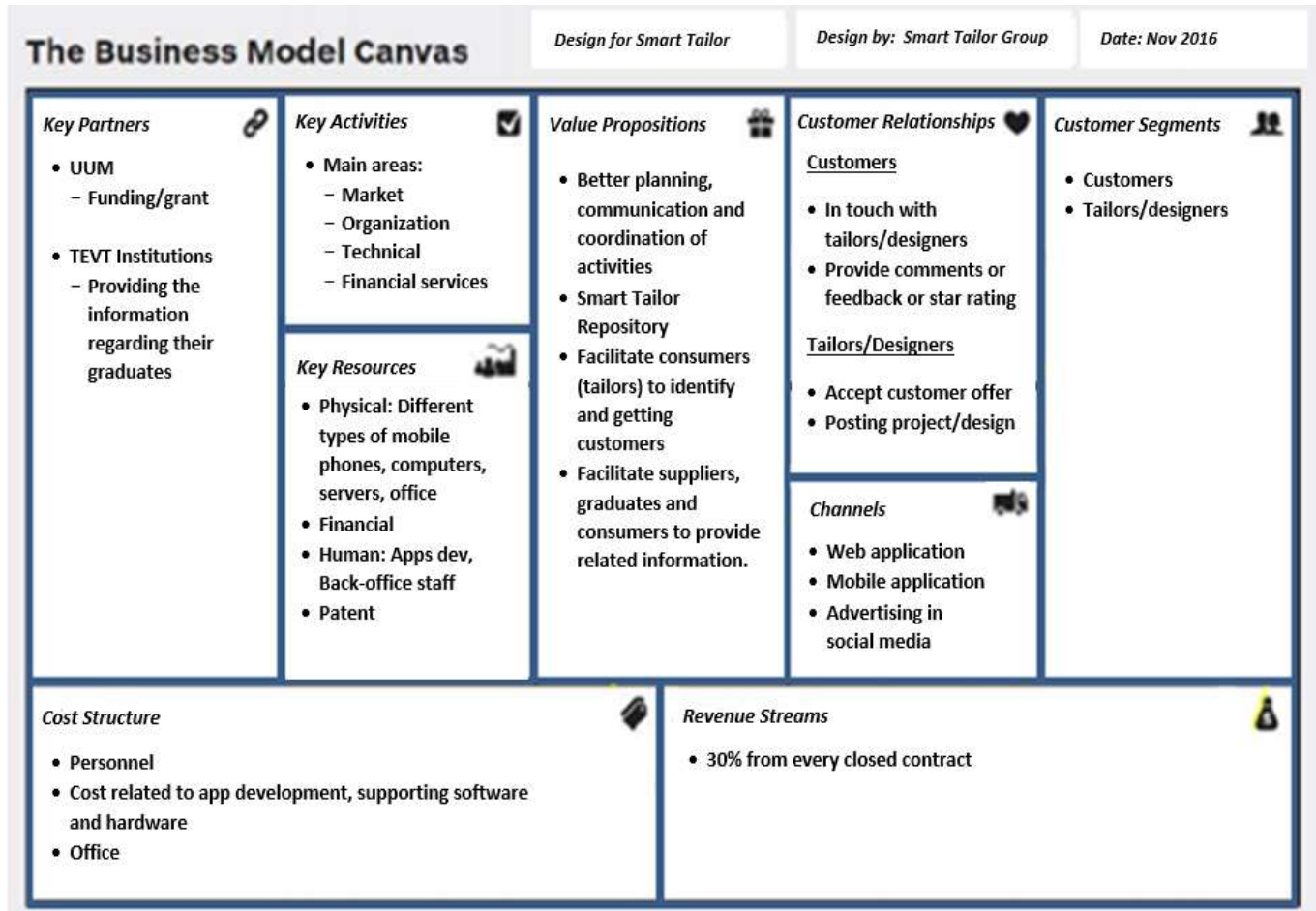


Figure 2. Proposed Business Model Canvas for Smart Tailor Platform

A. Key Partnerships

The main partners in the Smart Tailor business operation are all the TEVT Institutions in Malaysia (i.e. Institut Kemahiran Belia Negara (IKBN), Institut Kemahiran Mara (IKM), Universiti Teknologi Mara (UiTM), community college, polytechnic, Pusat Giat Mara, and vocational college), Human Resources Ministry, Youth and Sport Ministry, TEVT graduates, and tailors (including Boutique Owner and Small Medium Entrepreneurs). TEVT institutions represent the key supplier that provides qualified, trained and skilled tailors. The ministries are the authorities formulate respective policies regarding TEVT graduates employability. All the involved players are

users of the Smart Tailor Applications on the Smart Tailor Platform.

B. Key Activities

In realizing the value proposition that has been outlined for the Smart Tailor, a number of key activities have been planned. In identifying the nature of activities that are required, there are a number of questions need to be answered. The activities must conform to requirement in achieving the value proposition for the identified stakeholders. For Smart Tailor, the relevant stakeholders are Suppliers, TEVT graduates and Customers. The "Suppliers" refers to the institutions that provide TEVT graduates for the Smart Tailor. To develop a comprehensive e-

Repository of skilled tailors for the industry, pertinent information needs to be gathered. This could be conducted through activities that can gather together the relevant parties, in this case the all the stakeholder, at an event. During the event, data collection procedures, facilitated by the used of relevant data collection tools, can be performed. From the “Suppliers”, information related to the direction of TEVT programs and graduates in provided skilled labors in relevant industry, employability of graduates in the garment-making program, and what the graduates of the program do can be gathered. In addition, the TEVT graduates profiles can be collected. The Customers for Smart Tailor can be categorized into Business Customers and Individual Customers. They are those who required tailors with specific skills to fulfill their business needs. Hence, from the Customers, information related to their needs will be collected. The gathered information that will be kept in the repository will be used to facilitate the suppliers, potential labors and customers accordingly. Other activities that are important in encouraging the use of the Smart Tailor platform by relevant job seekers and industry players are the marketing and promotional activities. These may include road tours, exhibitions, advertisement on conventional mass media, and social media.

C. Key Resources

The main resources required include human capital and related technology tools for the Smart Tailor application development such as server, personal computers, software and other peripheral devices.

D. Value Propositions

Basically, Smart Tailor provides a digital platform for customers and tailors to meet and fulfill their needs. The Smart Tailor Platform expedites the process of getting the desired skilled tailors through the Smart Tailor Matching engine and Smart Tailor Repository. In addition, Tailors will also be able to update their profile after completing a job received from the customers by including feedbacks from their customers. With good feedbacks, it will thus increase their marketability. Smart Tailor Platform will also be equipped with extra services for the customers such as Smart Garment Measurement, Smart Garment Pattern, Smart Textile Matching, Design Gallery and Wardrobe to complement the basic services. This platform will eventually act as a one-stop-center for tailoring-related businesses. As it stabilizes and grows to a larger scale, it may invite memberships from around the globe.

E. Customer Relationship

A customer relationship block defines the relationship between Smart Tailor administrator and users (customers and tailors). The Smart Tailor administrator continual task is to build and maintain a strong relationship by means of personal and telephone support, customer feedback and online support services, workshops and training regarding the Smart Tailor Platform and other forms of information exchange between the platform and users. By providing various services, it will increase user trust toward Smart Tailor Platform and add value to the marketing services. Secure user privacy, data, credentials and harmony towards user feelings and satisfaction are key factors of increasing their trust and relationship. Providing extra services regarding the garment industry related activities without extra charge is a great value to maintain relation.

F. Customer Segments

The application is developed to facilitate customers in finding required tailors as well as for qualified and skilled tailors.

G. Channels

A channel defines how Smart Tailor platform delivers valuable services to the users (customers and tailors). Web-based application and mobile applications are two ways of getting in touch with end users. Social media, Web 2.0 tools as well as newspaper advertisement and word of mouth marketing are the ways of influencing an end user about Smart Tailor services.

H. Cost Structure

In devising the cost structure for the Smart Tailor, major considerations are given to the most expensive key resources and activities. The most expensive key resource is the product development. Refining this further, this involves costs for hiring the right personnel, procuring the required equipment, and obtaining the relevant and to date technologies. Another aspect of cost structure that must be planned well is the cost for the key activities that need to be conducted to realize the project. The key activities are as described in “Key Activities” section. As such, appropriate amount shall be allocated for each activity. In addition, the operation costs must also be included.

I. Revenue Streams

To encourage the use of Smart Tailor platform, minimal fee will be imposed to certain category of customers. To ensure the sustainability of the platform, the customers will be required to give commissions at some percentage of the payment

received by the customers on job secured through the platform.

V CONCLUSION

The main objective of this paper is to construct a Business Canvas Model (BCM) for Smart Tailor platform. The purpose of BMC is to understand the Smart Tailor business process. The business process of the Smart Tailor is identified in the Inception phase that finally contributes to the construction of the Smart Tailor BCM (ST-BCM). The ST-BCM comprises of nine components or building blocks namely Key Partnerships (KP), Key Activities (KA), Key Resources (KR), Customer Segments (CS), Value Propositions (VP), Customer Relationships (CR), Channels (CH), Cost Structure (CS), and Revenue Streams (RS). The Key Partnerships (KP) refers to the third party who willing to collaborate and invest in this project, it can be from the government sector such as IKBM who are responsible to train and provide technical skill in tailoring, small medium enterprise in garment industry such as boutique's owner, and any agencies who are interested to invest in this project. Secondly, Key Activities is referred as the main activities in this project such as job acquisition between tailor and customer (Business and Individual Customers), job matching between customer's requirements and tailor expertise, dress reservation, dress making, pattern design and customer's rating on the dress making and design, and feedback from customers. Thirdly, for the Smart Tailor platform, the main recourses which are Human Capital and required technology were identified. Fourthly, the Customer Segments (CS) refers to the application is developed to facilitate customers in finding required tailors as well as for qualified and skilled tailors. Fifth, the Value Propositions (VP), the Smart Tailor provides a digital platform for customers and tailors to meet and fulfill their needs. In addition, the platform also expedites the process of getting the desired skilled tailors through the Smart Tailor Matching engine and Smart Tailor Repository. Sixth, the Customer Relationships (CR), defines the relationship between Smart Tailor administrator and users (customers and tailors). The Smart Tailor administration is responsible to cultivate and maintain a strong relationship through personal and telephone support, customer feedback and online support services, workshops and training regarding the Smart Tailor Platform and other forms of information exchange between the platform and users. Seventh, the Channels (CH) defines how Smart Tailor platform delivers valuable services to the users (customers and tailors) through Web-based

application and mobile applications. Eighth, the Cost Structure (CS), this involves costs for hiring the right personnel, procuring the required equipment, and obtaining the relevant and to date technologies. Ninth, the Revenue Streams (RS), minimal fee will be imposed to certain category of customers who will be required to give commissions at some percentage of the payment received by the customers on job secured through the platform to ensure the sustainability of the Smart Tailor platform.

All the nine blocks in the BMC may assist various stakeholders in garment industry especially to the Small Medium Enterprise in garment industry as a guideline to design their business strategy and plan, and the most important is to Malaysia Government to properly channel the IKBM graduates to the Smart Tailor Platform for competitive advantages. Based on this BMC, the details of the Smart Tailor application can be determined and represented using Unified Modelling Language (UML) artifacts such as class and sequence diagrams. These artifacts can be used to assist developers in designing the platform and further development process.

REFERENCES

- Amit, R., and Zott, C. 2012. Creating Value through Business Model Innovation, *MIT Sloan Management Review*, 53(3), 41-49.
- Azlan Zakarian 2014. Kecenderungan Menceburi Kerjaya dalam Industri Fesyen bagi Bakal Lulusan Kolej Komuniti, Laporan Akhir Sarjana, Fakulti Pendidikan Teknikal dan Vokasional Universiti Tun Hussein Onn Malaysia. (In Malay)
- Bakar, A. R., and Hanafi, I. 2007. Assessing Employability Skills of Technical-Vocational Students in Malaysia, *Journal of Social Sciences*, 3(4), 202-207.
- Bocken, N. M., Short, S. W., Rana, P., and Evans, S. 2014. A Literature and Practice Review to Develop Sustainable Business Model Archetypes. *Journal of Cleaner Production* (65), 42-56.
- Cavalcante, S., Kesting, P., and Ulhøi, J. 2011. Business Model Dynamics and Innovation: (Re) Establishing the Missing Linkages, *Management Decision*, 49(8), 1327-1342.
- Chesbrough, H. 2010. Business Model Innovation: Opportunities and Barriers, *Long Range Planning*, 43(2-3), 354-363.
- Jacobson, S. 2002. "The Rational Objectory Process - A UML-based Software Engineering Process". Rational Software Scandinavia AB. Retrieved 2014-12-17.
- Lambert, S. C., and Davidson, R. A. 2013. Applications of the Business Model in Studies of Enterprise Success, Innovation and Classification: An Analysis of Empirical Research from 1996 To 2010, *European Management Journal*, 31(6), 668-681.
- Kamis, A., Bakar, A. R., Hamzah, R., and Asimiran, S. 2014. Keperluan Kompetensi Pengetahuan Rekaan Fesyen Pakaian untuk Menceburkan Diri dalam Industri Fesyen, *Sains Humanika*, 2(4), 25-33.
- Malem, W. 2008. Fashion Designers as Business: London, *Journal of Fashion Marketing and Management: An International Journal*, 12(3), 398-414.
- Omar, M. K., Bakar, A. R., and Rashid, A. M. 2012. Employability Skill Acquisition among Malaysian Community College Students, *Journal of Social Sciences*, 8(3), 472-478.
- Omar, Z., Eric Krauss, S., Sail, R. M., and Arif Ismail, I. (2011). Exploring Career Success of Late Bloomers from the TVET Background, *Education and Training*, 53(7), 603-624.

- Osterwalder, A., and Pigneur, Y. 2010. *Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers*, John Wiley & Sons.
- Osterwalder, A., Pigneur, Y. and Tucci, C.L. 2005, Clarifying Business Models: Origins, Present, and Future of the Concept, *Communications of AIS* (2005:16), 1-25.
- Perner, P. 2016. "Smart Spaces for On-line Tailor-Made Production of Clothes", in 30th International Conference on Proceedings of Advanced Information Networking and Applications Workshops (WAINA), pp. 790-795.
- Vashist, S. K., Schneider, E. M., and Luong, J. H. 2014. Commercial Smartphone-Based Devices and Smart Applications for Personalized Healthcare Monitoring and Management, *Diagnostics*, 4(3), 104-128.
- Zolnowski, A., Weiß, C., and Bohmann, T. (2014, January). Representing Service Business Models with the Service Business Model Canvas-- The Case of a Mobile Payment Service in the Retail Industry. In Proceedings of 47th Hawaii International Conference on System Sciences (HICSS), 2014 (pp. 718-727). IEEE.
- Zott, C., and Amit, R. 2010. Business Model Design: An Activity System Perspective, *Long Range Planning*, 43(2-3), 216-226.