

+62 813 8765 4578 +62 813 8765 4578 <https://dinastipub.org/DIJMS> dinasti-info@gmail.com 

## DESIGNING BUSINESS MODEL CANVAS TRANSFORMS INTO BALANCED SCORECARD IN THE XYZ UNIVERSITY IN INDONESIA

Rosana Mia Agusty

<sup>1)</sup>Universitas Mercu Buana, Jakarta, Indonesia

### ARTICLE INFORMATION

Received: 17<sup>th</sup> May 2020

Revised: 24<sup>th</sup> June 2020

Issued: 19<sup>th</sup> July 2020

Corresponding author: first author

E-mail:

[55119110030@student.mercubuana.ac.id](mailto:55119110030@student.mercubuana.ac.id)



DOI:10.31933/DIJMS

**Abstract:** Business Model Canvas becomes a company performance appraisal. BMC is widely used for initial design of business process. In this research, the author is focusing on analyzing business process in XYZ University, one of the largest well known universities in Indonesia. Through the business process, translated onto BMC to see wider view from the beginning to the end of the process. The BMC and then transforms into 4 areas of Balanced Scorecard to see percentage of 4 areas of the business process. Type of data is primary, by observing and interviewing some employees, students, and alumni, and secondary by searching information through social media. The methods is Business Model Canvas and Balanced Scorecard. The result is by including some inputs, business process of XYZ University confirms that the university will survive in long term and has good capacity to remain as one of the high rank universities in Indonesia.

**Keywords:** Business Model Canvas, Balanced Scorecard, Business Process .

### INTRODUCTION

Economic growth is the objective that all countries are trying to achieve. One of the most important factors effecting the economic growth is the capability of human resource that developed through informal training and also formal education. Economic growth will increase significantly by having qualified human resources in the companies.

On 2018 Indonesia government had commitment to support education in Indonesia by allocating major investment on strengthening human resource in Indonesia. Government budget for education achieves 444 billion rupiahs or equals to 20% of total Government Budget that year. Over 250 million population in Indonesia, 60% are young productive people that we can say as bonus of demographic condition of Indonesia.

Nowadays, people are more aware of the important of education to improve their quality of life and overall it will lead to increase the economic growth in the country if improvement could be done in massif way. Statistic data by BPS Indonesia shows, with huge population of productive people the number of young people registered to study at university is increasing each year. Given the situation, opportunity of doing business in the education industry in Indonesia become wider. Thus also creating competition between universities to give better service, higher standard of quality, and creating transformational future leaders. On this research, the writer will focus on analyzing business process in XYZ University, one of graduate universities in Indonesia, to be formed business process into 9 areas of Business Model Canvas and then integrated to Balanced Scorecard methods. The goal of this research is to show the existing business process and to give deeper understanding about how the business process should be delivered in order to achieve vision, mission, and value of the institution.

This XYZ University is applying linier connection between vision, mission, and objectives in all units, the main business in academic area and supporting units.

**The Mission:**

Enriched by our vibrant international network but rooted in local wisdom, we develop strategic business leaders with integrity, creativity, and knowledge needed to serve society

**The Vision:**

To be the leading graduate business school in Indonesia in advancing knowledge of business and promoting sustainable and ethical business practices by rising to the international challenges

**Values:** Integrity, Professionalism, Objective, Academic fairness, Social concern

## LITERATURE REVIEW

### Management Strategy

According to David (2011:5) definition of strategic management is an art and knowledge in the same time to create, implement, and evaluate the decisions towards division to achieve company's objectives.

Aime Heene and Sebastian (2010:9-10) defined that strategic management is a unit process in the company that continuously creating value and capability to deliver and widening its contribution to the stake holders or other parties involved.

According to them, there are 5 fungtion of strategic management:

1. Developing vision and mission
2. Setting company's goals and objectives.
3. Creating strategy to achieve the objectives
4. Implementing and realizing the strategy
5. Evaluating strategy and company direction

Pearce II and Robinson, Jr (2008:5), wrote that strategic management is a set of decisions and actions from company's formula and implementation from planning that designed to achieve the goal.

### **Business Model Canvas (BMC)**

The Business Model Canvas from the Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers (Osterwalder & Pigneur, 2010) is commonly used as an exercise for business creation and transformation. The Canvas consists of nine building blocks meant to "show the logic of how a company intends to make money" (Osterwalder & Pigneur, 2010, p. 14). Those blocks are: Customer Segments (CS), Value Propositions (V), Channels (CH), Customer Relationships (CR), Revenue Streams (RS), Key Resources (KR), Key Activities (KA), Key Partnerships (KP), and Cost Structure (CS). These nine blocks fall into four areas the customers, the offer, the infrastructure, and the financial viability of a business.

Models represent actual conditions in a concise and detailed manner and can describe various types of reality, including domains, systems, or languages. (Abmann, et al., 2006) .

A model is basically a set of statements about a particular system, which is used to describe it. The model generally can be descriptive, namely describing the system or specifications for the system (Seidewitz, 2003) . Among the most used roles for business models is understanding and sharing business ideas, analyzing them, managing them, showing prospects, or patenting business models (Osterwalder, et al., 2005).

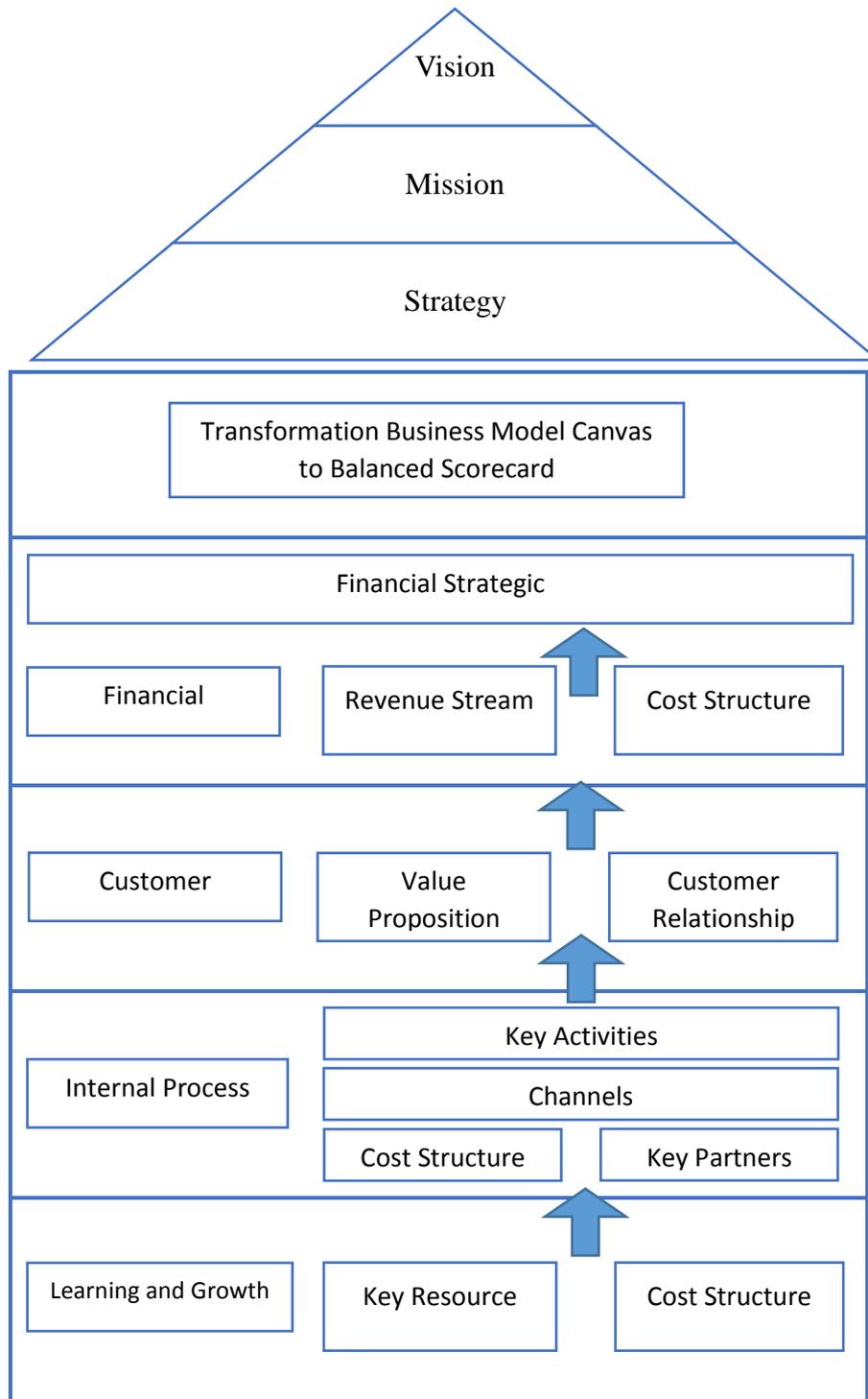
### **Balanced Scorecards (BSC)**

Accounting academic Dr. Robert Kaplan and business executive and theorist Dr. David Norton first introduced the balanced scorecard. The *Harvard Business Review* first published it in the 1992 article "The Balanced Scorecard-Measures That Drive Performance." Both Kaplan and Norton took previous metric performance measures and adapted them to include nonfinancial information.

Companies can easily identify factors hindering business performance and outline strategic changes tracked by future scorecards. The balanced scorecard model reinforces good behavior in an organization by isolating four separate areas that need to be analyzed. These four areas, also called legs, involve learning and growth, business processes, customers, and finance.

Balanced scorecard is used to capture objectives, measurements, initiatives, and goals that as four primary functions of a business in the company. BSC helps companies to identify factors hindering business performance tracked by future scorecards.

BSC can provide information about the company as a whole when viewing company objectives. BSC model is used by a company to implement strategy mapping to see where value is added within an organization as well as to develop strategic goals and strategic objectives.



**Picture 1. Transformation Business Model Canvas to Balanced Scorecard****Characteristics of the Balanced Scorecard Model**

There are 4 (four) information is collected and analyzed from four aspects of a business:

**1. Learning and growth**

Will be analyzed through the investigation of training and knowledge resources. This step is to identify how well information is captured and how effectively employees use the information to create a competitive advantage over the industry.

**2. Business processes**

Will be evaluated by investigating how well products are created. In this step, operational management is analyzed to find out if there are any gaps, delays, bottlenecks, or waste.

**3. Customer perspectives**

Will be collected to measure customer satisfaction towards quality, price, and availability of services provided. Customers will provide feedback about their satisfaction with current services.

**4. Financial data**

This leg is providing data of sales, expenditures, and income to understand financial performance. These may include the amounts of income, financial ratios, budget variances, or income targets.

The balanced scorecard is often referred as a management tool rather than a measurement tool.

**Transforming BMC to BSC**

In order to integrating Business Model Canvas, this research is developing concept that created by Richardson (2014) that showing a picture and direction of translating BMC to BSC.

**RESEARCH METHODS**

This research is using Business Model Canvas and Balanced Scorecard, The Business Model Canvas is commonly used as an exercise for creating business model in XYZ University and also leading XYZ University business strategic to a transformation. How the process business in the company will be drawn onto a canvas that consists of nine building blocks. Those 9 blocks are Customer Segments (CS), Value Propositions (V), Channels (CH), Customer Relationships (CR), Revenue Streams (RS), Key Resources (KR), Key Activities (KA), Key Partnerships (KP), and Cost Structure (CS). These nine blocks then divided into four areas, those are customers, the offer, infrastructure, and financial viability of the business itself.

Business model is the translation of business plan that the institution has, beside business model is more reactive through this model, we could see the helicopter view of the

process from very beginning to the end in the XYZ University. The canvas then is a strong tool to put down and show the business model as the translation of business plan.

#### **A. Type of Data**

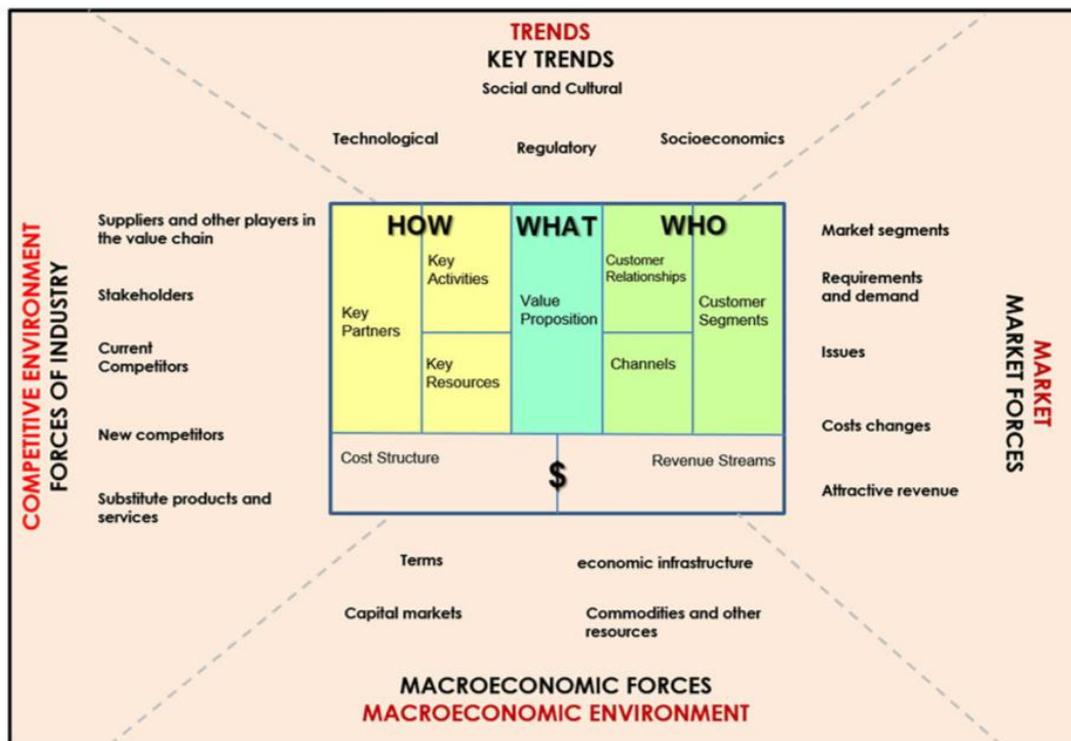
This research is using primary data as well as secondary data. Primary data is taken by interviewing some employees randomly within every level of employees in the organization structure which are operators (lowest level), supervisors (middle level), and managers (top level). Secondary data taken from the company documents such as the number of students per semester, company profile, and other information needed by searching through XYZ University social media such as website, Instagram, facebook, and others

#### **B. Collecting Data**

Collecting data has done by observing the customer service, industrial relationship, problem solving, and day to day business process in XYZ University. Interviewing some employees and asking for feedback from customer are the effective way to know how XYZ University service is accepted by customers. The customers are active students in the graduate level, alumni, and partners industry that doing business together with XYZ University in creating non degree program such as training and certification program.

#### **C. Data Analysis**

Descriptive data analysis will be done after process of collecting data has done. The result of data analysis is used to define Balanced Scorecard Model. Resuming data analysis involving the key person of the institution to match with current issue.



Picture 2: Business Model Canvas blocks

## FINDINGS AND DISCUSSION

### A. Existing Business Proses in XYZ University

XYZ University doesn't have issue regarding financial budgeting. Inflow of the capital structure comes from two resources, those are tuition fee and investment fee of participants that join the training program and also professional certification program. As one of the largest university in Indonesia, and also to be one of favorite universities that already achieved International Accreditation, to invite students to take graduate school in XYZ University is not an underlined priority. The number of students registered increasing each year and not showing the elasticity of increasing tuition fee.

### B. Business Model Canvas

Through collecting data, analysis data by observing and interviewing some of employees, key persons in the institution, students, and alumni, the Business Model Canvas that could be drawn is as follow.

| Key Partners                | Key Activities            | Value Proposition   | Customer Relationship                   | Customer Segment                             |
|-----------------------------|---------------------------|---|---|--|
| Industrial linkages         | Admission activities      | Credible and high quality of faculties, which strong in research and development, updated curriculum strengthen by conducting discussion, | Personal service                        | Alumni of undergraduate program in Indonesia |
| Partner institutions        | International Program     |   | Study Plan Consulting                   | Young executives                             |
| Partner universities abroad | Academic learning process |   | Day by day updated academic information | Expatriates in                               |

|   |   |   |          |   |
|---|---|---|----------|---|
| Regulator<br>Associations<br>Alumni   | Non Degree Program activities<br>Alumni Networking  | case study and presentation in class, International class conducted in English and over 40 International accredited partner universities all around the world, and enormous variety of training programs. | Channels | Companies in Indonesia<br>Professional degree seeking |
|   | Key Resources<br>Admission, Executive Development, and International relations<br>Academic and Alumni Affairs |   |          |   |
| Cost Structure<br>Efficiency in transportation and accommodation cost for faculties<br>Optimum tuition fee and training program investment toward service excellent<br>Paperless and internal integrated system |   | Revenue Stream<br>Student tuition fee<br>Executive Development Project  |          |   |

Picture 3. Business Model Canvas university services

### C. Value Propositions

VP that are given to the customers have already meet the needs of the standard service as graduate school might give to its customers. Strong knowledge of the faculties especially in the research and development activities put the XYZ University on the top of University rank in Indonesia in term of research and development. This achievement is proven by receiving funding from the government for many research projects leads by XYZ University faculties member. This also guarantee that the students will get the best education when registered as active student in XYZ University. Another Value Proposition is International program cooperation with more than 40 universities abroad giving opportunities for the students to explore knowledge to Universities abroad through the programs offered by them. XYZ Value that becoming uniqueness of XYZ University is industrial linkages to create many varieties of training program as well as certification program. Those values still become the competitive advantage for XYZ University in competing with other universities in Indonesia.

### D. Customer Segments

The potential customers of XYZ University are alumni of undergraduate students that are willing to continue their study to master degree, they can join regular class that are conducted on Monday to Thursday from 9 am to 4.30 pm, young executives to join executive class which has 2 options, Monday to Thursday evening class (executive A), or Friday evening and Saturday whole day (executive B). The students who are taking this type of class, should have minimum of 1 year working experience and 3 years minimum of working experience for executive B students. Other value that has been a uniqueness of XYZ

University is the industrial linkages that are seeking for upgrade knowledge in certain need. Public or customized training program are created as one of 3 pillars of education, the betterment of society. XYZ University could add practitioners that need upgrade knowledge for their professional work as one of potential customers. Overseas students that are willing to study in attractive emerging market could be potential.

#### **E. Customer Relationship**

XYZ University creating customer oriented principle of services in all units inside the organization. To maintain relationship, the information desks set up as face to face two ways service in all front liner employees. This will give effect of eye contact in deeper relationship than only service from provider to customers, with the objective to create bounding between 2 parties. The students could consult their study plan to be able to graduate in time, without any period of study delay. All updated information and schedule reminding are done by giving information to the students through whatsapp application and email. This way is to help students to always aware of any changing or present situations, knowing that most of the students are professional and attached with their commitment with office tight schedules. The suggestion for making bounding be more effective is to give birthday greetings to the students according to their date of birth data. Other way to increase the bounding is to give information through email about the smart way of dealing with current details in daily activities, such as how to do basic yoga to avoid stress in working environment while accomplish study commitment.

#### **F. Channels**

To acknowledge the XYZ University Value Proposition to the society, XYZ University regularly doing site visit and door to door marketing to potential companies in Jakarta. This way is to create awareness and attachment to the XYZ University in Jakarta. Marketing tools that are used by XYZ University in term of marketing is social media such as website, Instagram, facebook, twitter and others, which always updated every day by supporting units.

#### **G. Revenue Streams**

The main income of the XYZ University is tuition fee from the registered students. Other revenue stream is coming from development program such training and certification program. XYZ University needs to expand the business by diversification product which still in line with the main business. Suggestion for the improvement in the revenue income is to build the housing for the incoming exchange students, as well as coming faculties from main campus in other city in Indonesia.

#### **H. Key Resources**

Key resources is the critical unit for XYZ University to create value. In this area, XYZ University has an unsolved issue of getting employees prospective to be future leaders. The capability of employees is under capacity to be able to give service excellent to the graduate students with have high standard of expectation level. XYZ University should have employee development program, talent management, and employee performance appraisal tools to upgrade the quality of services.

### **I. Key Partners**

XYZ University already has strong partners to support program. Industrial linkages, partner institution, partner universities abroad, regulator, associations, and alumni are what universities required to be able to survive and become the best university in Indonesia, in high quality standard and deliver high quality graduates to participate in the economic growth of the country.

### **J. Key Activities**

Key activities of XYZ University business process are in the area of academic activities. Start from admission activities that receiving new students, entering learning process in XYZ University, non degree program, and alumni contribution to the university. The supporting units in XYZ University have to work together side by side to make sure that all support needed to run the core business has no obstacle and together all units will achieve the vision, mission, and goals of the institution.

### **K. Cost Structure**

Cost expenditure managed by finance division in XYZ University. The major expenditure are to provide transportation between cities by airplane and accommodation for the faculties. Expenditure efficiency also come from paperless program by applying internal integrated system in all involved units in the business process. Employee development is focusing on improving service excellent by giving two days training every year for the employees. The suggestion is to give knowledge to the employees not only service excellent topic but also give the employees capability of making decision, project management knowledge, and entrepreneurship mindset.

| Key Partners   | Key Activities  | Value Proposition   | Customer Relationship  | Customer Segment   |
|--|---|---|--|--|
| Industrial linkages<br>Partner institutions<br>Partner universities abroad<br>Regulator<br>Associations<br>Alumni  | Admission activities<br>International Program<br>Academic learning process<br>Training Program<br>Alumni Networking<br>Support from all units to Academic Activities  | Credible and high quality of faculties, which strong in research and development, updated curriculum strengthen by conducting discussion, case study and presentation in class, International class conducted in English and over 40 International accredited partner universities all around the world, and enormous variety of training programs. | Personal service<br>Study Plan Consulting<br>Day by day updated academic information<br>Birthday greetings<br>Information about smart daily life | Alumni of undergraduate program in Indonesia<br>Young executives<br>Expatriates in Companies in Indonesia<br>Professional degree seeking<br>Practitioners<br>Overseas students |
|  | <b>Key Resources</b><br>Admission, Executive Development, and International relations<br>Academic and Alumni Affairs<br>Employee Development Program<br>Talent Management<br>Employee performance appraisal |   | <b>Channels</b><br>Direct marketing<br>Partnerships<br>Industrial Linkages   |  |
| <b>Cost Structure</b><br>Efficiency in transportation and accommodation cost for faculties<br>Optimum tuition fee and training program investment toward service excellent<br>Paperless and internal integrated system<br>Investment in upgrading employee knowledge |   | <b>Revenue Stream</b><br>Student tuition fee<br>Executive Development Project<br>Dormitory for incoming students<br>Stationaries  |  |  |

Picture 4. Business Model Canvas University Services with Suggestion

**L. The transformation to Balance Scorecard**

Balanced Scorecard picture is the result of analyzing existing condition that already shown to the XYZ University, so that the measurement could show the real picture of balancing business process in the university.

**Table 1. Strategic Objective in XYZ University**

| Perspective                      | Theme                                       | Business Model Canvas                     | Strategy Objective   |
|----------------------------------|---|---|--|
| <b>Financial</b>                 | Financial Healthier                         | Revenue Stream                            | Increasing Revenue   |
|                                  |   | Cost Structure                            | Cost Efficiency  |
| <b>Customer</b>                  | Customer Satisfaction                       | Value Proposition                         | Increasing Customer Satisfaction   |
|                                  | Customer Loyalty                            | Customer Relationship & Customer Segments | Increasing Loyalty of the costumer<br>Customer word of mouth               |
| <b>Internal Business Process</b> | Increase Productivity                       | Key Activities                            | Increasing productivity<br>Increasing effectivity of the marketing program |
|                                  |   | Quality Partnership                       | Channel<br>Key Partners<br>Market development                              |
|                                  | Operational Excellent                       | Cost Structure                            | Investment in employees development program                                |
|                                  |   | Key Resources                             | Supporting from all unit to the core business process                      |
| <b>Learning &amp; Growth</b>     | Professional and Effectiveness Organization | Key Resources                             | Supporting from all unit to the core business process                      |
|                                  | Employees Productivity                      |   | Employees Development Program  |
|                                  | Business Technology Concept                 | Cost Structure                            | Integrated internal system   |

**Table 2. Percentage of Strategy Objective**

| Perspective               | Strategy Objectives | Percentage  |
|---------------------------|---------------------|-------------|
| Financial                 | 2                   | 17%         |
| Customer                  | 3                   | 25%         |
| Internal Business Process | 4                   | 33%         |
| Learning & Growth         | 3                   | 25%         |
|                           | <b>12</b>           | <b>100%</b> |

## CONCLUSION

XYZ University is one of the largest universities in Indonesia that running business in education industry. Huge population in Indonesia giving XYZ University opportunity to

develop the program and to get many students. Awareness of people in Indonesia to study in master degree program is a challenge for XYZ University to deliver high quality standard of education to meet the needs of high level expectation of services from potential students. The business process in XYZ University translated to Business Model Canvas and giving wider view of the business process from the very beginning to the last step of the process. Transformation of the Business Model Canvas to Balanced Scorecard has been done and finding that there are 12 Strategy Objective for 4 areas of Balanced Scorecard. Business process in XYZ University is confirming that the university will be able to survive in long term and has good capacity to remain as one of the high rank universities in Indonesia. XYZ University also has capability to achieve the vision, mission, and objective of the institution as long as XYZ University could maintain the existing achievement and run the business by doing continuously improvement.

### **SUGGESTION**

Business Model Canvas giving the picture of all the business process in XYZ University. The suggestion appears to complete the process, could give input for XYZ University to include the suggestions in the next concept of business process. XYZ University could add practitioners that need upgrade knowledge for their professional work as one of potential customers. Overseas students that are willing to study in attractive emerging market could be potential. Creating bounding to be more effective is to give birthday greetings to the students according to their date of birth data. Other way to increase the bounding is to give information through email about the smart way of dealing with current details in daily activities, such as how to do basic yoga to avoid stress in working environment while accomplish study commitment. Improvement in the revenue income could be building the housing or dormitory for the incoming exchange students, as well as coming faculties from main campus in other city in Indonesia. XYZ University should have employee development program, talent management, and employee performance appraisal tools to upgrade the quality of services. The supporting units in XYZ University have to work together side by side to make sure that all support needed to run the core business has no obstacle and together all units will achieve the vision, mission, and goals of the institution. Enhancing knowledge to the employees is not only service excellent topic but also give the employee capability of making decision, project management knowledge, and entrepreneurship mindset.

**REFERENCE**

- Dewi, L.K., (2017). Model Dasar Pengembangan Business Model Canvas ke Balanced Scorecard (Studi Kasus: PT. Boma Bisma Indra). JURNAL SAINS DAN SENI ITS Vol. 6, No. 2, (2017) ISSN: 2337-3520 (2301-928X Print) D-173
- Dewi, I., (2018). PENGEMBANGAN STRATEGI PEMASARAN BISNIS MODEL KANVAS PADA PT PENTARIO LIBERIA PERSADA (Kebun Sayur Surabaya). Seminar Nasional “Inovasi Pangan Lokal Untuk Mendukung Ketahanan Pangan” Universitas Mercu Buana Yogyakarta – Yogyakarta, 28 April 2018, ISSN: 2656-6796
- Firmanda, V., SISTEM INFORMASI SDM PENILAIAN KINERJA KARYAWAN DENGAN METODE BALANCED SCORECARD. Universitas Mercu Buana, Ensiklopedia of Journal Vol. 1 No.2 Edisi 2 Januari 2019, P-ISSN 2622-9110, E-ISSN 2654-8399
- Sawitri, D., (2019). STRATEGY FOR DIVERSIFYING TYPICAL SNACKS OF TRENGGALEK PRODUCTS TO INCREASE COMPETITIVENESS IN THE ERA OF SDGS BY USING BUSINESS MODEL CANVAS. International Journal of Organizational Innovation. 0984 IJOI, The International Journal of Organizational Innovation Volume 12 Number 2, October 2019
- Piñeiro, F., (2017), BUSINESS MODELS ON STARTUPS: A MULTICASE STUDY. Rev. Adm. UFSM, Santa Maria, v. 10, número 5, p. 792-807, 2017 DOI: 10.5902/1983465929161
- Bonazzi, F., (2013). Innovation and Business Model: a case study about integration of Innovation Funnel and Business Model Canvas. Rev. bus. manag., São Paulo, Vol. 16, No. 53, pp. 616-637, Oct./Dec. 2014ISSN 1806-4892
- Trimble, C., (2015). MORE THAN A FIELD TRIP: THE BUSINESS MODEL CANVAS AS SUPPORT FOR FIELD SITE VISITS IN MARKETING COURSES. Marketing Management Association Spring 2015 Proceedings
- Leon, M., (2015). Designing a Model of a Digital Ecosystem for Healthcare and Wellness Using the Business Model Canvas. J Med Syst (2016) 40:144 DOI 10.1007/s10916-016-0488-3
- Giourka, P., (2019). The Smart City Business Model Canvas—A Smart City Business Modeling Framework and Practical Tool. Energies 2019, 12, 4798; doi:10.3390/en12244798
- Tarver, E., 2020, <https://www.investopedia.com/terms/b/balancedscorecard.asp>. (16 May 2020, 15.20 pm)
- Dewi, P., (2017). IMPLEMENTASI BALANCED SCORECARD DALAM PENYUSUNAN RENCANA STRATEGIS DI RUMAH SAKIT UMUM DAERAH WANGAYA KOTA DENPASAR. E-Jurnal Akuntansi Universitas Udayana ISSN: 2302-8556 Vol.18.2. Februari (2017): 965-995
- Ali, Hapzi. 2020. Modul Strategic Management Program Studi Magister Management. UMB Jakarta.