

# Development of Value Creation in Website Leson.id an Education Technology Platform (Edtech) in Order to Increase Usage



Ailsa Amelia, Andi Ali Zainal Abidin, Sfenrianto

**Abstract:** In Indonesia, there are currently a variety of online learning platforms, namely called Education Technology (Edtech) which have various of different value creations in each one of them, value creation is a manufacturing of products or services that will eventually meet customers demand. Leson.id is one of Edtech's learning platforms with a vision of helping Indonesian students carry out an online learning practices by giving a various forms of examinations, quizzes and learning materials. However, in a very competitive situation, Leson.id is in need to increase their value creation to the users, to differentiated from the other Edtech's competitor. This study aims to improve Leson.id value creation from before to be a better version of Leson.id in the future. The value creation are analyzed based on the research that we conduct. We have a total of 120 students who have been interviewed and filled in the survey for the use of Leson.id existing value creation. Based on the result of the survey, we will be analyzing which value in Leson.id that can be improved. Currently there are four value creation aspects that will be used as a methodology to analyzed the value creation of Leson.id learning platforms. Based on Amit and Zott model there are many aspects of value creation, namely efficiency, novelty, Lock in, and complementary aspects. The development of Leson.id latest value creation by is expected to increase the number of users of the Leson.id website, thus it could also improve the competition between other Edtech industries in Indonesia.

**Keywords:** Education Technology, value creation, e-Learning, Development

## I. INTRODUCTION

Education plays a very important role in the progress of a wide nation, education itself is a process in producing the quality of the next generation Indonesia citizens. Various technological innovations that can be applied in the field of education, one of it is the development of e-Learning or Education Marketplace,

which can enable the learning and teaching process to be more efficient, innovative, and dynamic. E-Learning can be both web based or mobile based application that can connect between educators, tutors, and students in an online learning room. Currently e-Learning that is connected with online learning spaces can be called education technology (Edtech).

The development of Edtech in Indonesia in recent years shows a positive trends. Based on Forbes market research, it is predicted to grow until 325 billion US dollars by 2025 globally. With the various of existing Edtech industries, intense competition between each industries are created. Most of the main missions of most of Edtechs in Indonesia is to enter the online assessments market by providing an educational technology platform that is affordable and easy to use for formal and vocational learning. In an extremely competitive situation, it is important to pay attention to the value of the products and services. Creating value for customers that stands out from the competition has become a vital value for companies that compete in e-commerce platforms [1].

Leson.id is an educational technology platform, which has a vision to help Indonesian students and the community to prepare various forms of examinations, as well as daily learning materials. Leson.id provides products in the form of a variety of online tests or question banks consisting of a number of exam questions and learning material per subject for elementary, Junior high school, vocational, and college levels up to the Professional level in accordance with the National curriculum. Thus value creation is one of the points that needs to be considered.

Value aims to increase competition in the future for the company and affect the increasing number of customers [2]. Value creation theory proposed by Amit and Zott has been applied in e-business [3]. However, the right value creation is also expected to be applied to Leson.id as an educational technology platform. With the development of value creation of Leson.id Educational technology (Edtech) is expected to help increase the use of students as users.

## II. LITERATURE REVIEW

### A. Education Technology (Edtech)

According to Audrey Watters, Education Technology is a form of using digital technology and the internet in online learning [4]. Education Technology refers to technology aimed at developing applications with the use of hardware, software, and educational theory to facilitate online learning.

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\* Correspondence Author

**Ailsa Amelia\***, Bina Nusantara Graduate Program – Master of Information System Management, Jakarta, Indonesia Email: ailsa.amelia001@binus.ac.id

**Andi Ali Zainal Abidin**, Bina Nusantara Graduate Program – Master of Information System Management. Jakarta, Indonesia Email: andi.abidin@binus.ac.id

**Sfenrianto Sfenrianto**, Information Systems Management Department, BINUS Graduate Program – Master of Information Systems Management, Bina Nusantara University, Jakarta 11480 Email: sfenrianto@binus.edu

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Edtech is expected to make online learning systems more effective, efficient, accessible and used for future education for the betterment of students.

There are various startups and technology companies currently operating in the education technology sector. EdTech in Indonesia has developed rapidly, such as Ruang Guru, Zenus, Leson.id, etc.

EdTech hopes to help the learning process of students online.

## B. Value Creation

Value Creation is the manufacturing of products or services to meet customer demand. Usually, in the process of finding customer needs, a business creates new innovations according to customer needs [5]. These needs encourage companies to innovate by way of value creation to develop new products that satisfy the needs of consumers and provide a good customer experience. The main goal of creating value creation is: creating value for customers through products offered by the company to customers [6].

One approach to value creation is the Amit and Zott model to identify a value creation in e-business. The model is divided into 4 groups, each of which has a different identification value. Efficiency, Novelty, Lock-in, and Complementaries [1].

The first identified value is efficiency which is used to find out facilities in the business that make it easy and do not spend a lot of time [3]. So users can have fast and responsive access [7].

Value creation from Amit and Zott hereinafter referred to as novelty. Value creation is used to identify the level of business uniqueness to be a value in competing with other e-business competitors. Unique characteristics can make extraordinary innovations unlimited [3]. This value is important because new uniqueness and innovation play a role in e-business success [8].

lock-in which is one of the value creations of the third Amit and Zott model. Value creation is identified in order to create bonds with customers to become regular customers [3]. Creating a good relationship with customers needs to be considered when creating a competitive e-business [9].

Finally, complementaries, which are the values of the Amit and Zott model, are used to identify the complete package offered by e-business. E-business can utilize the potential of a complete product and service package to its customers as added value [3]. With the intention, if e-business has a complete package then the customer will be satisfied and revenue will rise [10].

## III. METHODOLOGY

This Study begins by the launch of the site of Leson.id as an object of value creation development. Leson.id is an educational marketplace platform that provide a variety of online test products and question banks consisting of questions and learning materials per subject for various of grades, Elementary, Junior high, High school, vocational, up to the professional level in accordance with the National curriculum. Figure1. Shows the Leson.id website.



Fig. 1. Leson.id Website

Currently the value creation founded at Leson.id has not yet reached the target of use. Based on Google Analytics in November, there were only 77,500 active users, based on the traffic projection data, Leson.id is expected to reach 150,000 active users in 2020.

In the initial creation and development, Leson.id conducted a data based market analysis. According to data released by the Central Statistics Agency, there has been an average increase in education costs by 10% in the 2015 to 2017 range, especially at college level. In 2030-2040, Indonesia predicted to experience a Demographic Bonus period, namely the number of productive age population (aged 15-64 years) is greater than the population of non productive age (under 15 years old and above 64 years) [11].

Next, according to survey data conducted by HSBC [12], real education costs incurred on average parents, based on nominal Indonesia ranked 13<sup>th</sup> with the most expensive education costs in the world. Based on the data analysis, Leson.id which is a learning website in the education technology sector began to make its own value creation based on the Amit and Zott model. Namey Efficiency, Novelty, Lock in, and Complementariness. Development of a system expected to increase the usage of user. [3].

Leson.id's existing value creation must continue to be developed thus it will increase the usage of each users. Development is based on the Amit and Zott model (Efficiency, Novelty, Lock in, and Complementariness), and the needs of Leson.id users. The first aspects of Amit and Zott value creation models is efficiency which is used to find out facilities in the business [3]. The efficiency is important as users want hassle free experiences especially in education sectors. The second aspects is Novelty, business uniqueness to be a value in competing with other e-business competitors [3], in order to gain more users, it is important to have different value added in the platforms. The third aspect is Lock in, by creating a good relationship with customers needs to be considered when creating a competitive e-business [9]. In e-business we expect users to be regular visitors, and not just one time purchases, it is important to improve the platform by increasing user stickiness. And lastly the aspects of value creation is Complementaries, are used to identify the complete package offered by e-business [3]. By giving a complete packages customer will feel content and complete, thus they don't need to find others platform to fulfil their purposes. And to analyse the current users of Leson.id, to know their input and their expectation.

The need from the users from Leson.id website are carried out through surveys using a questionnaire related to the value creation of Leson.id. the questionnaire was distributed to 120 students of various levels namely elementary school, junior high school, high school, college until professional.

**Table-I: Data Respondent**

Education	Amount of Respondent
Elementary School	4,3%
Junior High School	13,3%
High School	18,3%
Vocational	6,7%
College	33,8%
Professional	23,6 %

**IV. RESULT AND DISCUSSION**

**A. Existing Value Creation**

Table II shows the existing value creation of Leson.id’s learning website.

**Table-II: The existing Value Creation of Leson.id**

Amit and Zott Model	Existing Value Creation
Efficiency	<ul style="list-style-type: none"> <li>• Complete payment options</li> <li>• Various Packages questions</li> </ul>
Novelty	<ul style="list-style-type: none"> <li>• Professional test questions</li> <li>• The package has no time limits</li> </ul>
Lock-In	<ul style="list-style-type: none"> <li>• 24/7 Customer service</li> <li>• Feature arrangement feature</li> </ul>
Complementariness	<ul style="list-style-type: none"> <li>• Quiz competitions with prizes</li> <li>• Various of events</li> </ul>

Efficiency, Leson.id website offers a variety of payment options, from bank transfer, credit cards, convenient store payments, and by using e-wallets. Furthermore, because Leson.id itself is a platform of educational technology that sell various types of questions package from school level until professional level.

Novelty, shows the level of uniqueness of Leson.id website. The only thing that hasn’t been found in other education technology in Indonesia, is that there are professional test questions for probationary civil staffs. This test is highly visited based on the user analytical results. To initiate a purchase for a product sold at Leson.id, customer can buy a question package for lifetime, in Leson.id they don’t have time limits, whereas most customer learning websites are required to subscribe to the package they have chosen.

Lock in, the Leson.id website, has 24 hours customer service are ready to serve customers anytime, Leson.id realize how important it is for customers to receive immediate feedback about the issues they’re having. Customers are also spoiled with the question arrangements features given in advance, customers can seek the question arrangements before buying the full packages. This kind of treatment applied in Leson.id to gain customer loyalty.

Complementariness, complete packages and features will be provided by Leson.id, this is one of the added points to gain customer satisfactory, in addition Leson.id also added quiz competition in the event section, for those who have reach highest score will be getting various of prizes.

**B. Proposed Value Creation**

The proposed development of value creation is based on the results of students questionnaires that we have shared. The existing value creation will still be added in the latest value creation. Table III shows the proposed value creation from the education marketplace website called Leson.id.

**Table-III: Proposed Value Creation of Leson.id**

Amit and Zott Model	Additional Value Creation
Efficiency	<ul style="list-style-type: none"> <li>• Online Materials and online learning modules</li> <li>• QR code without time limits</li> <li>• Mobile application platform</li> </ul>
Novelty	<ul style="list-style-type: none"> <li>• A practice discussion forum between students and tutors</li> <li>• Customized exercises</li> <li>• Thousands of new question banks</li> <li>• Widget chat to ask online tutors</li> </ul>
Lock-In	<ul style="list-style-type: none"> <li>• Information for each exercise questions</li> <li>• Analytical result for each package</li> <li>• List of scores for the student that have finished the given exercise</li> </ul>
Complementariness	<ul style="list-style-type: none"> <li>• Bundling package</li> <li>• Voucher feature</li> <li>• Offline events</li> </ul>

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Increased value creation in Efficiency aspects, it is important to provide modules for each subject, thus the customers/students can review before making any purchases, and how important it is to provide ease of usage for the students, as they want the process to be hassle free, its important to facilitated QR code which contains a package of practice questions that are digital and can e accessed without any time limit. Based on analysis of the questionnaire, most of the students open the website by using mobile as their platform, by creating mobile application will make it easy for them to access the packages they have bought.

Novelty, Previously Leson.id website had a type of practice packages and test question for the professional level, aimed at people who seek for a job entry test in the government sectors to become a civilian staff. Based on the result from the questionnaire, discussion forums are needed for each level of education, the forums aims to help students to ask and answer questions and discuss among fellow students whom will about and after taking the package exam. Another addition in the Novelty aspect are, to add the tutor widget feature, where users who have difficulty in understanding the practice questions can ask directly to the assigned tutor based on the level of education they have chosen.

For the additional features in the Lock In aspect of value creation, based on the questionnaire, one of them is the information compiler for each exercise questions package. This value is needed by students because each school has a different curriculum, therefore each user who will make a purchase can check the compilers of the questions and the source of each curriculum sources. The next value addition, is for each exercise the student has taken, there are an analytical result for each subject that you still need to practice on, so rather than buying another package, the student can practice on the specific subject that they have trouble to understand.

The last development of value creation is Complimentary, based on pre existing value creation, the result of student questionnaire required bundling packages at lower prices. Furthermore by holding the voucher feature, coupons have become a sophisticated marketing tools, which not only drive sales, but also helps in building brand and student loyalty. To gain recognition as well, we proposed an offline event such as a simulation for professional test held in selected venue, so that other student can recognize Leson.id.

## V. CONCLUSION

The need for developing Leson.id value creation aimed to improve users by students' websites. Value creation can be carried out based on the results of the survey through the questionnaire to 120 users from various of level of education that used Leson.id platform. There are several additions to the existing value creation efficiency, novelty, lock-in and complimentary, as discussed in the results and discussion.

Based on the Result and Discussion, it resulted that each aspects of Amit and Zott model of value creation has been added based on the data we receive from the 120 users, thus in the questionnaire itself the respondent filled out what the pains and gains while using the Leson.id platform. Based on their input and complaints, we are able to added latest values. As resulted in the Efficiency aspects we added more learning

materials and modules, rather than various of payments and many packages of quizzes, the students can learn more based on modules that we provided. And in the Novelty section, added practice discussion forum between students and teacher, because based on the result the student would potentially bounces out of the learning platform when they are faced with problems and there are no one to asks. Thus we added the value in Novelty aspect in Leson.id Platform.

Based on the proposition to increase the usage, we can conclude that the added value creation successfully increase usage among users, measurement taken based on google analytic of the website Leson.id, the usage of the website itself has gain a significant step up, after applying the proposed value creation. (refer to table IV. Percentage of usage of website Leson.id, taken in January 2020)

**Table-IV: Short term result of the proposed value creation**

Level of Education	Usage before added value	Usage after added value
Elementary School	26.67%	42.92%
Junior High School	29.69%	58.17%
High School	39.47%	60.33%
Vocational	32.35%	61.08%
College	28.05%	33.92%
Professional	55.97%	76.97%

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## AUTHORS PROFILE



**Ailsa Amelia**, Bina Nusantara Graduate Program – Master of Information System Management, Bina Nusantara Undergraduate Program – Bachelor of Information System. Currently working as a Product Manager in Leson.id, manage product development and innovation within the platform, conduct user research, UI/UX research, and product research in order to create innovation within the platform. Working as a product section for 3 years.. Jakarta, Indonesia Email: ailsa.amelia001@binus.ac.id,  
Research Interest: Digital Business, E-learning, Education Technology, e-business, Information System, UI/UX, Education Learning, e-commerce, Product management, Scrum methodology, waterfall methodology, Project management, theory of acceptance, use of technology, user research, prototyping, mobile application, Financial Technology.



**Andi Ali Zainal Abidin**, Bina Nusantara Graduate Program – Master of Information System Management, Jakarta, Indonesia Email: andi.abidin@binus.ac.id. He is also an IT Programmer & Implementer in palm oil and manufacturing companies. He made several web applications and mobile applications to help management control company expenses and revenues. Innovating in the process of making an application is an important responsibility of the Programmer & Implementer in the company. One application made by him is business intelligence. It makes management easy and fast to analyze the business to support company development. Research Interest: Business Intelligence, Digital Business, Education Technology, Human Resources Information System.



**Dr. Sfenrianto, S, Kom, M. Kom**, is a Faculty Member of the Information Systems Management Department, BINUS Graduate Program – Master of Information Systems Management, Bina Nusantara University, Jakarta 11480, Indonesia. (e-mail: sfenrianto@binus.edu). With lecturing subject: Digital Business and E-Commerce Management. Research interest in Digital Business, e-Commerce, E-Learning and Information System.