VRIO Analysis to Measure E-Business Readiness in the Automotive Industry in East Java (Study on Otobus Company Kalisari and Otobus Company Menggala)

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Abstract
The development of information technology, especially e-business must be responded to by the company’s internal environment in order to compete with competitors and survive the changes in the external environment. The resource-based approach, namely resource based view with VRIO analysis, is one tool to measure the ability of company resources to become a competitive advantage, the automotive industry as a part of the transportation industry must also be able to respond to changes in existing external environments such as electronic ticketing systems. It has been used by trains and airplanes. The results of research at two automotive companies show that this company already has a sustainable competitive advantage and other companies do not have a sustainable competitive advantage, while in terms of readiness, the two companies are still not ready to implement e-business. In addition, the results of this study can only provide an overview of the readiness of the auto industry in using e-business, this is due to the nature of the company that is closed from research activities so that only two companies can be used as research objects.

Keywords: resource based view, VRIO analysis, perusahaan otobus, e-business

INTRODUCTION¹
The business world cannot be avoided by the development of technology, communication technology is one of the fastest growing technologies and influences activities in every business process. The use of communication technology can manifest efficiency and effectiveness in every business process. Another factor that drives the business world to use communication technology, especially the internet, is because of the high growth of the middle class, they tend to be quick to adapt to internet technology, and the growth of the middle class also promises the emergence of new markets. Facing this condition, many industries decided to enter the realm of e-business by adopting internet technology in their business processes. One of the industrial sectors that have adopted this technology is the transportation industry, the bus industry is one of the transportation industries that seeks to benefit from the growth of the middle class and prepares to enter the realm of e-business where the aircraft and railroad industries have already entered the domain.

New opportunities in the transportation and tourism industry as a result of the increase in the middle class make some transportation industries begin to enter the domain of e-business, one of the successful industries is the railroad industry where on March 8, 2012 PT. KAI imposed H-90 ticket reservations for trains commercial fire through 121 Contact Centers, ticket agents and online stations, Railcard, and internet networks and on June 1, 2013, the e-ticketing system was implemented on commuter line trains [1]. The following is data on the number of train passengers starting from 2012 to September 2017.

<table>
<thead>
<tr>
<th>Year (September)</th>
<th>Total passenger (thousand people)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>19,7795</td>
</tr>
<tr>
<td>2013</td>
<td>21,2015</td>
</tr>
<tr>
<td>2014</td>
<td>27,2604</td>
</tr>
<tr>
<td>2015</td>
<td>32,0621</td>
</tr>
<tr>
<td>2016</td>
<td>34,5839</td>
</tr>
<tr>
<td>2017</td>
<td>28,1925</td>
</tr>
</tbody>
</table>

Tabel 1 Number of train passengers in 2012-2017

Source: Central Statistics Agency (data processed)
Based on these data it can be seen that there was an increase in the number of passengers
where in 2012 the number of train passengers reached 197 million people then in 2013 after the online ticket booking system increased the number of passengers to 212 million, an increase of 15 million people and more increasing. While the number of passengers departing from Juanda airport from 2012 to 2017 can be seen in the following table.

**Table 2** Number of International Departure Passengers at Juanda Airport in 2012-2017

<table>
<thead>
<tr>
<th>Year (september)</th>
<th>Total passenger (thousand people)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>699581</td>
</tr>
<tr>
<td>2013</td>
<td>869167</td>
</tr>
<tr>
<td>2014</td>
<td>888121</td>
</tr>
<tr>
<td>2015</td>
<td>836382</td>
</tr>
<tr>
<td>2016</td>
<td>863948</td>
</tr>
<tr>
<td>2017</td>
<td>670848</td>
</tr>
</tbody>
</table>

Source: Central Statistics Agency (data processed)

Although it tends to fluctuate, in 2012 to 2016 the tendency of passengers to use airplanes increased. Increasing the number of passengers in the railroad and aircraft industry shows success in the realm of e-business.

The bus industry as one of the transportation service industries has the same opportunities as other transportation services industries to grow and absorb the growth of the middle class in Indonesia. The implementation of the electronic ticketing system, which was one form of e-business, was tested precisely in mid-2016 at Pulogebang, Jakarta and Tirtonandi Terminals, Solo. However, the implementation is still ineffective as stated by the minister of transportation “The online ticketing system on the bus has not been effective, there are still those who pay for the ticket directly. Just in Pulogebang Terminal online it can’t, it hasn’t run yet,” [2]. Meanwhile, the number of AKAP bus passengers who are objects in the electronic ticketing system tends to fall, but when there is homecoming Lebaran in 2017 there is a buildup of passengers so that the Department of Transportation increases the number of buses to reduce passenger accumulation. According to the University of Indonesia Transportation Observer, Ellen Tankudung “to improve services at the AKAP Bus Terminal, the use of an online ticket purchase system must indeed be done. So, passengers no longer need to queue at the counter and wait for the bus to be too long in the terminal.” [3].

Changes in conditions in the external environment of the bus industry make industry players, especially owners of POs (Otobus Companies), have to respond to be able to compete with other modes of transportation, especially trains and airplanes that have used internet technology and make it a competitive advantage. Therefore PO Owners must be able to identify the resources they have in order to become competitive advantages so that they can compete, as in Figure 1 below.

**Figure 1** External environmental pressure on the company’s internal (core competencies, resources, and capabilities). Source: Rothaermel (2017: 107)

**Figure 1** explains the pressures of the company’s external factors in an industry, where the company must respond to the company’s external environmental conditions as stated by Rothaermel [4], the following

“The firm’s response is dynamic. Rather than creating a one time and thus a static fit, the firm’s internal strengths need to change with its external environment in a dynamic fashion. At each point the goal should be to develop resources, capabilities, and competencies that create a strategic fit with the firm’s environment. The forward motion of those environmental forces must also be considered”

The response of the company to the condition of the external environment is dynamic, rather than making a response that is rigid the internal strength of the company can be changed according to the conditions of the external environment dynamically, and the purpose of changing the internal strength is to develop resources, capabilities, and competencies that can form strategies that are in accordance with the company’s environment. In addition, the pressure from environmental changes is also taken into consideration in making the company’s response.

One theory in strategic management studies that is considered to be able to answer the challenges of the external environment is the
VRIO Analysis to Measure E-Business Readiness in the Automotive Industry (Yudiono, et al.)

theory of RBV. Assumptions are used in the theory that business organizations obtain sustainable competitive advantage by implementing strategies that exploit their internal strengths, through responding to environmental opportunities, while neutralizing external threats and avoiding internal weaknesses. In his study [4] providing a critical review of the approaches available since strategic management was introduced as a separate discipline outside the economic domain. Barney stated [4] that most research on the source of sustainable competitive advantage has been focused both on isolating opportunities and corporate threats ( [5], [6] ), describing their strengths and weaknesses ( [7], [8], [9] ), or analyze how this is synchronized to choose a strategy.

VRIO Analysis is a tool to measure competitiveness based on resources (Resource Based View), there are four elements in this VRIO analysis, namely Valuable, Rare, Imitate, and Organize. This analysis aims to analyze the company's resources, capabilities and competencies in order to be a source of competitive advantage. The reason why competitive advantage is obtained from core competencies is important because according to [10]. "Core competencies allow companies to differentiate their products and services from their rivals, creating higher value for customers or offering products, core competencies enable companies to differentiate their products and services from competitors., creating higher value for customers or offering products and services with a value that is comparable to lower costs. Based on these reasons the VRIO analysis was conducted to determine the readiness of the resources, capabilities, and competencies of business actors in the automotive sector, especially the Autobus Company Owners (PO) in implementing e-business in their business lines so that the core competencies of the resources owned and able to compete with other sectors and can provide input to stakeholders in the auto industry in taking appropriate policies for e-business implementation.

The importance of knowing the core competencies of resources as well as the pressure or change from the external environment coupled with the number of type A terminals in East Java Province as many as 19 places and the enactment of Permenhub No. 132 of 2015 which requires the existence of special ticketed ticket booths on type A terminals to be a fundamental reason carry out VRIO Analysis which is a form of applying the theory of resource-based view to find out the readiness of resources, capabilities, and capabilities of autobus industry players in East Java Province. Based on this, the research is entitled " VRIO Analysis to measure e-business readiness in the autobus industry in East Java (Study on Perusahaan Otobus Kalisari and PO Diga) ".

Based on the exposure to the background, the formulation of the problem made is as follows: How is the Autobus Industry Readiness in East Java in the face of e-business within the framework of VRIO Analysis?

MATERIAL AND METHOD

The research carried out in this thesis is qualitative research, the reason for the use of qualitative research in this study is to explore and understand the readiness of the automotive industry to enter the domain of e-business, besides the characteristics of qualitative research such as the natural environment, meaning of the participants is also the reason for the use qualitative research in this thesis.

In this study the data analysis process uses spiral data analysis, which uses this approach can make researchers do data analysis that is more dynamic than analysis of linear data.

Data Collection

In this study the data collection process was carried out by interview and observation methods in the field. The process of collecting this data is done by both methods because the type of research used is qualitative.

Determination of key informants in this study used purposeful sampling. The sampling method according to Creswell has 16 typologies or sampling strategies and for the typology case study approach used by Creswell is the maximum variation. The following is an explanation of the maximum variation which is one of the sampling strategies according to Creswell:

"In the case study, I tend to choose unusual cases in collective case studies and use maximum variation as a sampling strategy to represent a variety of cases and to fully describe a variety of perspectives on these cases" [11].

The maximum variation sampling strategy aims to document the diversity of individuals or places based on specific characteristics.

Based on the explanation, the site or object in this study is the Otobus Company, namely Kalisari Otobus Company, Menggala Otobus Company This is because the VRIO Analysis
places more emphasis on the condition of internal resources within the company so that only autonomous companies are more aware of the conditions of the company’s internal environment. Meanwhile, another reason for the selection of the two companies was because only the two companies could accept outsiders to conduct research, while other autobus companies tended to be closed in order to receive outsiders who wished to conduct research activities.

RESULT AND DISCUSSION

General Description of E-Business Implementation in Autobus Industries in East Java
Some Otobus Companies in East Java Province have developed the business realm towards e-business, especially e-commerce, this can be seen from the number of ticket booking applications that are managed by autonomous companies themselves and in collaboration with third parties. From around 13 POs from East Java, less than 50% (percent) have used internet technology, especially e-commerce, in ticket reservations. The use of e-commerce technology does not replace offline ticket sales as is usually done by Otobus Companies, but rather towards increasing online sales channels.

Data Presentation
Based on the research background of the problem formulation, as well as the research objectives, the focus in this study is as follows:
Readiness of the bus industry to deal with e-business within the framework of VRIO analysis, which include:

a. Valuable
One of the requirements for resources to be a competitive advantage is that these resources are valuable, the valuable criteria here are whether these resources are able to exploit opportunities and minimize threats from the external environment or in other words whether the resources to deal with e-business that has been owned by the company - this automotive company has been able to exploit opportunities and minimize threats?

b. Rare
The main question in assessing whether resources are scarce is whether the resources to deal with e-business are owned or controlled by a small number of competitors? If a little, it can be ascertained that these resources have a rare nature and vice versa.

c. Imitate / Costly to Imitate
Resources that can be used to compete must be expensive to emulate which means that whether a company that does not have the resources to deal with e-business will suffer losses when acquiring and developing these resources, if the company does not have these resources then have it and experience loss, the resource has an expensive nature to imitate.

Organize to Capture Value
A further factor is whether the policies and procedures of other companies are regulated to support the exploitation of valuable, rare, and expensive resources to replicate? This explains that how the ability of a company can organize resources owned by other companies or not, if not, then the competitive advantage can be achieved, especially competitive advantage in the field of e-business.

Based on the focus of the research that has been made, the following are the results of the data collection that has been carried out

Valuable
Based on the theory of Resource Based View, the resources owned by a company are heterogeneous (diverse) and not perfectly across firms (unable to move perfectly). Based on these two assumptions the resources possessed by Kalisari Otobus Company and Menggala Otobus Company which in this case are the admin or operator of the electronic ticket system and the ticketing system has been able to seize opportunities and be able to support economic value creation, this can be seen from the use of websites that have owned by the two POs, where the PO family has long used the website in its operations so that despite having diverse resources, the resources possessed by the two POs have been able to capture the opportunities of the electronic ticketing system, so that in this case the resources they have valuable.

Rare
Human resources and the ticketing system owned by Menggala Otobus Company and Kalisari Otobus Company have a rare nature, rare in the sense that actually every company can use or maximize the resources it has to operate the system, but most are still reluctant to use it. The reason for the reluctance of the use of electronic ticket technology is a separate finding in this study, the first opinion from Kalisari Otobus Company said that the reluctance of using electronic ticket technology is because the benefits or benefits obtained by using this system cannot be directly felt and even companies that
use it feel aggrieved because the operator complained on the Autobus company, while from Menggala Otobus Company itself indirectly also supported the statement from Kalisari Otobus Company where as long as using the electronic ticketing system from the third party there was still no improvement from the passenger side.

Imitate
Menggala Otobus Company can be assured of having a competitive advantage. It is known from the ability of its resources to use the electronic ticketing system, this is supported in terms of the use of electronic ticket technology that has been carried out starting from 2015, before the issuance issued a proposal to use electronic tickets while that for the Perusahaan Otobus Kalisari party these resources are not owned, but Kalisari Otobus Company can have these resources by issuing costs he will obtain resources with the same ability as those owned by PO Collapses on the condition that this electronic ticket policy is fully implemented.

Organize
Menggala Otobus Company parties already have a reporting system that can avoid the occurrence of technical problems in the field by way of distributing seat rations and reporting systems every half hour, the PO method is a proof of the ability of these POs to organize their resources so that they can become a competitive advantage sustainable

<table>
<thead>
<tr>
<th>Resource</th>
<th>V</th>
<th>R</th>
<th>I</th>
<th>O</th>
<th>Competitive Implication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kalisari</td>
<td>√</td>
<td></td>
<td>√</td>
<td></td>
<td>Temp Comp Adv</td>
</tr>
<tr>
<td>Menggala</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td></td>
<td>Sus Comp Adv</td>
</tr>
</tbody>
</table>

Sumber: data primer (data diolah)

Based on the results of the VRIO Analysis, it can be seen that the resources owned by the Otobus Kalisari Company are in the position of Temporary Competitive Advantage while the Otobus Menggala Company is in the position of Sustainable Competitive Advantage. The results of the VRIO analysis, if discussed with the Resource Based View approach, will get the following results:

a. Otobus Kalisari company
The results of the VRIO analysis on the Otobus Kalisari Company explained that the level of ability of the resources possessed in the Otobus Company was at the level of temporary competitive advantage, besides the results of this analysis also found several issues or findings, including the following:

<table>
<thead>
<tr>
<th>VRIO</th>
<th>Findings</th>
<th>Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valuable</td>
<td>Kalisari since 2013 has a website</td>
<td>Core Competencies (+)</td>
</tr>
<tr>
<td>Rare</td>
<td>Direct benefits from electronic tickets that have not been felt</td>
<td>Capabilities (-)</td>
</tr>
<tr>
<td>Imitate</td>
<td>Resources (-)</td>
<td></td>
</tr>
<tr>
<td>Organize</td>
<td>Core Competencies (+)</td>
<td></td>
</tr>
</tbody>
</table>

Source: primary data (data processed)

Based on table 4, it can be seen that in Valuable Analysis the Otobus Kalisari Company has advantages in terms of core competencies where the resources owned by the Otobus Kalisari Company in the form of human resources owned by the Otobus Kalisari Company already have core competencies because they have experience in operating websites, where the website is the initial form of the ticket system electronically. The core competencies of the Otobus Kalisari Company should continue to be honed so that the competencies that have been owned can be an advantage for the Otobus Kalisari Company. Other advantages in terms of core competencies owned by the Otobus Kalisari Company include the use of CCTV in every bus, although it is not new in the bus industry, but the commitment of the Otobus Kalisari Company in increasing comfort to the feeders so that it can be used to compete with Other Otobus companies in East Java, the advantages in terms of CCTV must be maintained by periodic maintenance of these technologies.

Meanwhile the Otobus Kalisari Company also has a lack of capabilities, this can be known from the findings in table 4 where the applications used by the Otobus Kalisari Company come from third parties, this condition shows that the resources owned still do not have the capability to make an application, this also explains that the Otobus Kalisari Company Management does not yet have the ability to be able to make efforts to increase the capabilities of the resources owned. Therefore, the Otobus Kalisari Company Management must be able to make efforts to be
able to increase the capabilities of its resources so that it can compete with other companies. The disadvantages in terms of the Capabilities which are then obtained from the results of VRIO Analysis on the Rare and Organize side, namely:
- Direct benefits from using electronic tickets that haven’t been felt
- A third party hires with the Otobus Company
- Ineffective reporting system
- Human Resources (HR) who are not aware of the electronic ticket system

The three deficiencies are more due to deficiencies in Management, where they are less able to improve their capabilities from the internal side of their human resources. An ineffective reporting system shows that management has not made enough resources to improve, such as training so that HR who handle the ticketing system can do their jobs better. Meanwhile, for Automotive Companies to get benefits or benefits directly from the application of tickets electronically and so that third parties do not feel benefited by the use of an electronic ticketing system, there is a need for the presence of management to improve the ability of resources capable of operating technology web to be able to operate ticket technology electronically, then related to an ineffective reporting system coupled with resources that are not aware of electronic systems also need attention, where the current increase in the quality and capability of the resources owned by Kalisari is absolutely necessary, namely by do education program and training so that quality can increase and can compete with other Automotive Companies. Finally, in terms of resources, where the PO Kalisari plans to recruit new resources to implement an electronic ticketing system, this shows that the PO Kalisari party prefers to re-invest by bringing in new resources rather than upgrading its resources, this further shows the inability of the management of the Otobus Kalisari Company to be able to improve its capabilities.

b. Otobus Menggala company
The results of the VRIO analysis on the Otobus Menggala Company explained that the level of capability of the resources owned by the Autobus Company was at the level of sustainable competitive advantage, besides the results of this analysis also found several issues or findings, including the following:

Tabel 5 Findings from the VRIO Menggala Analysis

<table>
<thead>
<tr>
<th>VRIO</th>
<th>Temuan</th>
<th>Isu</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valuable</td>
<td>- Already have my own website even though it is now made by a third party</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Electronic ticketing system that is not too complicated because it uses Android</td>
<td></td>
</tr>
<tr>
<td>Rare</td>
<td>- There is training from third parties</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Already has an Surabaya-Singaraja electronic ticket system</td>
<td></td>
</tr>
<tr>
<td>Imitate</td>
<td>- Already have qualified human resources for online and offline ticket</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Since 2015, have made an online ticket system</td>
<td></td>
</tr>
<tr>
<td>Organize</td>
<td>- Bench distribution system</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Bench update system</td>
<td></td>
</tr>
</tbody>
</table>

Source: primary data (data processed)

Based on table 5 it can be seen that in terms of Capabilities and Core Competencies that are owned by the company Otobus Menggala more than those owned by the Otobus Kalisari Company. Based on the findings from Table 5.3, it can be seen that the resources owned by enterprises Otobus Menggala has fulfilled as resources that have a sustainable competitive advantage, it can be seen from the advantages of capabilities possessed by the Company Otobus Menggala namely:
- Electronic ticket system that is not too complicated because it uses Android
- Training from third parties
- Already have qualified HR for tickets online & offline
- Bench distribution system
- Bench update system

The use of a ticket sales system that uses the Android operating system is a form of the management ability of the Automotive Menggala Company to improve its resource capabilities, this is because the Android operating system is an operating system that is easy to use by users, this is also supported by training given by a third party where this party is an online ticket sales system provider. Another advantage of the capability side here is the ability of the management of the Automotive Mobilizing Company to conduct training so that the resources they have can master the ticket sales system both offline and online and this capability is one of the capital in achieving competitive advantage for Automotive Driving Companies, where do not have to spend money when you
have to actually use the ticket sales system electronically, coupled with a bench distribution system to facilitate the evaluation when there is an error in the ticket sales process coupled with a system of updating seat filling information every half hour makes the possibility of errors which can be detrimental to passengers as is the case with the Kalisari Otobus Company that uses CCTV in every vehicle it owns which also aims to increase passenger comfort. Another advantage of the resources owned by Menggala Otobus Company lies in the Core Competencies, namely:
- They already had their own website even though it is now made by a third party
- Already has an Surabaya-Singaraja electronic ticket system
- Since 2015, they have made an online ticket system

Core competency is a unique strength embedded in the company, this power is important to gain and maintain competitive advantage, based on this understanding, it can be seen that the historical factor in which the Otobus Menggala Company is the first Otobus company that uses an electronic ticket system makes the system one of the competencies the core owned by the Otobus Menggala Company, where before the Department of Transportation called for an electronic ticketing system for the Otobus Menggala Company, it had already been used first. In connection with the core competencies of the Otobus Menggala Company, to be able to maintain a sustainable competitive advantage, efforts need to be made to be able to maintain it by increasing the capabilities of the resources that are owned so that the core competencies possessed can be stay awake and maintained.

Based on the explanation regarding the findings between the Otobus Kalisari Company and the Otobus Menggala Company in the viewpoint of a resource based view, we can find out the similarities and differences from the perspective of resources, capability, and core competencies.

<table>
<thead>
<tr>
<th>RBV Element</th>
<th>Equation</th>
<th>Difference</th>
<th>Automotive company</th>
<th>Automotive company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource</td>
<td>-</td>
<td>Add new resources</td>
<td>Not adding new resources</td>
<td></td>
</tr>
<tr>
<td>Capability</td>
<td>-</td>
<td>- The use of electronic tickets has not had a beneficial impact</td>
<td>- Electronic ticketing system that is not too complicated due to using the Android operating system</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Third parties (electronic ticket system providers) benefit more than auto companies</td>
<td>- Training from third parties</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Ineffective reporting system</td>
<td>- Has human resources capable of managing the ticket system online and offline</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Electronic ticketing system from third parties</td>
<td>- Bench distribution system</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Bench update system</td>
<td></td>
</tr>
<tr>
<td>Core Competencies</td>
<td>Both have websites as ticket sales channels</td>
<td>- Use of CCTV to increase passenger comfort</td>
<td>- Has an electronic ticketing system for Surabaya-Singaraja destinations</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Since 2015, there is an online ticketing system</td>
<td></td>
</tr>
</tbody>
</table>

Source: primary data (data processed)

Based on the results of table 6, it can be seen that the resources owned by the Otobus Kalisari Company and the Otobus Menggala Company turned out to be diverse and in the process of readiness to use e-business especially the electronic ticket system, the resources owned by the Otobus Menggala Company were better prepared because of the Ownership capability shows more superiority compared to Otobus Kalisari Company, but in terms of core competencies, both Otobus Kalisari and Otobus Menggala Companies have similarities, namely having used a website which is one form of information technology so that competency in that field is the same, while both Otobus Menggala Company and Otobus Kalisari Company also have unique core competencies from each other. Therefore, in terms of the resource based view approach, it can be said that the resources of the Otobus Menggala Company are better equipped to run an electronic ticketing system compared to the resources of the Otobus Kalisari Company. The results of this study also reinforce the opinion of [12]. which reveals that the results of the RBV Analysis cannot be generalized, this is because competitive advantage is not obtained from only a few resources, but an interaction between the
resources that exist within a company and the results of the research also show the same thing where human resources and owned electronic systems have not been able to make the company have a competitive advantage.

Meanwhile the results of this study also support opinions from [13] and [14] regarding the use of Information Technology as a source of competitive advantage according to [13] investment in Information Technology can be one of the competitive advantages when integrated with other resources, this opinion is in accordance with the conditions in both Otobus Companies which show that investment in Information Technology and without integrating with other supporting resources has not been able to make information Technology as one source of competitive advantage. Meanwhile opinions from [14] which revealed that the use of information technology, namely cloud computing on companies Deepwater’s Rigs (DR) and Fuji Motors (FM) can increase interaction with consumers, this opinion if associated with results shows that the use of information technology in online ticket booking can facilitate consumers to interact with the company which uses information technology.

The results of this study also indicate that the two automotive companies are family companies, which according to the results of research from [15] the experience of the family company leaders is still a consideration in formulating a policy, and this is also evident in automotive companies that are the object of research, especially in the Otobus Menggala Company where they faithfully make a policy they need time to gather with family related policies to do. Meanwhile for the Otobus Kalisari Company itself even though it is in the form of a family company, in the decision making process it tends to be more independent and does not require consideration from the experience of the previous party even though it is a family. The two autobus companies reinforce the assumption that most automotive companies are family companies and tend to be closed.

**Research Limitations**

The limitations in the research that have been carried out are as follows:

- The object in this study only uses two POs so that it cannot fully describe the readiness of the automotive industry in the East Java province and each OTOBUS COMPANY can only interview one key informant.
- Access to entry for a Otobus Company is limited because most automotive companies are family companies that tend to be closed so that the results of interviews are less in-depth.

**CONCLUSION**

Based on the results of the VRIO analysis conducted on the two Otobus Companies, namely the Otobus Menggala Company and the Otobus Kalisari Company, there are a number of things that can be concluded:

1. The electronic ticket sales system is one form of e-business that has been carried out by the Otobus Company in East Java Province
2. Resources related to ticket sales electronically are human resources that use the application and the ticketing system
3. Based on the VRIO analysis, it is known that human resources and ticketing systems owned by the Otobus Menggala Company have fulfilled the requirements as a resource that has a sustainable competitive advantage while the Otobus Kalisari Company has resources that have not been able to become superior resources sustainable competition
4. Findings which are facts in the field show that the otobus industry in East Java is not ready to implement e-business, especially electronic ticket sales and for the Menggala Company Otobus have owned resources are ready to use the ticket system electronically, while for PO Kalisari is still not ready because of the lack of resources available

**Suggestion**

The suggestions for further research are as follows:

1. For Otobus Menggala Companies, the resources they have have been able to deal with changes in the external environment so that they are expected to maintain their resources with various efforts
2. For Otobus Kalisari Companies, increasing the capability of resources is absolutely necessary so that many efforts need to be made to improve the capabilities that are owned so that they can compete with other automotive companies.
3. Subsequent research is expected to be able to examine other sectors because autobus companies in East Java are generally closed with research activities
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