

## Carimontir: Motor vehicle service application

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### ARTICLE INFO

#### Article history:

Received Jul 5, 2023

Revised Jul 7, 2023

Accepted Jul 28, 2023

#### Keywords:

Development;  
Carimontir;  
Motor Vehicle Service.

### ABSTRACT

The number of motorized vehicles in Indonesia is increasing, people's mobility is also increasing so that it often creates problems regarding the motorized vehicles used to carry out activities. The problem that often occurs is in the aspect of service. This has prompted the emergence of the carimontir application which helps with various motor vehicle maintenance problems. Unfortunately, studies on the carimontir application have not been carried out in depth so that researchers are interested in studying Carimontir: motorized vehicle service applications. The research method used is qualitative with a literature study so that various data are collected for analysis and it is known from the research results that the development of the carimontir application is carried out carefully and carefully, namely analyzing external and internal factors, implementing strategies, marketing plans, operational plans, planning human capital, financial plans and risk plans to find out various things that might occur so that they can be minimized and prevented quickly and precisely.

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## 1. Introduction

The number of motorized vehicles in Indonesia is increasing (Supriadi, 2019) (Chalid, 2019). With the increase in the number of motorized vehicle users, of course, it is in line with the bustle of an increasingly crowded society. Especially for working people who carry out activities every day so they often forget to carry out maintenance on the vehicles they own (Saputra & Dores, 2021) and have an impact on damage to certain parts of the vehicle (Yulianingsih, 2021). If this is allowed to continue, of course it can have fatal consequences such as a breakdown in vehicles (Lesmana, 2017), being late for work, work being ineffective and inefficient, and so on. Moreover, Indonesia is a country with a dense population so that the mobilization of its people often experiences density, for example the DKI Jakarta area (Femy Mulya et al., 2022) (Sitanggang & Saribanon, 2018).

For this reason, efforts are needed to overcome the various problems experienced by the community such as forgotten service times, service fees that are too expensive, no services carried out at home, lack of service that is known if there is a sudden strike and so on. One effort that can be done is to take advantage of increasingly developing technology. Technological developments are proven by the industrial revolution 4.0 which is a transformation by integrating the online world with the world of industrial production so that the production process becomes easier, more effective and efficient (Sibuea et al., 2023). In addition, the development of information systems also makes it easy for various companies to provide even better products or services (Kurniawan, 2021) (Zahroh et al., 2023).

The development of this technology has also entered Indonesia (Palita et al., 2020), as evidenced by the increasing number of smartphone users in Indonesia amounting to 98.2% (Rahmandani et al., 2018) (Basit et al., 2022). This situation certainly provides an opportunity for business people or entrepreneurs to

continue to develop their business by analyzing the characteristics of society, especially in Indonesia at this time through technological opportunities (Widhiananda et al., 2018). Of course, efforts to develop a business through technology also require various efforts and careful analysis so that the business being carried out can continue to operate and provide profits for the company.

Developing a system or application through a smartphone is one of the right steps so that your smartphone or Android can provide a solution when a problem occurs with your vehicle so that the condition of the vehicle can continue to be excellent (Syafrial & Fauzi, 2019) and become an effective driver or supporter of the pace of human activity and efficient. One application that can help people maintain or provide maintenance on their vehicles is Carimontir. Unfortunately, research on applications used for licensed vehicle servicing services using the Carimontir application development has not been carried out much. This gave impetus for researchers to conduct research with the title "Carimontir: Motor vehicle service applications". The purpose of this research is to gain knowledge about the carimontir application which is used as an application to provide service to motorized vehicles where not a few motorized vehicle drivers experience various difficulties in maintaining the stability of their vehicles so that they remain primed. With this, it can make it easy for vehicle owners to be able to get vehicle services quickly and precisely anywhere and anytime, making it easy for loyal partners to be able to reach their potential consumers to increase income.

## 2. Research Method

This research is a qualitative research by conducting a study on the Carimontir application through a literature review so that various documents related to the Carimontir application are collected and then analyzed to obtain information about the various steps taken by the company to develop the Carimontir application. The steps of analysis carried out in this study are First, by selecting library sources, where this selection is carried out carefully and ensures that the selected literature is a source that is relevant to research. Second, do a search on library sources. Third, read the library sources carefully and thoroughly. Fourth, record various important points during the study process. Fifth, presenting data as a form of research results. The results of the research are expected to be able to contribute ideas for entrepreneurs or other companies to continue to develop their own products so that they are widely known by consumers, utilized massively and provide benefits for both the company and other parties.

## 3. Results And Discussions

Before developing the Carimontir application, it is important to know a number of things so that various aspects can be identified to overcome various problems that can arise and provide the best offer for customers to work with companies that provide the Carimontir application. The steps for developing the Carimontir application are known as follows:

### Performing External Factor Analysis

This section discusses factors that come from outside the company and can have an influence on the development of the company (Astari, 2017) (Prastiti et al., 2019). Some of the aspects included in the external factors include: a) Competitive forces are used to obtain information about the strength level of a company in facing various existing competitors. In addition, it can also be used to determine the intensity of competition in a business industry which can be seen through the five compositions of strength, namely Threat of New Entrants, Bargaining Power of Buyers, Threat of Substitutes Products, Bargaining Power of Suppliers and Rivalry Among Existing Firms. The results of Porter's analysis of Competitive Forces are as follows:

**Table 1.** Total value porter's five forces carimontir

FORCES	VALUE
Threat of New Entrants	2.0
Bargaining Power of Buyers	2.6
Threat of Substitutes Products	2.0
Bargaining Power of Suppliers	1.0
Rivalry Among Existing Firm	1.4
Total Grade Average	1.80

The table above provides information that the average value of Porter's Five Forces is 1.80. From the total average value, it can be concluded that the competitive strength of this industry is moderate. This shows that Carimontir needs to make a strong effort in order to be able to increase its business and make a profit. As well as the need to innovate regularly so that the sustainability of Carimontir's business can survive. By looking at the results of these strengths, Carimontir will strengthen its competitive strength by using market penetration. b) Pest, there are several pest aspects that are important to note in the development of the carimontir application, namely political factors, economic factors, social factors, and technology factors. In the pest aspect, it is known that political factors play an important role in the development of the Carimontir application, including social, economic and technological factors, especially since Indonesia currently has a large number of smartphone users. c) Opportunity Threat, the results of the analysis on political, economic, social and technological factors are presented in the form of an EFE (External Factor Evaluation) table consisting of opportunities and threats for Carimontir.

**Table 2.** External factor evaluation carimontir

External Factor Evaluation	
Opportunities	
1	There is a government policy regarding financial support to improve the performance of cooperatives and MSMEs in the workshop business (POLITIK)
2	High market potential where the number of motorized vehicles increases by 70% yoy (ECONOMY)
3	Number of available business partners (mechanic) (ECONOMY)
4	People's lifestyles tend to be instantaneous (SOCIAL)
5	High number of Y and Z generations who are technologically literate (SOCIAL)
6	63.3% of Indonesia's population are smartphone users (TECHNOLOGY)
Threats	
1	Strict regulation of workshop business quality system certification (POLITIK)
2	Number of tax obligations of workshop entrepreneurs (POLITIK)
3	The decline in people's purchasing power due to the pandemic (ECONOMY)
4	The rise of crime on the streets (SOCIAL)
5	The rapid development of Stratup company technology (TECHNOLOGY)
6	Cybercrime (TECHNOLOGY)

### Internal Factor Analysis

This section discusses the various internal factors that exist in Carimontir's business where internal factors are obtained from within the company itself (Astari, 2017). There are several internal factors, namely Demand Analysis, Competition Analysis, Assessment of Resources and Capabilities, Competitive Advantages, and Strengths and Weaknesses. By knowing the various internal factors, the company can provide services and facilities in the Carimontir application in accordance with the wishes of consumers. In the aspect of strengths and weaknesses, the following is the result of an assessment of resources and capabilities.

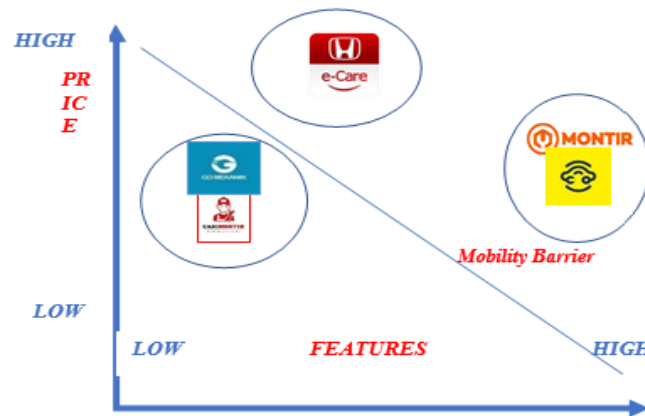
**Table 3.** Strengths -weaknesses carimontir

Internal Key Success Factor	
Strengths	
1	Has a wide selection of products
2	Workshop partners / partners who are anywhere and anytime
3	Have historical service record data
4	The Carimontir transaction process is easy anywhere and anytime
5	Has a wide variety of service types
6	The design of the Carimontir application is easy to use
7	Has artificial intelligence technology in the form of Chat Bot
Weaknesses	
1	The quality of work is not yet competitive
2	Lack of business capital
3	Reputation is still low
4	SMMA promotion strategy (Social Media Marketing Activities) is not optimal

### Strategic Plan

This section discusses the company's strategic plan. Corporate strategic planning, namely a long-term and comprehensive plan, providing various formulations for the desired direction of the company also discussing the resources that will be allocated to achieve company goals within a certain period of time (Elisa, 2020). The company's strategic plans in the Carimontir application are company goals (short term

goals, medium term goals and long term goals), The Input Stage (External Factor Evaluation Matrix, Internal Factor Evaluation Matrix and Competitive Profile Matrix), The Matching Stage (SWOT Matrix and Internal-External Matrix), The Decision Stage (Quantitative Strategic Planning Matrix), Porter's Generic Strategy and the Lean Business Canvas Model. The results of analysis of Porter's Generic strategy are as follows:



**Gambar 1.** Strategic group and the mobility barrier carimontir

Based on Figure 3.1 above related to Carimontir's Strategic Group and The Mobility Barrier, it shows that Carimontir is in the same area as Go Mekanik, namely in the medium price area and medium low features. Then, Carimontir is in a different mobility barrier line area from Montir, MobilCar, and HeppiCar.

Porter's generic strategy describes how Carimontir can gain and achieve competitive advantage in its business industry market. Carimontir's customer segment is divided into 2, namely service providers or partners, namely mechanics and service users, namely owners of motorized vehicles, both motorbikes and cars. Based on the results of the Benefit and Risks of Differentiation - Cost Leadership Carimontir analysis above, the strategy to be chosen is the Differentiation Strategy. By implementing the Differentiation Strategy, it is expected to reduce the threat of competition by offering service provider application services that are attractive, unique and innovative compared to competitors.

### Marketing Plan

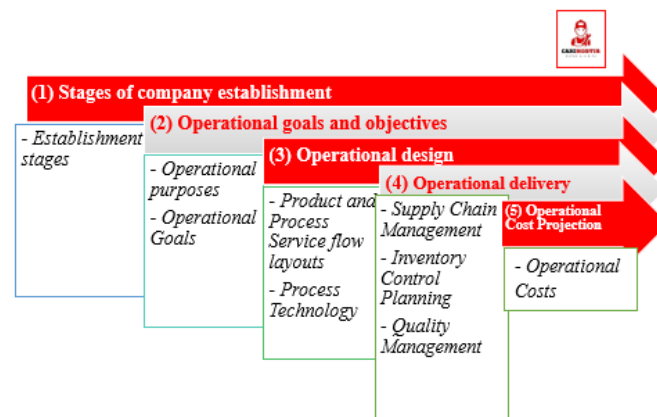
This section discusses Carimontir's marketing plan, namely the company's marketing strategies (Fransinatra et al., 2021). There are several things that need to be considered in the aspect of Carimontir's marketing plan. Namely, setting marketing goals and objectives, Segmenting, Targeting, and Positioning, marketing mix, sales and marketing, and projected revenue streams.

Marketing objectives are arranged in various terms such as short term, medium term and long term. Goal setting can be used to focus the company in developing carimontir applications. After the goals are set, the next step is to determine marketing goals. Carimontir determines the target for the number of downloaders of the Carimontir application through an alternative strategy based on table 4.8 of Carimontir's QSPM, namely optimizing Social Media Marketing, and based on a business level strategy, namely differentiation strategy. The next step is to determine segmenting, targeting and positioning so that Carimontir as a company engaged in the technology business, namely applications, can continue to compete with various similar companies. With this, Carimontir determines its positioning as a company that provides various service features and is equipped with artificial intelligence in the form of chat bots.

It doesn't stop there, several other things related to the marketing plan are also being worked on so that sales planning can be in accordance with the company's goals amidst the onslaught of many companies that are involved in similar fields.

### Operational Plans

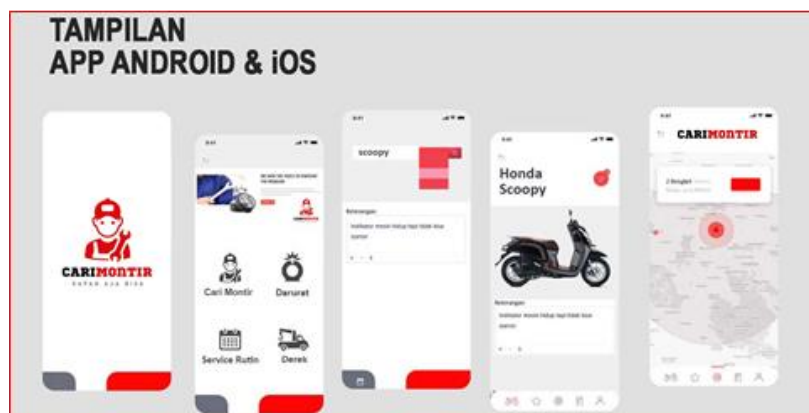
The operational plan is an important aspect because operational planning can encourage companies to carry out their operations so that they can run well, effectively and efficiently (Suharjo, 2017). The operational framework for Carimontir's plan is as follows:



**Figure 2.** Operational framework plan for carimontir

The picture above provides an understanding that there are several stages used in the operational plan, namely: the stages of company establishment, operational goals and objectives, operational design, operational introduction and operational cost projections. These stages are carried out with care and consideration so that they can be used as a reference for the proper, effective and efficient operation of the company.

The operational plan also presents an interface from the Carimontir application that is easy for users to use so that users become comfortable and their loyalty is high. The following is a picture of the Carimontir application user interface

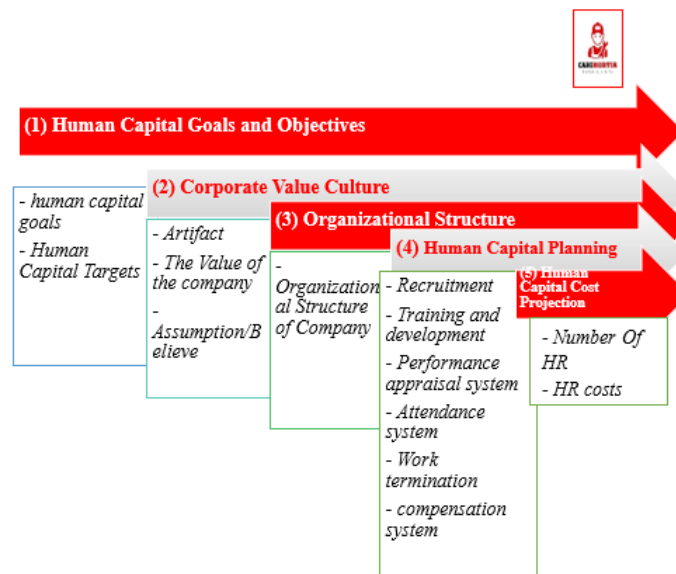


**Figure 3.** The user interface of the mechanic search application

Carimontir also has partnerships with various vehicle companies such as Honda, Yamaha, Suzuki, Daihatsu and so on. It doesn't stop here, Carimontir also collaborates with various repair shops as well as spare parts suppliers so that the services provided can be according to the wishes of the users, especially in an emergency, where Carimontir can provide information about the nearest repair shop and can even do home service.

### Human Capital Plan

Carimontir's Human Capital Plan is an important aspect because it will have an impact on the running and sustainability of Carimontir and its partners. For this reason, the human resources needed by Carimontir are resources that are able to work well and have competence in their field of work (Suhairi et al., 2020). Moreover, partners are the main pillars of the business that will meet directly and be seen by consumers as a reflection of the company. So, it is clear that partners must also have good skills or expertise to continue to provide comfort for consumers for the services provided. The framework for the Human Capital Plan is as follows:

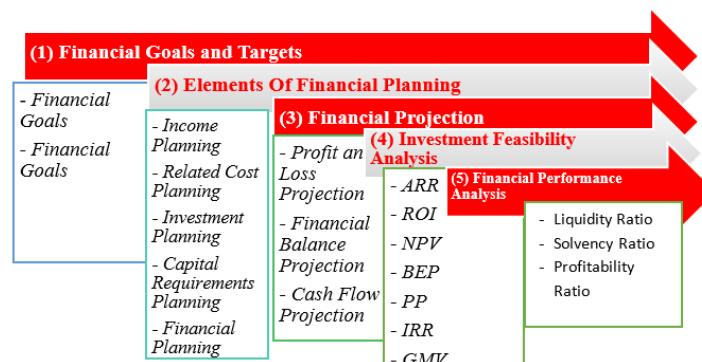


**Figure 4.** Framework for Human Capital Plan Carimontir

Based on the picture above, it can be seen that Carimontir's plain human capital is carried out in several aspects, namely: determining human capital goals and objectives, corporate culture values, corporate organizational structure, human capital planning and human capital cost projections which include the number of human resources and human resource costs. These steps or stages are carried out in a focused manner so that quality human resources are obtained and have expertise in the field of work which is their main task and function.

**Financial Plan**

This section discusses Carimontir's financial planning. Company finance has an important role in the sustainability of the company. Without stable and well-planned finance, it can have an impact on the company's activities not being carried out properly so that goals and aspirations will be achieved in an ineffective and efficient manner (Wati et al., 2022). For this reason, it is important to carry out a financial plan for the company so that the company's performance can run according to the desired goals and ideals. The framework for the financial plan is as follows:



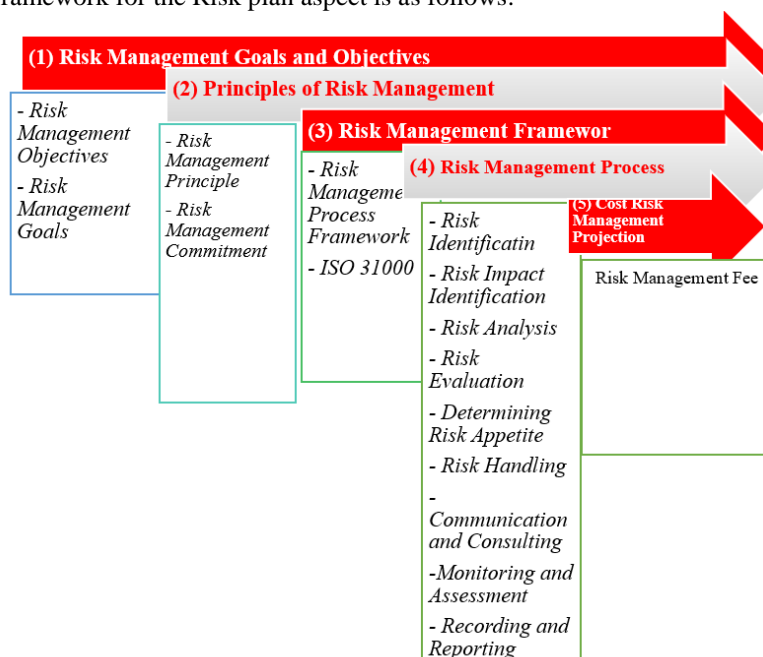
**Figure 5.** Framework financial plan

The picture above provides knowledge about financial planning. Financial planning carried out includes income planning, cost planning, investment planning, capital planning and others. Including investment feasibility and Liquidity Ratio. The objectives of the company's finances are formed in several terms, namely short, medium and long term. In the aspect of financial planning elements, there are several things that are important to note, namely income planning, related cost planning, investment planning,

planning capital requirements and financing planning. Meanwhile, in the financial projections there are profit and loss projections, balance sheet projections and cash flow projections. Then, in the aspect of investment feasibility analysis there are also several things, namely ARR, ROI, NPV, BEP, PP, IRR, and GMV. While the analysis of financial performance includes liquidity ratios, solvency ratios and profitability ratios which are studied and analyzed in depth so that the company's financial performance can be at a good level and have an impact on the company's financial performance as well as smooth, effective and efficient company operations.

### Risk Plan

Every business carried out by the company, including the Carimontir application, is of course possible to have various risks, both internally and externally. Therefore, the risk plan functions to minimize or overcome various risks that can arise in the operation of the Carimontir application so that users can continue to use the Carimontir application and for the company in carrying out its operations (Muhaimin et al., 2022). The framework for the Risk plan aspect is as follows:



**Figure 6.** Framework risk plan

The image above provides information about the steps or aspects used by the company in developing its business in the form of the Carimontir application. Such as, determining goals and objectives in risk management, determining and implementing risk management principles, creating a management framework including aspects of the management process framework and ISO 31000, a risk management process that includes several things, namely risk identification, risk impact identification, risk analysis, risk evaluation, determine risk appetite, risk management, communication and consultation, monitoring and review as well as recording and reporting. Then the last aspect of the risk plan is the projected risk management cost which includes risk management costs.

By making an appropriate and good risk plan, it can minimize or suppress any risks that may arise from the Carimontir application so that the company can continue to carry out its operations properly, as well as partners who continue to receive the best service from the company. With this, the Carimontir application can be well received in the community because the company can quickly and accurately deal with various problems that may arise and disturb consumer comfort.

Some of the things above are important parts of what the company has done in developing the Carimontir application as a motorized vehicle service application which is expected to be a solution to various problems that the community has regarding motorized vehicle services. With the running of the company and the Carimontir application, it can also have an impact on reducing the number of unemployed because of course companies need a variety of quality human resources to work together and synergize with the Carimontir application.

#### 4. Conclusion

The rapid development of technology must of course be addressed wisely so that it can be used to provide benefits to others. In addition, the development of the times also has an impact on the density of people's mobility which is getting denser so that it often triggers various problems in servicing owned vehicles such as service delays, expensive service prices, difficulties when there is a strike on the road, and so on. This encourages the emergence of the Carimontir application which seeks to provide a variety of services to answer community concerns so that the quality of the motorized vehicles used can be maintained. This research only examines the Carimontir application development process so that various steps or factors can be identified in developing the Carimontir application by the company.

The research results show that the application company Carimontir in developing this application is carried out carefully and thoroughly through various parts and aspects so that the company's operations can run smoothly and provide satisfaction for its customers. Such as conducting an analysis of external and internal factors, carrying out strategic planning, marketing plans, operational plans, human capital plans, financial plans and risk plans to find out various risks that may occur so that they can be minimized and prevented quickly and precisely.

The author hopes that the results of this research can provide a variety of benefits for entrepreneurs in developing the products they work on, especially those in the Information Technology sector so that they are able to provide various conveniences for users, for example the Carimontir application which is able to provide convenience for vehicle users to perform services. anytime and anywhere for partners to find their potential customers. Of course this will also have a positive impact on the company by continuing to increase its income. In addition, the researcher also hopes that the results of this study can be used as a reference for conducting further research so that the scientific community continues to develop and provide various positive changes for the country.

#### ACKNOWLEDGEMENTS

The researcher would like to thank all parties, especially the Carimontir company, which has provided the opportunity to study in depth about the Carimontir application. In addition, the researchers also thank all parties who have helped researchers, so that this research can be completed.

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