Determinants of operational efficiency at Mitsubishi Fuso Truck and Bus Corporation (MFTBC) in Japan

by

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ABSTRACT

The objectives of the case-study are to identify determinants of operational efficiency at Mitsubishi Fuso – a truck and bus manufacturer in Japan. After that, by going through extensive literature review, the researcher also looks at how operational efficiency can keep the company's competitive advantage sustainable. Finally, through the case study's findings, there are also problems identification and solution recommendation.

The results show that many departments in Fuso have been trying to standardize their processes in order to make it simpler and focus on deliverables. In the IT Department, ITM OM is a particular example of standards and policies that guides the users the whole process from the input to the output. Other determinants are application of Information Technology in most of the areas of the business as well as powering the truck products known as "connectivity"; last but not least communication is highly focused by the board of management to improve companywide, such as redesigning the workplace, upgrading the employee portal, certificated trainings in presentation skills, indoor and outdoor events.

Automation projects have improved significantly the operation in various departments, including Human Resource, Procurement, Production, Sales, and IT Department. Through automation, the company can save time, labor forces, costs and more importantly increase the quality of the products/services.

There are some challenges existing, such as Product Portfolio Overhaul, Inefficient Processes, Network and Facilities, Active Partner Management, Complexity Management, People and Culture which needs to be successfully solved in the near future.

MOTIVATION OF THE CASE-STUDY

Over 80 years, MFTBC has stood for superior products, outstanding service, economic value, safety and a commitment to customers' success around the world. In order to achieve that, the company has gradually improved their process and operation management over years. And to be emphasized, quality is considered and has been proven to be a MFTBC's first and foremost priority. However, the more interesting factor to investigate about this organization would be seen from the organization itself. Since 2005, MFTBC become part of the Daimler Trucks Division of Daimler AG. There have been massy changes and movements happening at MFTBC, about human resource, policy, structure, process, strategy, as well as the leadership style. Based on these facts, there is a very interesting question emerging "How MFTBC can transform to become a more productive and more efficient company after the join-venture with Daimler Trucks?"

From the perspective of the study area of Innovation and Operation Management (IOM), the researcher found it worth to participate in a practical environment, to join their team and become a part of the organization. Through this experience, the research expects to have a broader view about the organization management in general and operation management in specific. The case study is also decided to build up based on the internship program. Due to time constraint, the case study will particularly look at the operation management in a specific IT department of Mitsubishi Fuso which is assumed to follow the company's strategy as a whole unit.

CHAPTER I.

INTRODUCTION

In this chapter, the researcher would like to express of the importance of the case-study, the objectives of the research. After that, the research questions, the scope and limitation will be presented

1.1 Significant of the case study:

The case study is expected to 1) contribute the understanding of the operation management practices in International joint ventures in Japan, 2) strengthen the role of operation management and quality control in building and maintaining competitive advantage, 3) references for both Executive and students majored in IOM field.

1.2 Research objectives:

The research aims to identify the main determinants of operational efficiency at Mitsubishi Fuso and Bus Corporation in Japan. Through the extensive literature review, the researcher has found several main criteria of defining the operational efficiency in the manufacturing and service context. To an extent, operational efficiency has been seen to be an important factor determining the competitive advantages by previous studies (Porter, M., 1996; Ron, H., 2014; etc.). Therefore, in this case-study, the researcher also intended to link the operational efficiency and the company's competitive advantages. Finally, major challenges will be defined at Mitsubishi Fuso and propose solutions for sustainable growth.

1.3 Research questions:

In short, the major research questions are as follow:

RQ1: Which factors determine the operational efficiency, without hurting the customer experience or the organization's ability to innovate and grow at MFTBC (FUSO) Japan?

RQ2: How does operational efficiency impact positively on sustainable competitive advantages?

RQ3: What are problems hindering the operation management at MFTBC and possible approaches to improve?

1.4 Overview of the Internship:

The internship occurred at IT Department, Mitsubishi Fuso Truck and Bus Corporation from August 1st 2016 to January 31st 2017. Under this internship, the student was assigned to support the IT Governance team in the Chief Information Officer Office, IT Department. The student was responsible to complete tasks assigned by direct supervisor, Ms. Kazumi Kanzaki as well as supporting other activities of the department, such as event organizing. On the other side, the direct interaction and observation at the company brought out many essential experience and subjective point of views for the student to explore the proof factors on the operational efficiency.

CHAPTER II.

LITERATURE REVIEW

As the focus of the paper is to build up a case study equivalent to the intended research topic, this chapter just shortly reviews some basic concepts in order to make a theoretical background for the case-study. These terms, concepts, and theories presented in this chapter will be used repeatedly throughout the paper.

2.1 Operation Management (OM):

There are many different views about how to define the meaning of operation management in an organization. In this paper, the general understanding about operation management would be taken from the APICS dictionary (Cox & Blackstone, 1998). Operation management is including planning, scheduling, and control of the activities that transforms inputs into finished goods and services. To be more specific, the term of operation management can be divided into two parts: operation management in manufacturing and operation management in service (Collins, 2012, p.568).

However, whatever the process is to produce products or deliver services, the OM managers not only need to know how to run the process properly but also need to improve or fine-tune the process in order to make it more efficient, which will in result reduce the costs of materials and labors as well as other costs that add no value to the finished products/services. Figure 1 illustrates the traditional function of operation management.

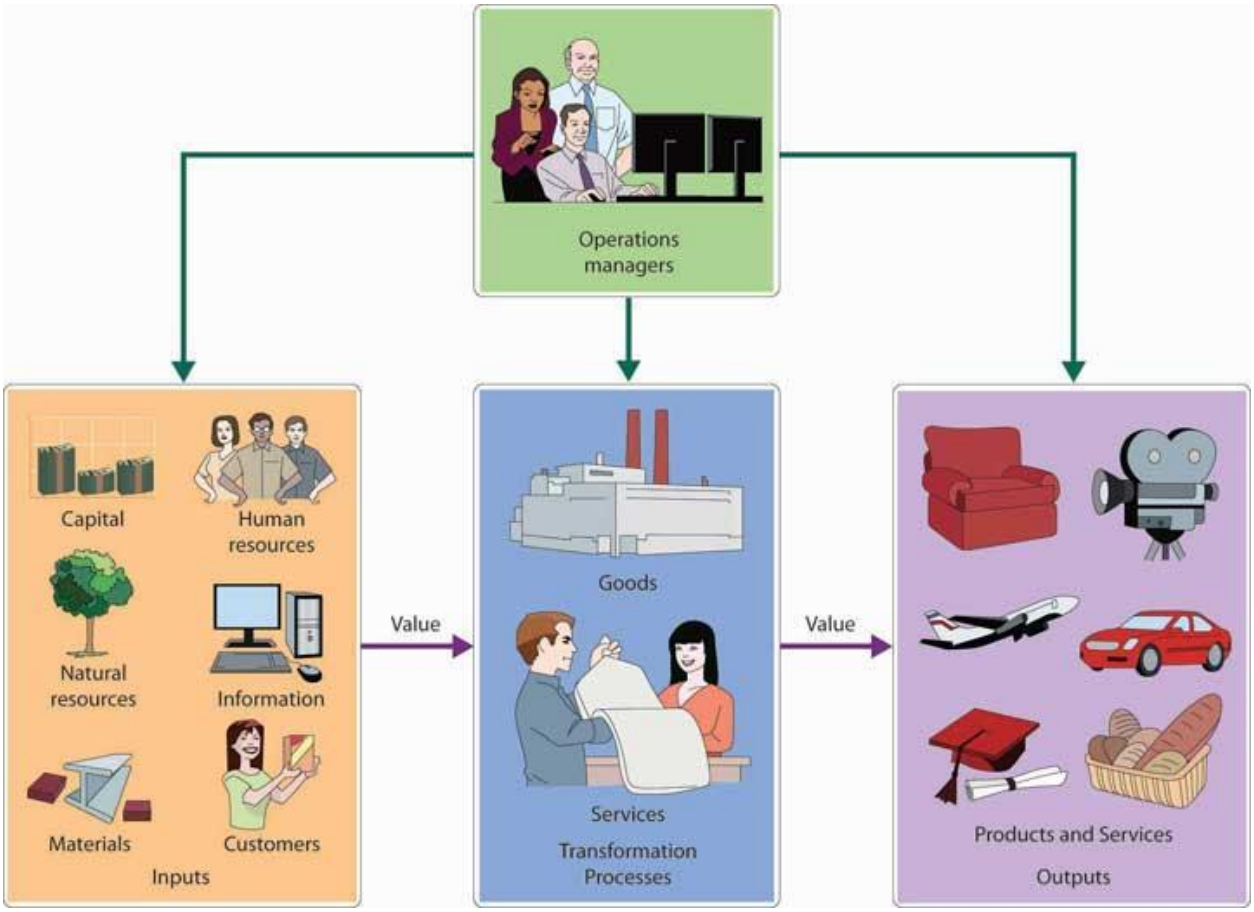


Figure 1: The Transformation Process. Reprinted from An Introduction to Business, by Karen C., December 29 2012, retrieved from http://2012books.lardbucket.org/pdfs/an-introduction-to-business-v2.0.pdf.

These series of actions that the OM need to do can be explained into three main responsibilities:

Production planning: as it is called "planning", the OM needs to identify these very basic but important information, such as how goods to be produced, where the production will take place, and how manufacturing facilities will be laid out.

Production control: Once the goods have been in-process in the production process, the next task of OM is to schedule and monitor the sequence of activities, such as raw material purchasing, inventory controlling, and so on, which all mean to guarantee the finished goods will meet the requirements as defined in the planning phase. Also, feedback and adjustments are very concerned by OM in order to quickly response to changes or potential risks.

Quality control: last but not least, the OM needs to ensure the finished goods meeting the specifications, quality standards that have been defined or committed to maintain.

2.2 Operational efficiency vs. Operational effectiveness:

The two terms of efficiency and effectiveness should be carefully considered in order to define in when the operation is called to be managed efficiently or effectively. According to Mathew B. (2012), efficiency is not just about cost cutting. In more specific clarification, Mathew supported his argument by definitions from Information Technology Infrastructure Library V3 (ITIL V3). The general understanding is as follow:

Efficiency – "A measure of whether the right amount of resources have been used to deliver a process, service or activity. An efficient process achieves its objectives with the minimum amount of time, money, people or other resources."

Effectiveness – "A measure of whether the objectives of a process, service or activity have been achieved. An effective process or activity is one that achieves its agreed objectives".

Thus, if the operation is considered to be efficient, it would also mean to be effective. In other words, effectiveness is a broader measure than effectiveness. From this understanding, efficiency is not only about cost minimization, but also about achieving other business objectives, such as quality, revenue, market shares, and so on. There are many ways to approach the efficiency in operation. According to ITIL V3 (as cited in Matthew B., 2012), instead of supporting from tools and numbers of people, automation or business process automation (BPA) has been becoming more preferable approach than manual works to achieve the operational efficiency. As conceptualized by Gartner, BPA tries to simplify complex business processes and functions by reducing the manual steps with the support of advanced technologies. It focuses on "run the business" as opposed to "count the business". As the results, the workload can be reduced, less human errors, less waste, less time; increase the correction, consistency in the outputs.

If talking about efficient operation, Lean production has been commonly discussed due to its core philosophy of getting more from less. If the firm is considered to acquire lean production, which mean they are trying to use less amount of inputs (raw materials, direct labors, space, time) for producing products. Aldi, a case study of a German discount supermarket chain, is a typical example of using lean production which has brought Aldi become one of the leading global supermarket chain with around 10,000 stores throughout 18 countries. For Aldi, lean production is not only about reducing costs, it is also about making values for customers.

As the attention of this case-study, the measure of operational efficiency will be used to examine at the IT Department of Mitsubishi Fuso.

2.3 Competitive advantages:

For many organizations, the competitive advantages are the must property to survive and outperform their competitors. Just a simple observation, there is a so-called "ramen" restaurants located in a small area called "Tsurukawa" in Kawasaki city, Japan, which is just one of 20 or 30 restaurants nearby. The question is how it can differentiate itself with the others or in more simple way, why the customer decides to come to that "ramen" restaurant instead of enjoying their dinner in another one.

This phenomenon has actually been explored by a well-known economist - Michael Porter - since 1985. Based on his findings, there are basically two types of competitive advantages:

- Cost advantage
- Differentiation advantage

In this paper, this concept is also being applied in order to explore the competitive advantages at Mitsubishi Fuso, particularly its internal process and operation at IT Department.

2.4 The relationship between operational efficiency and competitive advantages:

In 1996, Michael Porter argued that the relationship between operational effectiveness and strategic positioning is defined by the concept of *fit*. Fit refers to the ability of a firm to manage its operational activities in a way that most effectively meet the firm's strategic position. Ron H. (2004) showcased about the logistics and supply chain operations which implies the positive impact of operational efficiency on competitive advantage. Through improvements in operation, including lower costs, more productive workers, utilization of technology, companies can attain double digit competitive advantage over their rivals as reported by the study. In addition, a survey conducted by Navi Radjou of Forrester Research showed that 92% of the participants rating "improving operational efficiency" as their top priority. Another noteworthy result of the study is that operational efficiency does not influence on the customer's experience. In contrast, with a good warehouse management system, the goods can be ordered and delivered more correctly and quickly, increasing the customer's satisfaction.

While in the food industry, the customers nowadays increasingly demand for high quality products at the lowest possible prices. This trend has created challenges for businesses to not only focusing on quality but also fine tuning their processes more efficient, less wastes. Again, Wallmart, Aldi are those well-known examples in the retailing industry of focusing on continuous improvements, just-in-time production, time based management, total quality management which are main concepts of efficiency operation.

These are few of studies and case studies which have been done to support the positive impact of operational efficiency on competitive advantage in various industries. In this paper, the researcher will apply to test how the operational efficiency at Mitsubishi Fuso can help it to gain competitive advantages and by that achieving business strategy.

2.5 Cross-cultural management at International joint-venture in Japan:

As the purpose of problem identification, from many previous studies, differences in culture have been widely realized to be one of the major problems in International joint-venture in Japan. Based on this view, the researcher will also look at this perspective in order to fulfill question. According to Andrew M. (2013), in the business context, there are several vital differences in business culture between Japan and West. Firstly, Japanese colleagues tend to accept the job modestly and deliver exceptional results even though this given task exceeds their capabilities. This feature is contrast to their foreign counterparts who are, to some degree, highly avoiding responsibility and blame on the boss by claiming that his direction was not clear. Secondly, customers are highly valued from the Japanese perspective. In other words, the benefits of both sides are equally considered in the transactions. This ideology reflects the unique difference between Eastern and Western culture where the personal relationship are important to main the long-term business. Thirdly, an interesting difference can be found in the meeting room where Japanese colleagues consider it as a place to report progress, whereas in Western's point of view it's a place for brainstorming and discussion. However, a good point of this approach, from a perspective of French businessman, is the higher efficiency of the meeting time when the involved parties already prepared in advanced for making the decision more smoothly. Alcohol or "nomikai" allows Japanese to reveal their true thoughts and it's considered as work when drinking with colleagues. According to Reina, H. (2010), the differences can clearly be seen in those perspectives:

Table 1: Cultural contrasts between USA and Japanese companies.

Characteristics	**USA**	**Japan**
Speed Vs. Consistency	Quick Decision Making	Hierarchy Decision Making
Roles & Responsibilities for Individual vs. Group	Emphasize On Individual Role	Emphasize on Group Success
ROI of Revenues vs. ROI of Relationships	Focus on the Final Result (ROI)	Focus on the Process
Risk Takers vs. Risk Adverse Cultures	50-70% of Success: "We Can Do It"	90-100% of Success: "We Can Do It"
Remote vs. Face-to-face Communications	Prefers E-Mail, Phone	Prefers Face-to-face
Personal Life vs. Professional Life	Prefers Balanced Work Life	Priority on Work

Note: Reprinted from Cultural contrasts between USA and Japanese companies, by Reina Hashimoto, retrieved from http://blog.btrax.com/en/2010/12/15/10-cultural-contrasts-between-us-and-japanese-companies-a-personal-view/ Copyright2010 by btrax.

CHAPTER III.

METHODOLOGY

The main purpose of the research is to analyze the case study of Mitsubishi Fuso and answer the research questions. The major data collection and research approach will be shortly described in this chapter.

3.1 Research approach:

There are different types of approaches for conducting a research. Denzin and Lincoln (1994) mentioned two types of approaches available for researchers which are qualitative and quantitative approach. Selectivity and distance to the object of the research characterize a quantitative approach whereas a qualitative approach is characterized by nearness to the object of research. The best research method to use in a study depends on that study's purposes and the accompanying research questions (Yin, 1994).

Based on that perspective, qualitative research is best fit in this study due to the direct involvement of the researcher at the target company.

3.2 Data collection:

The data collection is divided into two types of data, secondary data and primary data. Secondary data is data that has already been collected, for example data from previous studies (Webb, 1992). Primary data is the collected data, which exclusively answer questions regarding research objectives. Obtaining primary data can be divided into four methods, survey research, qualitative, experimental and observation. In this study, to collect the information related to research literature and background (secondary data), online journals were mainly used. The primary data in this research consists of data retrieved from the company website, personal interview, and observation. The reason is to clarify the norms, behaviors which is hard to know from an official documents. Hindering problems are also mainly from managers' perspectives rather than basing on the company's perspective, which can give the case-study more realistic and true information.

Briefly, the primary data collection will be conducted as follow:

- Participation observation and questionnaire: collecting data on naturally occurring behaviors in their usual contexts. Basically, for the approach of questionnaire, the researcher will deliver the questionnaire sheets during the events organizing at the company. It will take around 5 minute to fill in the form. All the questionnaires sheet will be collected and put into excel to analyze the results of the feedback.
- In-depth interview: collecting data on individuals' personal histories, perspectives, and experiences.

CHAPTER IV.

CASE OVERVIEW AND ANALYSIS

This chapter will mainly describe about the organization, from the high level of organization vision, mission to the low level of department's objectives. Trough secondary data and primary data (interview, observation), the problems existing inside the organization will be described and analyzed by using several methods, including Porter's five forces model and SWOT analysis.

4.1 Company overview:

Since 2003, Mitsubishi Fuso Truck and Bus Corporation (MFTBC) is an integral part of Daimler AG, one of the world's most successful automotive companies. Together with BharatBenz, FUSO trucks are operating under its umbrella Daimler Truck Asia. MFTBC manufactures commercial vehicles, including light, medium and heavy-duty trucks and buses, and vans as well as industrial engines. The company also provides heavy-duty tractors in Indonesia; after-sales services and parts. The distribution channel is mainly through wholesaler in Europe, the Russian Federation, Asia, the Middle East, Africa, Latin America, the Oceania, North America, and internationally. The company was founded in 2003 and is based in Kawasaki-shi, Japan. The main production facilities are located in Tochigi, Kanagawa, and Toyama, Japan; and Tramagal, Portugal (Fuso Corporate Profile, 2016).

Over 80 years of leadership in technological innovation, Mitsubishi Fuso has now presented in over 150 markets around the world and consecutively recorded as one of the most innovative and prominent brands in the commercial vehicles industry (Fuso Corporate Profile, 2016).

4.1.1 Vision:

The vision of Mitsubishi Fuso is described in a very simple and understandable way, which is to provide seamless transportation: Truck is always driving, fully loaded, never stuck. It never fails and has a happy driver.

4.1.2 Strategy:

In addition to customer requirements, the regulatory framework in particular varies from market to market. Emission regulations and trade restrictions, for example, can differ greatly from country to country. Add to that the new competitors coming out of emerging countries that already have strong position in new growth markets such as Asia and Africa. How to response to these changes is the question that the three strategic pillars have been focused and being executing throughout the DTA group, including Technology Leadership, Global Market Presence and Intelligent Platforms.

4.1.3 **Innovations**:

As the report aims to describe and analyze the operation management mechanism at Mitsubishi Fuso, it is necessary to understand from the root to the top, from inside to outside of the organization. Thus, two of the factors that can be possible to get insight are the development process of Fuso as well as impacts from M&A activities on the organization structure and leadership.

Throughout the development process, Fuso products have been experienced many changes which are considered to be important and exceptional to transform the business and market position. For the purpose of identifying the root causes that strikes Fuso team to pursue the efficient philosophy, and through that how the "improved" or "efficient" changes impact on the company's sustainable competitive advantage would be the following question to come. In that sense, some of the highlights in innovation are described as below:

In 1932: the first "FUSO", the B46 bus named produced at Mitsubishi Heavy Industries' Kobe Shipyard & Machinery Works.

Note: Reprinted from Fuso Corporate Profile, by Fuso Academy Sales Training, retrieved from http://www.mitsubishi-fuso.com/core/pdf/jp/aboutus/corporate_profile/FUSO_Corporate_Profile_2016_04_28.pdf

In 1946: started production of model KT1 4t trucks and B1 buses. The first domestically manufactured trucks and busses after WWII were made.

Note: Reprinted from Fuso Corporate Profile, by Fuso Academy Sales Training, retrieved from http://www.mitsubishi-fuso.com/core/pdf/jp/aboutus/corporate_profile/FUSO_Corporate_Profile_2016_04_28.pdf

In 1951: the basic system for special vehicles of Mitsubishi Fuso was born. Started production of Model W11 4t tow-trucks.

Note: Reprinted from Fuso Corporate Profile, by Fuso Academy Sales Training, retrieved from http://www.mitsubishi-fuso.com/core/pdf/jp/aboutus/corporate_profile/FUSO_Corporate_Profile_2016_04_28.pdf

In 1960: started sales of B10 light-duty busy “Rosa”

Note: Reprinted from Fuso Corporate Profile, by Fuso Academy Sales Training, retrieved from http://www.mitsubishi-fuso.com/core/pdf/jp/aboutus/corporate_profile/FUSO_Corporate_Profile_2016_04_28.pdf

In 1963: the first light-duty truck Canter was born

Note: Reprinted from Fuso Corporate Profile, by Fuso Academy Sales Training, retrieved from http://www.mitsubishi-fuso.com/core/pdf/jp/aboutus/corporate_profile/FUSO_Corporate_Profile_2016_04_28.pdf

In 1967: started sales of heavy-duty trucks T951

Note: Reprinted from Fuso Corporate Profile, by Fuso Academy Sales Training, retrieved from http://www.mitsubishi-fuso.com/core/pdf/jp/aboutus/corporate_profile/FUSO_Corporate_Profile_2016_04_28.pdf

In 1978: the 4th generation light-duty truck Canter was born. (Added wide body vehicles and full scale 3t trucks.)

Note: Reprinted from Fuso Corporate Profile, by Fuso Academy Sales Training, retrieved from http://www.mitsubishi-fuso.com/core/pdf/jp/aboutus/corporate_profile/FUSO_Corporate_Profile_2016_04_28.pdf

In 1982: started sales of heavy-duty sightseeing bus “Aero series”

Note: Reprinted from Fuso Corporate Profile, by Fuso Academy Sales Training, retrieved from http://www.mitsubishi-fuso.com/core/pdf/jp/aboutus/corporate_profile/FUSO_Corporate_Profile_2016_04_28.pdf

In 1996: made full model change in heavy-duty trucks after an interval of 13 years and named them "Super Great"

Note: Reprinted from Fuso Corporate Profile, by Fuso Academy Sales Training, retrieved from http://www.mitsubishi-fuso.com/core/pdf/jp/aboutus/corporate_profile/FUSO_Corporate_Profile_2016_04_28.pdf

In 2006: Light-duty hybrid truck "Canter Eco Hybrid" was born.

Note: Reprinted from Fuso Corporate Profile, by Fuso Academy Sales Training, retrieved from http://www.mitsubishi-fuso.com/core/pdf/jp/aboutus/corporate_profile/FUSO_Corporate_Profile_2016_04_28.pdf

In 2010: Started sales of the 8th generation Canter equipped with BlueTec and DUONIC.

Note: Reprinted from Fuso Corporate Profile, by Fuso Academy Sales Training, retrieved from http://www.mitsubishi-fuso.com/core/pdf/jp/aboutus/corporate_profile/FUSO_Corporate_Profile_2016_04_28.pdf

In 2013: Introduction of new light medium-duty truck models FA and FI under the new FUSO brand badge

Note: Reprinted from Fuso Corporate Profile, by Fuso Academy Sales Training, retrieved from http://www.mitsubishi-fuso.com/core/pdf/jp/aboutus/corporate_profile/FUSO_Corporate_Profile_2016_04_28.pdf

In 2014: The future of Mitsubishi Fuso

Note: Reprinted from Fuso Corporate Profile, by Fuso Academy Sales Training, retrieved from http://www.mitsubishi-fuso.com/core/pdf/jp/aboutus/corporate_profile/FUSO_Corporate_Profile_2016_04_28.pdf

4.1.4 Brand strategy:

The brand strategy of MFTBC is "Partner in Moving Customers' Business" which is supported by four brand values, including Trusted Quality, Committed Service, Solid & Functional Design, and Economic Efficiency (Fuso Brand, 2016). To be more specific and understandable, each of the brand values is clearly explained as follow:

Trusted Quality:

Again, the product and service quality is clearly defined as the first priority in achieving the brand strategy, among the four brand values.

- Quality is the first and most important brand value
- Quality is like a promise – the promise to be reliable
- For the trucks, this means they must continue to do their jobs reliably after many years of hard use
- Highly quality shows not only in the product, but also in customer contact and in service.
- Reliability gives customers planning security and guarantees maximum truck availability

Economic Efficiency:

Due to the fact that the goods vehicle trade is a harsh business with low margins and fierce competition, Mitsubishi Fuso always focus on improving its products in the aspects of low fuel consumption, low maintenance costs and high resale value. From the customers' perspective, the economic efficiency truck will reduce the costs and increase the profit margin. Not only automobile sector, friendly to environment and the CO2 emission standards are also becoming key factor for the success of commercial trucks business.

Committed Service:

Responsibility and flexibility are two of the emphasized terms that MFTBC aims to deliver to its customers in all the markets.

Solid and Functional Design:

Last but not least, due to the fact of shortage of truck drivers in Japan market and high level of requirement of driving standards in European zone, the design and interior are increasingly concerned by the customers. Mitsubishi has made a huge investment in improving comfort experience in the driver's cabin.

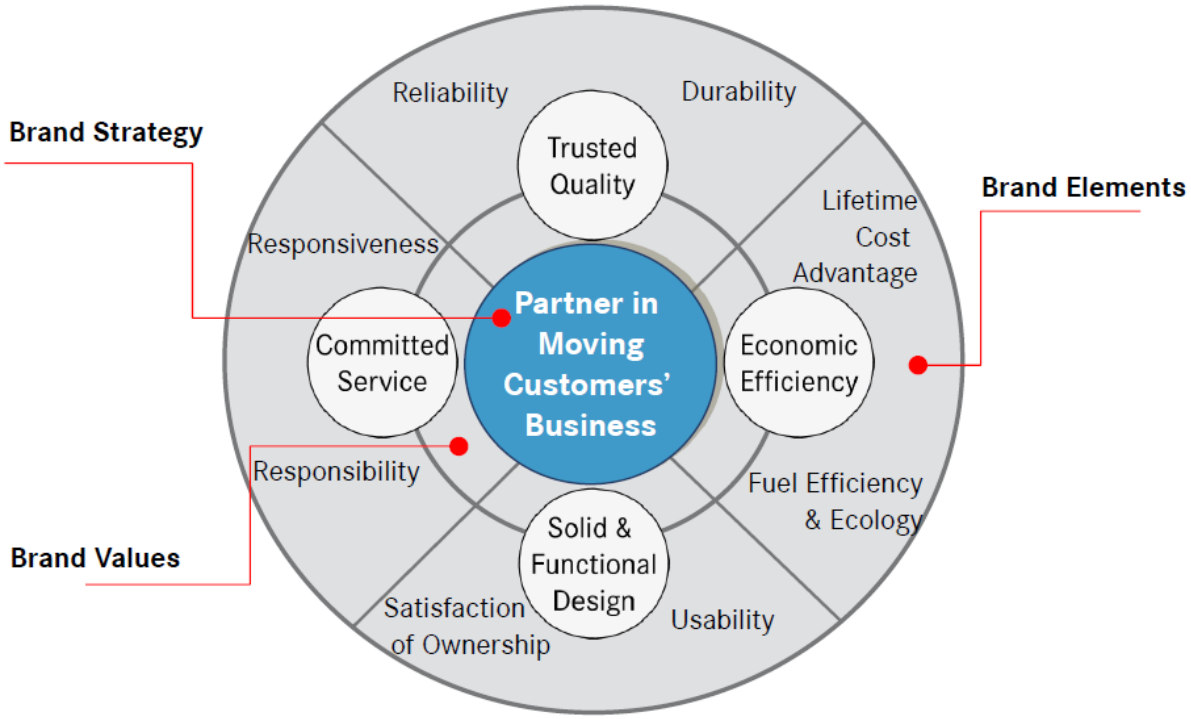


Figure 2: Brand strategy model of MFTBC. Reprinted from Fuso Brand, by Fuso Academy, 2016, retrieved from http://www.mitsubishi-fuso.com/en/aboutus/fusobrand/history.html

4.2 IT Department Overview:

IT Department basically contains 4 main units: IT Infrastructure and Operation; IT Product Development and Production; IT Sales and Customer services, Cross functions; and last but not least Chief Information Officer's office. Each IT units are responsible for different functions of IT Departments, specifically:

- **IT Infrastructure and Operation (ITI/OF):**

ITI/OF team main responsibility is to provide efficient, secure and reliable IT infrastructure for the company, dealers and subsidiaries. ITI/OF team is also a contact point for all IT Infrastructure related questions. Besides that, there are on-going projects in introducing new technology

- **IT Product Development and Production (ITC/AP):**

ITC/AP provides IT solutions and services throughout entire Product Development and Production Processes.

- **IT Sales and Customer services, Cross functions (ITC/AC):**

ITC/AC is responsible for Customer service, IT wholesales and retail, IT quality and purchasing, IT parts management, IT Business Intelligence and CRM, IT Finance & Controlling / Human resources.

- **Chief Information Officer's office (CIOO):**

On top of those functions, CIOO is accountable for general management of the IT department of MFTBC. As the basic understanding, the CIO is responsible for the entire Information Technology department and functions to identify the employees' capabilities corresponding to all the Information Technology functions within the enterprise. In more specific, besides the leading role in technology development of the enterprise, the CIO nowadays also has insights in other aspects of the business, such as corporate finance, sales situation and so on. Supporting this point of view, according to Khalid Kark (2015), CIOs can help drive innovation by serving as a link between the business strategy and the IT agenda – fusing the vision for tomorrow with the realities of today. They should view their responsibilities through an enterprise-wide lens, not only as the connective tissue but the driving force for intersecting. At MFTBC, the CIOO is clearly functioned by 2 teams: IT Governance team and Process Design team.

While the IT Governance team is mainly responsibly to ensure the compliance and quality of the service proving by IT Department to the Business Units, the Process Design is taking care of improving the performance of the processes placing at the Business Units. Both team together aims to maximize the benefits of the new service or system.

4.3 Operation Management at MFTBC IT Department:

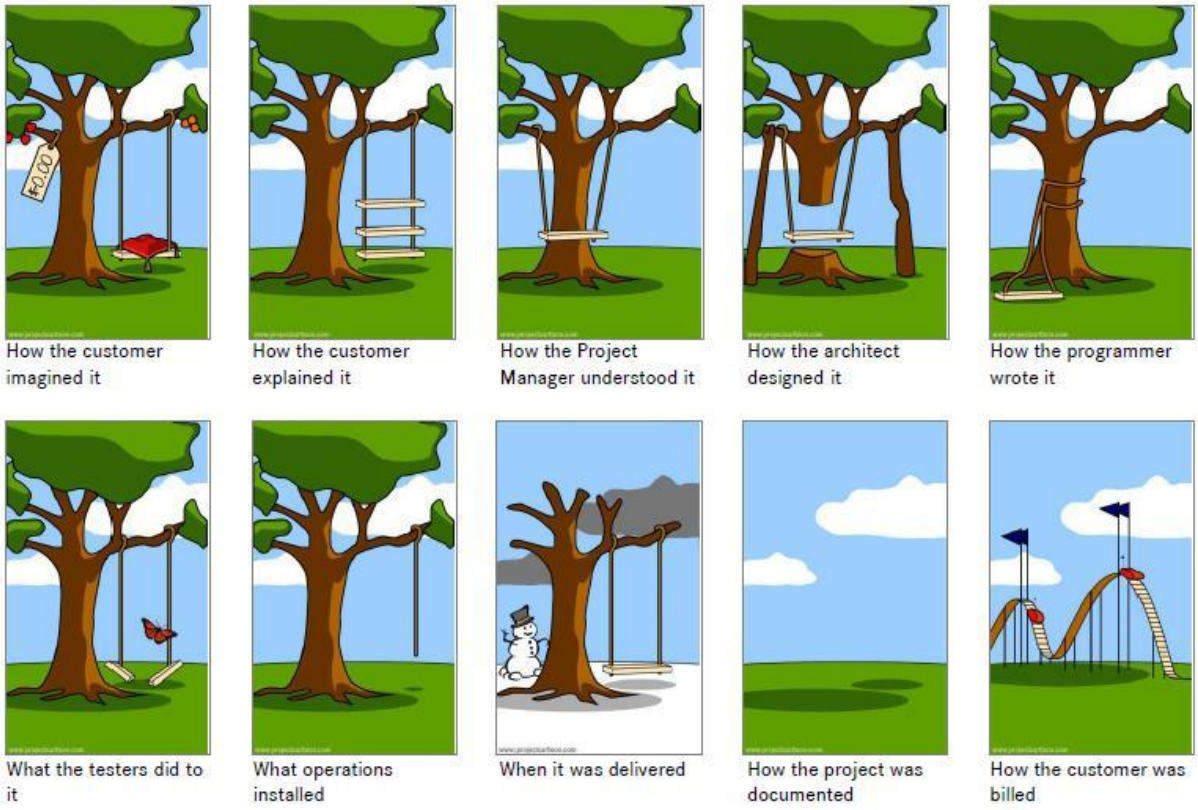
As a member of Daimler AG group, Mitsubishi Fuso is also organized to apply the same standards, procedures and policies which have been certificated and widely recognized in the world. As the scope of the research is within the IT Department of MFTBC, based on the

definition discussed above, the operation management system that MFTBC IT Department is applying is based on a model named ITM OM, which is object to manage the whole process from receiving the requirements from business (input) to delivering and operating the services (output).

At first, according to Daimler, from the overall landscape, the objectives of ITM OM model is to foster cross-organizational cooperation; joint ITM approach; efficiency despite heterogeneous departments, locations, cultures; enabling of knowledge-sharing; common language and process understanding throughout the entire organization.

Getting into more specific, the most important determinant of the project success would be basically about the project management approach. The core domain of the ITM OM model is Project and Program Management (PPM). PPM domain support Project and Program management lifecycle process and it is the essential connective tissue that will hold each of your development projects together, and is connected with other domains like Demand management (DM), Service Delivery (SD) and Service Operation (SO).

All of these domains are integrated and working closely in order to ensure the synchronization of outcomes and importantly meeting the demand or problems. Daimler has realized this issue very well, which can be implied via this below picture:



Note: How projects really work, by Project Cartoon, 2006, retrieved from http://www.projectcartoon.com/cartoon/2

There is a set of standards and procedures called House.IT that serve the whole idea of PPM. Basically, the project management approach will include four main phases, Initiation, Planning, Realization/Execution and Closure. However, before the project can be considered to be officially started, the commitment on demand must be obtained, which is called Demand Management. This step is not including the project management process, but playing an important role to keep the whole project running consistently. The demand needs to be analyzed based on a set of criteria and get approval. After getting the approval, the detailed cost estimation will be elaborated. Finally, the demand will be classified into several categories, A, B, C or No project as well as other decisions. The step is very important in the sense that it will help the project manager to start the project with a complete understanding about the demand and how to organize the resources appropriately.

After that, the project initiation phase will get officially started. As mentioned above, at this time, the Project Manager can elaborate several deliverables including Resource Plan, Procurement

Plan, and Project Log. All these information needed to be checked and approved before going to the next phase.

Next step, the project planning phase will be started with the main purposes of defining and refining project objectives and scope, and planning the course of actions required to attain them. In this phase, the Project Manager is responsible to prepare the Work Breakdown Structure (WBS), Dependencies, and Estimation.

All of these planning documents will be triggered in the Realization/Execution Phase. At this step, the Project Manager will manage the project progress by using the PDCA approach (P: Plan, D: Do, C: Check, A: Act) in all knowledge areas, such as:

- Scope: developed scope fits to the Scope Statement
- Time: current timeline and actual effort comply with the Project Schedule
- Cost: actual costs do not deviate from the Cost Estimation
- Quality: quality assurance measures have been conducted according to the Project Quality Plan
- Risk: risks are measured and controlled as planned within the Risk Log
- Human resource: number of resources, their skills, and training needs do not deviate from planning
- Communication: communication activities take place as defined in the Communication Plan
- Procurement: orders have been conducted as specified within the Procurement Plan
- Integration: project documentation was done properly.

Finally, the project will be closed after formalizing the acceptance of the product, service, or result. At this last step, the delivered product/service will have a final check before rolling out in the productive environment and handover to the Service Operation domain.

4.4 IT Communication – Improve the information transparency:

Newsletter, Surveys, Fuso Employee App., Demos, Seminars/IT Talks and Onsite Talks are those channels that are motivated by the CIO in order to improve the communication quality at MFTBC. Besides, events, workshops are organized to promote the use of these channels and make them more efficient in not only within the IT Department but for the whole organization.

The researcher also has change to participate in an event called "MFTBC IT-Days 2016" which aims to promote the role of IT Departments and get more attention of the company with disruptive technologies, such Artificial Intelligence, 3D Printing technology, Big Data, Virtual Reality and so on. From the observation, these kinds of event are great chance for all the employees to improve face-to-face communication, figure out their own confuses of what happening in other departments. This is one of the problems existing in most of Japanese organization due to lack of communication. How does Information Technology (IT) find its place in a Truck Company in 2016? Why does IT become mandatory for bringing a company profit? What can we expect from the IT in the near future? are such questions highlighted by this event. For getting insight about the participant's opinion, questionnaire is also prepared to deliver at this event (Please refer to Appendix).

4.5 Analysis of external environment:

Porter's five forces framework is applied in this paper in order to better understand the industry context in which the firm operates. Porter's five forces were first introduced in 1979 by Michael Porter who is still a young associate professor at Harvard Business School at that time. However, this model has been widely recognized and applied to make analysis in many types of industries. As Porter said "Understanding the competitive forces, and their underlying causes, reveals the roots of an industry's current profitability while providing a framework for anticipating and influencing competition (and profitability) over time" (Harvard Business Review, 2008). According to Porter, the origin of profitability is identical regardless of industry.

Based on this light, Porter's five forces model is suitable for measuring the competitiveness of the market that Mitsubishi Fuso is currently participating and the outcome of the analysis will help to determine the company's risk in its industry (both current and potential). The five forces consist of (1) Threat of New Entrants, (2) Threat of Substitute Products or Services, (3) Bargaining Power of Buyers, (4) Bargaining Power of Suppliers, (5) Competitive Rivalry Among Existing Firms.

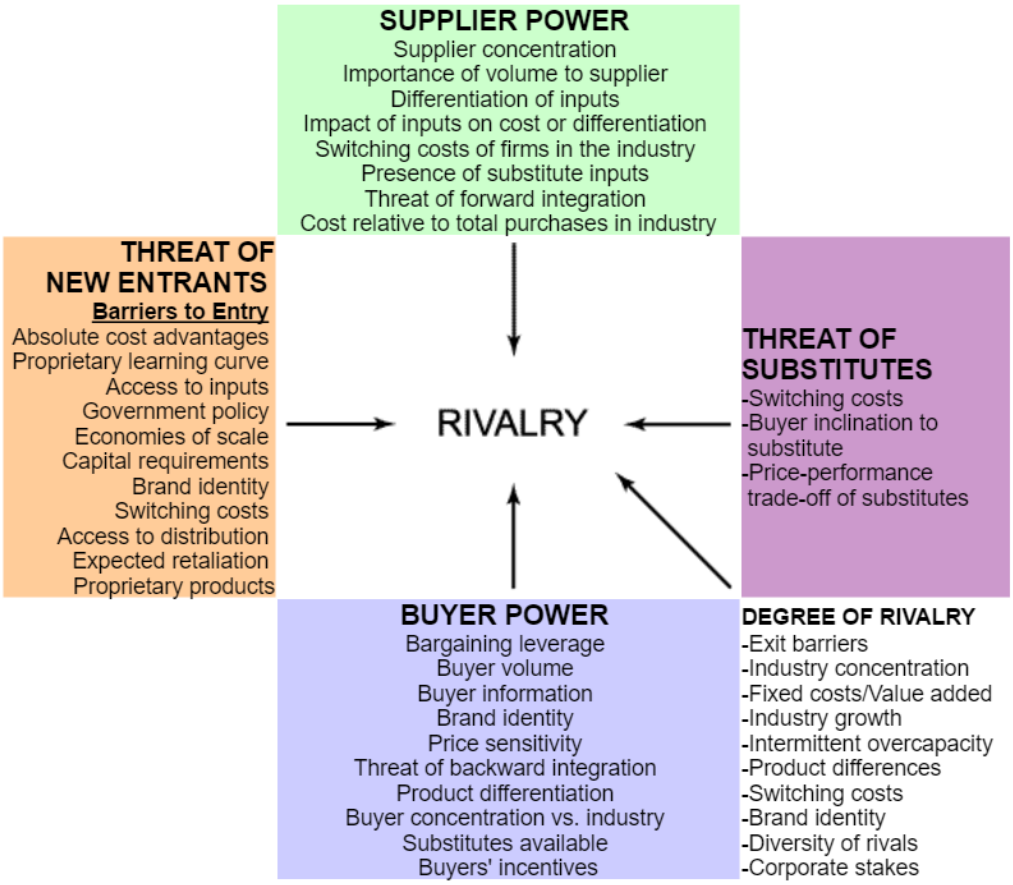


Figure 3: Diagram of Porter's 5 Forces. Reprinted from The Five Competitive Forces That Shape Strategy, by Havard Business Review, 2008, retrieved from https://hbr.org/2008/01/the-five-competitive-forces-that-shape-strategy

4.5.1 Threat of New Entrants: Medium to High

Trucks in Japan are commonly known as the common vehicle for shipment. According to a survey of Japan Society of Automobile Engineers (JSAE) in 2015, trucks shipment consecutively accounts for the highest rate of transportation in Japan market from 2006 to 2013. Followed by that, air shipments, ships and trains are in the 2nd, 3rd and 4th position. Due to the economic downturn over a decade, the increasing awareness of emission regulation as well as high

requirements in safety, fuel consumption, Japan domestic market experienced a gradual decline in the number of trucks. For instance, 2015 figure shows a decrease of approximately 80,000 vehicles or 0.5% relative to the previous year, 2014.

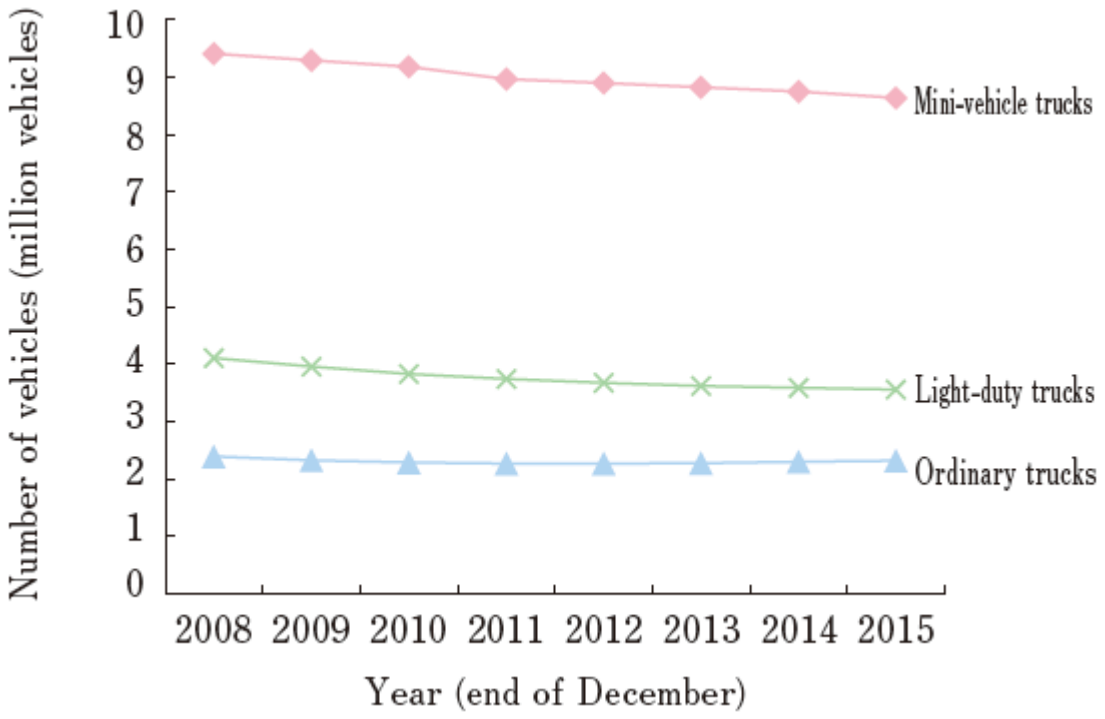


Figure 4: Number of trucks in Japan according to vehicle type. Reprinted from Trucks, by Japan Society of Automobile Engineers, 2014, retrieved from http://www.jsae.or.jp/e07pub/yearbook_e/2014/docu/08_trucks.pdf

Breaking down by type of vehicle, in 2015, ordinary trucks account for 78.1% of freight shipment, special-purpose trucks for 19.7%, light-duty trucks for 1.9% and mini-vehicle trucks for 0.3%. Inside Japan, heavy-medium- and light-duty models have been widely upgraded in fuel economy, safety and maneuverability by most of the major manufacturers, such as Hino Motors, UD Trucks, Isuzu Motors, Mitsubishi Fuso, and so on. Light-duty and mini vehicles trucks segments also have the appearance of other well-known Japanese automobile companies, such as Mazda, Suzuki, Daihatsu. Outside Japan, many manufacturers have launched new models meeting Euro 6 standard as well as advancing in safety measures, such as GPS-based cruise control, aerodynamics parts, reducing rolling resistance module, or braking system using higher performance cameras and radars, lane change assist systems, dynamic steering system, and so on. Even though the technology has become one of the foremost factors determining the customer decision in the automobile industry, as can be seen from the above facts, the Japanese trucks

market is still being dominated by big automobile corporations which have sufficient resources to invest in their R&D activities and catch up with the European manufacturers.

Table 2: Main product technology trends for heavy-duty trucks in 2014

Month of launch	Truck model name	Main characteristics
April	Profia	Partially refined • Vehicle configured to achieve the 2015 fuel efficiency standard +5 % threshold. • Safety systems refined and made standard equipment
May	Quon	Partially refined • Vehicle configured to achieve the 2015 fuel efficiency standard +5 % threshold. • Safety systems refined
	Super Great V	Partially refined • Vehicle configured to achieve the 2015 fuel efficiency standard +5 % threshold. • Safety systems made standard equipment
September	Volvo FH	Launched in the Japanese market
October	Giga	Partially refined • Safety systems made standard equipment

Note: Reprinted from Trucks, by Japan Society of Automobile Engineers, 2014, retrieved from http://www.jsae.or.jp/e07pub/yearbook_e/2014/docu/08_trucks.pdf Copyright 2013 by Society of Automotive Engineers of Japan, Inc.

Table 3: Main product technology trends for medium-duty trucks in 2014

Month of launch	Truck model name	Main characteristics
October	Forward	Partially refined • Safety systems installed
December	Canter EX	Partially refined • Medium-duty truck loading capacity with a light-duty truck base

Note: Reprinted from Trucks, by Japan Society of Automobile Engineers, 2014, retrieved from http://www.jsae.or.jp/e07pub/yearbook_e/2014/docu/08_trucks.pdf Copyright 2013 by Society of Automotive Engineers of Japan, Inc.

Table 4: Main product technology trends for light-duty trucks in 2014

Month of launch	Truck model name	Main characteristics
June	Light Ace Truck	Partially refined • All vehicles achieved the 2015 fuel efficiency standard
September	Kazet	OEM procurement from Mitsubishi Fuso Truck and Bus Corporation
November	Elf	Partially refined • All vehicles achieved the 2015 fuel efficiency standard

Note: Reprinted from Trucks, by Japan Society of Automobile Engineers, 2014, retrieved from http://www.jsae.or.jp/e07pub/yearbook_e/2014/docu/08_trucks.pdf Copyright 2013 by Society of Automotive Engineers of Japan, Inc.

As can be seen from the Table 2, 3, 4, the Japanese truck manufacturers closely update their trucks model with the technology trend. Thus, the competition is mostly happening among Japanese players in the domestic market. However, as Mitsubishi Fuso has shifted their focus on emerging markets like India, Indonesia, the domestic market is no longer a major source of revenue. According to the Truck Market 2024 – Sustainable Growth in Global Markets (Deloitte, 2014), in emerging markets like India, China, ASEAN, new players are expected to emerged in the near future with the power of local brand, low cost strategy. Especially, Chinese OEMs will become serious competitors. Moreover, based on the outstanding growth figure of India market,

Tata is also predicted to become the second largest player globally in 2024, just after Daimler. And as discussed above, these are also key markets of Mitsubishi Fuso. Therefore, the treats from new entrants can be considered to be medium in short-term and high in long-term to the global truck market.

4.5.2 Threat of Substitute Products: Low

According to Porter's model, the threat of substitutes exists when the product's demand is affected by the price change of a substitute product. For truck industry, the diversity of products is quite large, mainly grouped into heavy-duty, medium-duty and light-duty trucks. At Fuso, the product portfolio is very diversified in order to closely meet the customers' requirements:

Note: Reprinted from Fuso Corporate Profile, by Fuso Academy Sales Training, retrieved from http://www.mitsubishi-fuso.com/core/pdf/jp/aboutus/corporate_profile/FUSO_Corporate_Profile_2016_04_28.pdf

In term of substitute products for truck, it can be considered to be low threat to the industry.

4.5.3 Buyer Power: Medium - Strong

Due to the Japanese truck market getting matured, MFTBC is just one of many truck OEMs in Japan expanding their business globally. For MFTBC, sales in Japan market only accounts for 25% of the total revenue. International sales, especially in key markets like India, Indonesia,

impact heavily on the company's performance. According to the Truck Market 2024 – Sustainable Growth in Global Markets (Christopher, N. & Michael, A, 2014), while the industry environment remains challenging; the global truck market outlook is optimistic. The report shows that growth is shifting from matured markets where the competition is extremely high to emerging markets. For example, Brazil, China, and Japan show little momentum; growing at 1% per year, while Eastern Europe, Russia, ASEAN countries show high growth, 10%, 5%, 4% respectively. Understanding this shift, Mitsubishi Fuso has expanded its focus in these regions for many years. "Japanese truck OEMs including Daimler's Fuso Brand own the Indonesian market due to substantial investment and compliance with local specification" said by the report. By expanding the market globally, Mitsubishi Fuso can reduce the dependency on the home market where the competition is very high and minimal growth rate. However, changes in customer buying behavior will also a considerable factor for OEMs to devise their ways in order to catch the trend. According to the report, price-sensitive customers demand lower-priced part options. Truck products need to ensure to meet the compliance programs. Alternative dealer suppliers of parts will also bring a plus for the truck due to the convenience and easy to replace the parts.

Here, it can be seen that the buyer power is considered to be powerful in Japan based on the low switching costs of changing the truck brands. However, in markets like Indonesia which has been largely penetrated by Fuso as well as limited presence of local OEMs, the customers will have less choice in their decision.

4.5.4 Supplier Power: Low to Medium

Producing a truck requires thousands of parts and various materials. At Mitsubishi Fuso, according to the Production Department, for some parts of the truck like air conditioner suppliers from Korean and China have become more and more unstable in term of price and flexibility than before. In the year of 2016, political issues as well as more expensive labor force in Korea and China have causes the company's production being delayed and struggle to find another supplier.

4.5.5 Rivalry: High

As a highly matured market, the competition among the truck manufacturers in Japan is very aggressive. Besides, the increasing pressure from foreign entrants is also considerable because

of the improvements in technology and application of internet. Based on a long history of brand name and reputation, Mitsubishi Fuso currently remains its position in the Japan market and mainly shifts its resources to develop in key markets such as Indonesia, India.

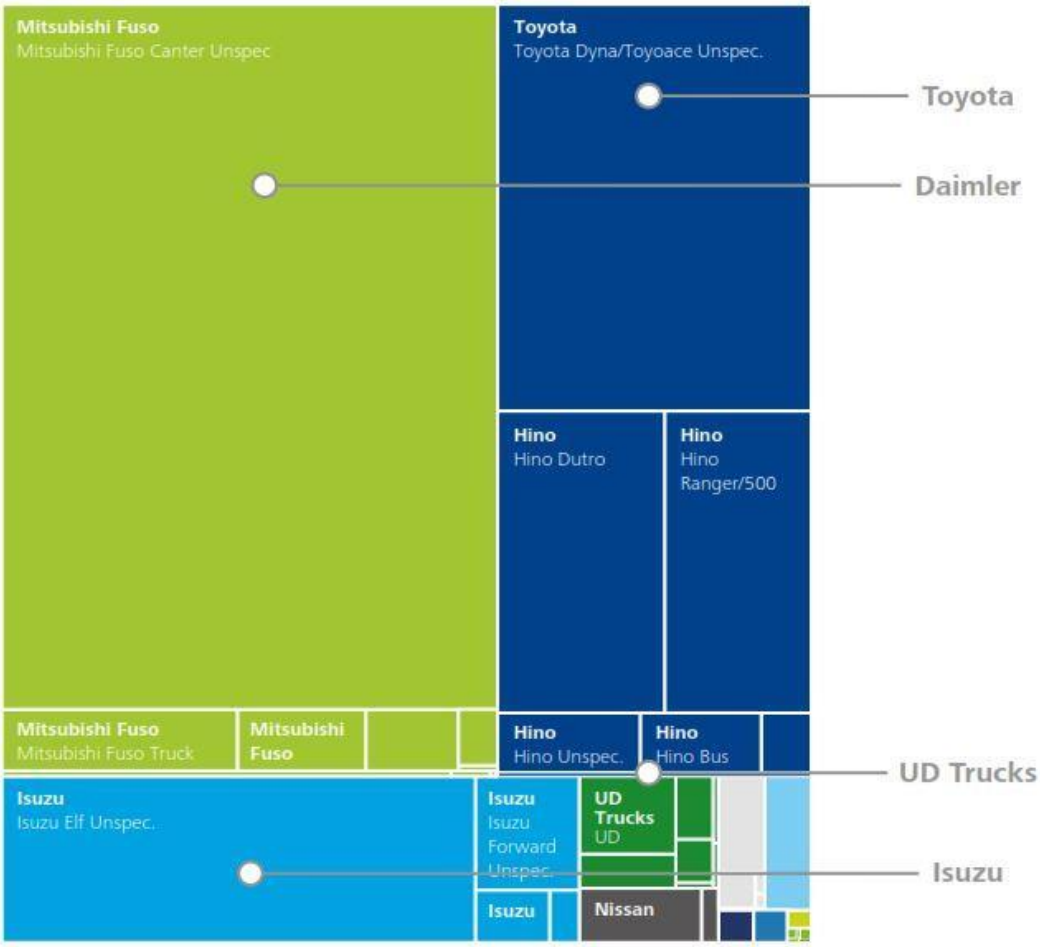


Figure 5: Registered Commercial Vehicles in Indonesia in 2013. Reprinted from Truck Market 2024 – Sustainable Growth in Global Markets, by Deloitte Consulting GmbH, 2014, retrieved from https://dupress.deloitte.com/dup-us-en/focus/tech-trends/2015/tech-trends-2015- Copyright 2014 by Deloitte.

As can be seen from the Figure 9, the Indonesian truck market is very much characterized by strong dominance of Japanese truck manufacturers. Mitsubishi Fuso remains its highest market share in this market by introducing the Canter model meeting Indonesian terrain. As a whole look, Daimler Truck still successful defends its position as No.1 truck manufacturer with 14% of global unit sale, while Tata seizes the growth in India to overtake Volvo, Dongfeng and Volkswagen, which is illustrated in the report:

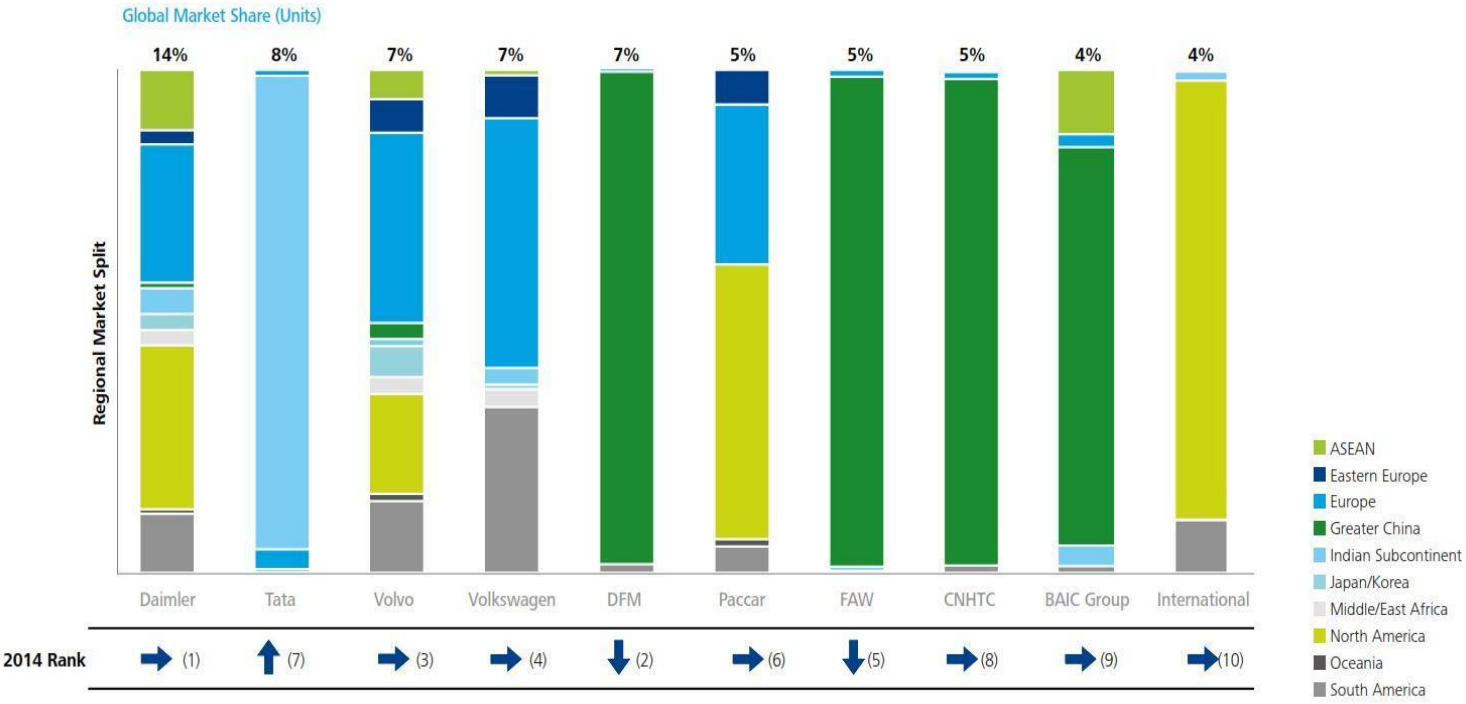


Figure 6: Global market share (Units). Reprinted from Truck Market 2024 – Sustainable Growth in Global Markets, by Deloitte Consulting GmbH, 2014, retrieved from https://dupress.deloitte.com/dup-us-en/focus/tech-trends/2015/tech-trends-2015- Copyright 2014 by Deloitte

However, as discussed above, the threats from new entrants of Chinese OEMs is very considerable.

4.6 SWOT Analysis:

SWOT analysis is applied to get insights about the company's internal capability and resources:

Strengths	**Weaknesses**
- Have experiences in business especially in truck manufacturing industry - Reputational brand name in term of quality and pioneering in innovation. - Gaining knowledge about new trends in truck industry by integrating with Daimler Truck which is one of the leading truck manufacturing in the world. - Strong support from Japanese government	- Differences in cultures between Germany and Japan cause misunderstandings and long process of making decisions. - Outdated information system compared to competitors - High production costs due to wastes

in term of imposing high barriers for new entrants in order to protect domestic companies. - Diversified markets with the worldwide presence.	
Opportunities	**Threats**
- Emerging markets like China, India, and Vietnam show high potential. - Integration with Daimler Truck which is currently the No.1 truck manufacturer in the world creates a new force for Mitsubishi Fuso to make significant changes and innovation.	- Economic downturn in Japan market and in some core oversea markets like Indonesia - New entrants from Indian and Chinese OEMs. - Emerging technologies like application of internet and mobile devices in truck system

CHAPTER V.

FINDINGS, RECOMMENTATIONS AND CONCLUSION

This chapter will briefly summarize the findings as well as proving recommendations for the company. Finally, a conclusion of the research will also be mentioned.

5.1 Data analysis:

Regarding to communication perspective, the result of the event feedback showed that more than 100% of the participants rate the relevance of information at "Very relevant" option in all the displayed booths. The contents of the booth are also informative, updated and appealing with 70%, 20% and 10% of the responses respectively. The Majority of Fuso staffs answered "Very satisfied" with the event and the way IT Department was trying to communicate and transparent the information to other departments, approximately 80%. Likewise, this kind of event was highly recommended to re-organize at Fuso with more interesting technology and showcases from IT Department.

Regarding to the personal perspective, the researcher also conducted some face-to-face interviews with managers, staffs and interns in order to get subjective opinions from different perspective. The common feedback is about the communication in multi-culture working environment causing some challenges. Contrast to the research conducted by Reina, H. (2010), according to the researcher's direct supervisor, Ms. Kazumi Kanzaki, from her point of view the Japanese people are not really motivated with the face-to-face communication. They may feel more pleased and comfortable to discuss by email or phone. However, German colleagues are more favor with direct communication.

5.2 Summarized Findings:

RQ1: The results show that many departments in Fuso have been trying to standardize their processes in order to make it simpler and focus on deliverables. In the IT Department, ITM OM is a particular example of standards and policies that guides the users the whole process from the input to the output. Other determinants are application of Information Technology in most of the areas of the business as well as powering the truck products known as "connectivity"; last but not least communication is highly focused by the board of management to improve companywide,

such as redesigning the workplace, upgrading the employee portal, certificated trainings in presentation skills, indoor and outdoor events.

RQ2: Continuous improvement in operation helps Mitsubishi Fuso to strengthen its No.1 position in key markets like Indonesia, India by quick response to the market demand, lead the market with innovations and flexibility in dealing with main competitors. "Speed" is also set as the first priority in the strategy in order to keep the business sustainably competitive.

RQ3: There are six challenges that Mitsubishi Fuso need to successfully overcome:

i) Product Portfolio Overhaul:

- New products in heavy, medium, light and buses by 2017 and 2018 with captive engine strategy.
- Connectivity and new technology (e-cell)

ii) Inefficient Processes:

- Manual, time-intense, paper-based processes; not end to end
- Outdated IT system; high costs

iii) Network and Facilities:

- Aging sales dealer network, warehousing, with need for invest
- Current factory offices with need for upgrade

iv) Active Partner Management:

- Sales and suppliers partners in need for monitoring and performance check

v) Complexity Management:

- Business across all segments, supplying more than 160 markets across several norms

vi) People and culture:

- Low Employee Commitment – disengaged workforce
- Lack of unifying company culture

5.3 In-progress Improvement Activities:

By applying information technology in most of the business processes, the company aims to improve the operational efficiency which in return creates values for the business as a whole. Below are few of the improvements that researchers collected to illustrate the continuous improvement activities at IT Department and Fuso:

Process automation	**Procurement automation**
What: Sales **Activities to improve:** Approvals of truck price discounts **Before:** ▪ Delay in process ▪ Loss of documents ▪ Highly manual process **Future** ▪ Fully automated ▪ Status management **Benefit:** reduce 160,000 approvals per year, phone calls, stress, work time, 250,000 paper sheets, costs (0.4 Oku JPY per year).	**What:** Procurement **Activities to improve:** User friendliness of the system for suppliers to order parts **Before:** ▪ Paper based ▪ Many approvals steps ▪ No tracking possible ▪ Manual work to gather ▪ Information for parts **Future:** ▪ Less approval and waiting time ▪ Automated application ▪ Reduction of process steps ▪ New parts information system **Benefits:** Eliminate paper loss, easy tracking, improved speed in processes, reduce work time, reduce 300,000 paper sheets, possibility to analyze
Fixed cost funding automation	**HR automation**
What: Company wide **Activities to improve:** getting approvals for any expense **Before:** ▪ Various different paper templates ▪ Thousands L1/L2 managers' signatures per year required ▪ Risk of information loss ▪ No information about current request status **Future:** ▪ Request form in SharePoint ▪ Reduction of process steps ▪ Electronic real-time status check for requests ▪ No paper & information loss **Benefits:** Eliminate paper loss, automatic threshold management, improved approval speed, reduce 2 FTE work time, real-time status check, transparent to see future potential	**What:** Human resources **Activities to improve**: employee management (e.g. hiring of temporary contractors) **Before:** ▪ Many process steps ▪ High number of signatures ▪ Many paper templates/forms **Future:** ▪ Elimination of unnecessary signatures ▪ Less process steps ▪ Paperless documentation ▪ Centralize HR administration work **Benefits:** Transparency, fast processes & approvals, reduce lead time, reduce work time, easy use, analysis capability

Paperless production

What: Production

Activities to improve: documentation of production activities

Before:

- Paper used processes
- Loss of time due to handling paper
- Manual archiving
- Delayed data analysis

Future:

- Real time data analysis
- Tablets instead of paper
- Paperless documentation
- Digital archiving

Benefits:

- Digital capturing of reworks & errors
- Real-time production information
- Reduce station based work instructions
- Reduce work time
- Easy user interface
- Real time data analysis

5.4 **Recommendation**:

Based on the external and internal analysis, the pressure of rivalry, buy power, and new entrants are considered to be medium to high, which should get the company's attention in the future strategy. As can be seen, the company has an advantage of winning the market shares in highly potential markets like India, China, and Indonesia. The growth of the global truck market is optimistic (Christopher, N. & Michael, A, 2014). However, there are still a need for Mitsubishi Fuso to develop its products portfolio and technology in order to catch the trends as well as defending itself with low-cost strategy OEMs coming from India, China. Aftersales segment is becoming more attractive and even accounting for approximately one third of total revenue for truck manufacturers in several markets, such as North America. Supporting by the report of Deloitte, it is recommended for OEMs to have four key levers at their disposal to arrive at a smarter competitive approach in the aftermarket business, including strengthen pricing capabilities, align product strategy, utilize dealer and customer incentives and improve dealer market share. Additionally, the partnerships model should be highly open to apply across the entire ecosystem in order to increase the competitive advantages, such as truck suppliers, service providers, insurance providers, owner operator aggregators. In emerging markets, particularly

SEA, one-size-fits-all approach will not work due to different country maturities and needs. Development of logistics networks and increasing transport efficiency will allow re-manufacturing and salvage business in less mature markets. Finally, Free Trade Agreement (FTA) should be increasingly focused as a tool for market entry strategy by lower tariff barriers.

5.5 Conclusion

The case-study of Mitsubishi Fuso Truck and Bus Corporation has clearly defined the understanding of operational efficiency as well as a link between operational efficiency and competitive advantages. Based on facts, figures as well as subjective opinions from the interviewed managers and questionnaires, the collected information tends to be more dynamic and useful in the aspect of opening new topics for further researches. Operational efficiency has been proved to be an important factor in the company's success. And the determinants of operational efficiency vary from one to another. The managers from executive-level to shop-floor need to understand well any the business processes, analyze the process and how to make it more efficient. Reductions in costs, wastes, errors and increase in time, profit margin will bring values to the company.

Appendix:

EVENT FEEDBACK

Date of participation: 17th October 2016

Department:……

Please spare a few minutes to response to the following questions which will help us analyse our standards of service and improve accordingly:

1. Please rate the relevance of information presented at 3D Printing Booth? (Please select only one)
   ☐ Very relevant ☐ Relevant ☐ Not relevant
2. Please rate the relevance of information presented at Virtual Reality Booth? (Please select only one)
   ☐ Very relevant ☐ Relevant ☐ Not relevant
3. Please rate the relevance of information presented at SAP Booth? (Please select only one)
   ☐ Very relevant ☐ Relevant ☐ Not relevant
4. What do you think about the information presented at IT Units Booths? (Please select only one)
   ☐ Useful ☐ Not interested
5. Please specify your answer: (for those who answer "Useful" in the Question 4)
   (Not limited to single answer)
   ☐ Informative ☐ Updated
   ☐ Appealing ☐ Understandable
6. Did you attend the presentation sessions?
   ☐ Yes (Continue with Question 7, 8)
   ☐ No (Continue with Question 9)
7. Which presentations (on stage) did you attend? (For those who answer "Yes" in Question 6)
   (Not limited to single answer)
   ☐ Business speaks about IT
   ☐ Digital Transformation – Are you ready for the automotive industry of the future?
   ☐ Mobile Virtual Engineering at Daimler Protics
   ☐ 3D – Printer Technology
   ☐ Big Data
   ☐ Decision Making for the Digital Age with SAP S/4HANA Finance
8. How useful was the information presented at these sessions? (For those who answer "Yes" in Question 6) (Please select only one)
   ☐ Extremely useful
   ☐ Quite useful

☐ Moderately useful

☐ Slightly useful

☐ Not at all useful

9. Please specify the reasons of not joining the presentation: (For those who answer "No" in Question 6) (Not limited to single answer)

☐ Time constraint ☐ Duplicated time with other interested activities at the event

☐ Language constraint ☐ Others:

……

10. How did you know about the event? (Not limited to single answer)

☐ By email ☐ By DTA INSIDE JAPAN

☐ By intranet ☐ By colleagues

11. How likely is it that you would recommend IT Days to your colleagues? (Please select only one)

☐ Extremely likely

☐ Very likely

☐ Somewhat likely

☐ Not so likely

☐ Not at all likely

12. Overall, were you satisfied with MFTBC IT-Days 2016? (Please select only one)

☐ Extremely satisfied

☐ Very satisfied

☐ Somewhat satisfied

☐ Somewhat dissatisfied

☐ Quite dissatisfied

☐ Extremely dissatisfied

13. Lastly, do you have any comments or suggestions to improve the IT Department as the service provider to business?

……

……

Thank you for your input. We ensure that all data collected will be kept anonymous.

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