TOTAL QUALITY MANAGEMENT EXPERIENCES OF AUTOMOTIVE GRADUATES OF NORTHWEST SAMAR STATE UNIVERSITY IN THE INDUSTRY

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Major in Automotive Technology

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The Researcher

DEDICATION

To God,
for giving good health and wisdom from the start
until my last struggle...

To my Family,

for their deepest love and support...

To my Mentors,

for sharing their expertise...

To the Respondents,

for their inspiration...

To the Teachers,

for their philanthropy...

To all of you, the researcher humbly dedicates this

academic masterpiece.

-FG

ABSTRACT

The study aimed to determine the total quality management industry experiences of automotive graduates of Northwest Samar State University Philippines. This study made use of descriptive research design. On the level of performance of the respondents between TQM industry experiences an level of performance was strongly significant at the 0.01 level. On the significant relationship between TQM experiences in industry and their level of performance. There is a significant relationship between TQM industry experiences and level of performance. The automotive graduates are predominantly 36 years old, graduated in 2005, earned automotive course, 10 years in service in the industry. The assessment on TQM industry experiences encountered by the respondents are satisfactory particularly on customer focus, leadership, people involvement, factual approach to decision making, and mutually beneficial supplier relations. The relationship between TQM industry experiences and level of performance was strongly significant. Conduct training for employees focused on enhancing their competence and management skills to develop their duties and professional development. Automotive industry should strictly maintain and observe the total quality management to further strengthen employees' commitment to serve and remain serving the people as their clients.

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Chapter 1

THE PROBLEM AND ITS SETTING

Introduction

Total Quality Management (TQM) in automotive industry describes the culture, attitude, and organization of a company striving to produce high quality products and services that meet or exceed customer expectations. This concept has been implemented by automotive companies such as Ford Motor Company, General Motors Company, and Toyota Motor Company. TQM in automotive industry views an organization as a collection of processes. It maintains that industry must strive to continuously improve these processes by incorporating the knowledge and experiences of employees. The simple objective of TQM is "Do the right things, right the first time, every time." TQM is infinitely variable and adaptable. Although originally applied to manufacturing operations, and for a number of years only used in that area, TQM is now becoming recognized as a generic management tool, just as applicable in service in automotive industry. There are a number of evolutionary strands, in different automotive industries creating their own versions from the common ancestor (Khurram Hashmi, 2012).

TQM of automotive industries must focus on the systematic management of data in all processes and practices to eliminate waste and pursue continuous improvement. It should aim to deliver the highest value for the customer at the lowest cost while achieving sustained profit and economic stability for the

industry. While every industry should implement its own specialized form of quality management, there are some basic core principles that guide every quality effort. The single most important element of quality management is the focus on the customer. During this quality process, manager must strive frequently to hear from the customers. From this basic concept, that the customer is the ultimate determiner of quality. All types of automotive industries have to reduce costs increased process efficiency and improved the quality of their products and services by working to meet the needs of the people they serve through the application of total quality management (TQM) principles. Learning the principles and practices of TQM will help the automotive industries to achieve outstanding results and enlist the support of top management in advancing this concept within the organization enabling managers or supervisors to create a work environment that gets the best from its employees. The proof will be reflected in the results deliver to the customer. With growing global competition, quality management is becoming increasingly important to the leadership and management of automotive industry. Quality management principles provide understanding of and guidance on the application of quality management. By applying following quality management principles, automotive industries will produce benefits for customers, owners, employees, suppliers and society as a whole.

However, Total Quality Management is not something that happens overnight. While there are a number of software solutions that will help

organizations quickly start to implement a quality management system, there are some underlying philosophies that the organization must integrate at every level of management. Whatever other resources that the department managers use, they should adopt the important principles of Total Quality Management as a foundation for all the activities (Quin Harris, 2016).

In the Philippines, the automotive industries have recently been experiencing a loss of experienced and skilled employees. These industries experienced a loss of competent employees over the past years. The industries have failed to retained skilled and experienced employees and therefore there is a need to establish ways of improving the situation. The turnover in employees has contributed to the decreased quality services in the automotive industry since there has been an increase in "negative impact" reports regarding managerial issues.

In Bachelor of Science in Industrial Technology, TQM should be incorporated in the curriculum so that sufficient knowledge for the students would be given emphasis and they could be applied for their future job in automotive industry and this is considered a vital part of the quality management process in an industry. Students would be empowered to make decisions, their contributions are valued, and their suggestions are implemented.

Hence, the proposed study focuses on the total quality management industry experiences of automotive graduates of Northwest Samar State University.

Statement of the Problem

The study aimed to determine the total quality management industry experiences of automotive graduates of Northwest Samar State University Philippines.

Specifically, it sought to answer the following sub-problems:

1. What is the profile of the respondents in terms of:
    - 1.1 age;
    - 1.2 year graduated;
    - 1.3 TQM subject in automotive course;
    - 1.4 number of years in industry;
    - 1.5 number of trainings related to TQM;
    - 1.6 current position, and
    - 1.7 awards?
2. What TQM industry experiences encountered of the respondents in terms of:
    - 2.1 costumer focus;
    - 2.2 leadership;
    - 2.3 people involvement;
    - 2.4 process approach
    - 2.5 systematic approach to management;
    - 2.6 continual involvement;

2.7 factual approach to decision making, and

2.8 mutually beneficial supplier relations?

3. What is the level of performance of the respondents in industry?

4. Is there a significant relationship between TQM industry experiences and level of performance?

5. Based on the findings, what implications may be derived towards automotive curriculum improvement?

Hypothesis

1. There is no significant relationship between TQM industry experiences and level of performance of the respondents.

Theoretical Framework

This study is anchored on Deming's Profound Knowledge, a branch of philosophy and management concerned with the nature and scope of knowledge, its presuppositions and bases, and the general reliability of claims to knowledge. It emphasizes that there is no knowledge without theory and that experience alone does not establish a theory. To copy an example of success without understanding it with the aid of theory may lead to disaster. Experience only describes; it cannot be tested or validated. Theory establishes a cause-and-effect relationship that can be used for prediction. Theory leads to questioning and can be tested and validated it explains why. Many consultant methods that

have sustained success are grounded in theory. Managers have responsibility to learn and apply.

Deming's theory of profound knowledge is a management philosophy grounded in systems theory. It is based on the principle that each organization is composed of a system of interrelated processes and people which make up system's components. The success of all workers within the system is dependent on management's capability to orchestrate the delicate balance of each component for optimization of the entire system. Deming believed profound knowledge generally comes from outside the system and is only useful if it is invited and received with an eagerness to learn and improve. A system cannot understand itself without help from outside the system, because prior experiences will bias objectivity, preventing critical analysis of the organization. Critical self-examination is difficult without impartial analysis from outside the organization. Also, insiders can rarely serve as hostile critics who speak frankly without fear of reprisals. According to Deming, the journey from the prevailing management style to quality requires the understanding of systems. A system is composed of interrelated components. Quality is the optimization of performance of the components relative to the goal or aim of the system. Individual components of the system will reinforce, not compete with each of the other components of the system to accomplish the aim of the system.

Short-term thinking, quarterly and annual performance evaluations, and bottom line thinking forces attention to quick-fix solutions. Even if long-range

plans exist, prevailing short-term thinking distracts from long-term behavior toward real solutions. Quality is a systematic process. First, establish the aim: vision, mission, goals or constancy of purpose of the system According to Deming, without aim, there is no system (Identity) then identify the components and processes and the interrelationships of the components within the system (relationships). Constantly improve on the processes of the system (Information/Learning/Knowledge.)

This study is also anchored on the theory of Crosby who is the only American quality expert without a doctorate. He is responsible for the zero defects program, which emphasizes "doing it right the first time," (DIRFT) with 100 percent acceptable output. Crosby argues that quality is always cost effective. He does not place the blame on workers, but on management.

Crosby also developed a 14-point program, which is again more practical than philosophical. It provides managers with actual concepts that can help them manage productivity and quality. His program is built around four Absolutes of Quality Management as enumerated; first, quality must be viewed as conformance to specifications. If a product meets design specifications, then it is a high-quality product. Second, quality should be achieved through the prevention of defects rather than inspection after the production process is complete. Third, according to Crosby, the traditional quality control approach taken by American firms is not cost effective. Instead, production workers should be granted the authority and responsibility to ensure that quality goods

or services are produced at every step of the process. Fourth, managers need to demonstrate that a higher standard of performance can lead to perfection—to zero defects. Crosby believed that the company goal should be zero defects. Lastly, quality should be measured by the price of nonconformity. Crosby contends that the costs associated with achieving quality should be part of a company's financial system.

Conceptual Framework

As illustrated in Figure 1, the researcher conceptualized that the total quality management industry experiences of automotive graduates of Northwest Samar State University (NwSSU).

Furthermore, the total quality management of the industry which guides the leadership style of the managers to provide good services to the people.

Significance of the Study

This study was significant to the following:

Industrial Managers. They would gain insights on the total quality management and most likely enable them to practice much better management functions.

Employees. They would be motivated to work harder knowing that the total quality management is being practiced in their department.

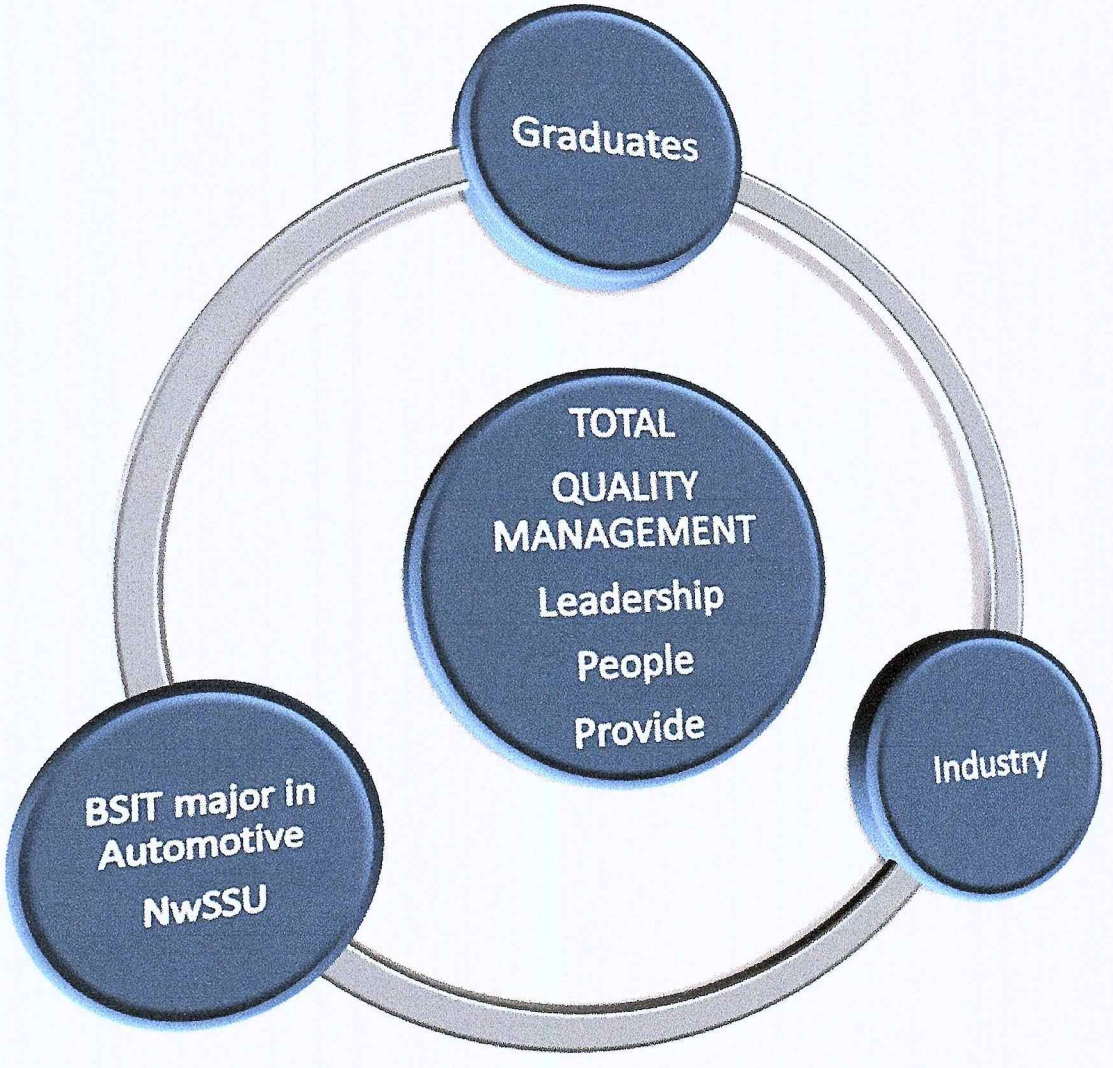

Figure 1. The Conceptual Framework of the Study

School heads. They would be aware of the total quality management of Industry and give them more support to sustain their dedicated work for the betterment of the industry as a whole.

Curriculum planners. They would formulate, modify and create curriculum suited to the needs of the learners and society.

Researchers. They would conduct researches of the same nature and other studies and the recommendations in this study may serve as springboard for future researchers to achieve or maintain total quality management.

Scope and Delimitation

The study focused on total quality management experiences of automotive graduates of Northwest Samar State University. This covered the 50 graduates from school year 1994 - 1995 to school year 2009- 2010 who took the four-year degree Bachelor of Science in Industrial Technology major in Automotive. This study was conducted in January 2018.

Data in this study were gathered through the use of three research instruments namely, Part I was the respondents' profile and Part II dealt with experiences of automotive graduates of Northwest Samar State University. While the Part III was the employees' level of performance in industry constructed by the researcher and duly validated by a jury composed of six members.

Statistical tools used to analyze the data gathered in this study were

frequency, percentage, mean, t-test, and regression. Analyses of data were made using the Statistical Package for the Social Sciences (SPSS) software version 17.0.

The study was limited to the total quality management practices, competence, and performance of the Industrial Technology managers.

Definition of Terms

To facilitate the understanding of this study, the following terms are defined conceptually and operationally to provide common frame of reference:

Age. This refers to the number of years an automotive graduate has lived from the period of his/her birth (Encyclopedia Britannica, 25 March 2014, retrieved from http://www.newworldencyclopedia.org/). The same definition is adopted in this study.

Awards. This refer to a prize or recognition given to the automotive graduate in honor of an achievement (Encyclopedia Britannica, 25 March 2014, retrieved from http://www.newworldencyclopedia.org/). The same definition is adopted in this study.

Communication. This term refers to a process of exchanging and sharing of ideas, feelings, and knowledge to one another in an automotive industry (Bailey, 2009). The same definition is adopted in this study.

Competence. It is a state of being capable of carrying out task and performs well in an automotive industry (Gilbert, 2011). In this study, it means

the capacity and the skill of the automotive graduates to accomplish his/her task perfectly.

Continual involvement. This refers to an on-going participation for the development and progress of the automotive industry (Hyde, 2010). The same definition is adopted in this study.

Customer focus. This refers to the orientation of an organization toward serving its client's needs in an industry (Martin, 2010). The same definition is adopted in this study.

Current position. This refers to the present rank of an employee in an automotive industry (Ishikawa, 2009: 26.). The same definition is adopted in this study.

Decision making. This is the process of identifying and choosing alternatives based on the values, preferences and beliefs of the decision-maker in an automotive industry (Smith, 2010. In this study, it means the logical choice among the options that could be used in a certain problem in the industry.

Industrial managers. This refers to managers who are working in an automotive industry (Iwaarden, 2013). The same definition is adopted in this study.

Leadership. This is a practical skill encompassing the ability of an individual or organization to "lead" or guide other individuals, teams, in an automotive industry (Hackman & Wageman, 2010). In this study, this refers to the art of motivating a group of people to act towards achieving a common goal.

Leadership skills. These are essential components in positioning executives to make thoughtful decisions about the organization's mission and goals, and properly allocate resources to achieve those directives in an automotive industry (Hackman & Wageman, 2010). The same definition is adopted in this study.

Management. This refers to the administration of an organization which includes activities of setting the strategy of an organization and coordinating the efforts of the employees to accomplish the organizational objectives of an automotive industry (Powell, 2011).

Number of trainings related to TQM. This refers to the quantity of learning and skills formally acquired by an employee through seminars and studies. (Operationally Defined)

Number of years in industry. This refers to the length or duration of service rendered by an employee to the industry. (Operationally Defined)

People involvement. This refers to the participation and teamwork among all the stakeholders in the industry (Blackburn & Rosen, 2011). The same definition is adopted in this study.

Performance. This term refers on how the employees carry out their daily task (Linda, 2010). The same definition is adopted in this study.

Personal characteristics. These refer to the habitual patterns of behaviour of an individual (Creech, 2010). In this study, it means the individual difference which is innate to every employee in the industry.

Principles of community. This refers to an aspirational statement that embodies commitment, and reflects the ideals being seek to uphold for the betterment of everybody (Dewhurst, 2010). The same definition is adopted in this study.

Quality improvement. This is a systematic and formal approach to the analysis of practice performance and efforts to improve performance (Houston, 2009). The same definition is adopted in this study.

Supplier involvement. This refers to shared and interdependent affiliation between the supplier and customer in an automotive industry (Pfeifer, 2012). The same definition is adopted in this study.

Strategic planning. This is an organizational management activity in an automotive industry that is used to set priorities, focus energy and resources, strengthen operations, ensure that employees and other stakeholders are working toward common goals, establish agreement around intended outcomes/results, and assess and adjust the organization's direction in response to a changing environment (Gomez-Mejia, Balkin and Cardy, 2008). In this study, it means the step-by-step designed activity used by the industry to guarantee the welfare of the industry and employees.

Supervision. This refers to an act of directing, managing, or overseeing someone to see to it that the task will be done properly (Gomez-Mejia, Balkin and Cardy, 2008). The same definition is adopted in this study.

Systematic approach to management. This is an approach focuses on the management process rather than on the final outcome to create specific processes and procedures to be used in job task completion (Stoner, 2010). The same definition is adopted in this study.

Teamwork. This is the process of working collaboratively with a group of employees in order to achieve a goal (Kleiman, 2010). In this study, this refers to the spirit of cooperation of the employees in the industry.

Total Quality Management. This is a system of management based on the principle that every staff member of an automotive industry must be committed to maintaining high standards of work in every aspect of a company's operations (Armand, 2010). The same definition is adopted in this study.

TQM subject in automotive course. This refers to the TQM subjects being incorporated to the automotive courses. (Operationally Defined)

Year graduated. This refers the specific year wherein the automotive graduates received a degree of completion of his/her course. (Operationally Defined)

Chapter 2

REVIEW OF RELATED LITERATURE AND STUDIES

This chapter presents the review of literature and studies which have direct bearing to the present study.

Related Literature

There is sufficient evidence in the literature that demonstrates that practicing and observing Total Quality Management (TQM) in Automotive Industry has a positive indicator of increased retention. Conversely, ignoring TQM principles has been shown to lead to turnover, inefficiency, and misunderstanding (Paredes, 2012). These factors have a direct impact on management and team collaboration (Donelon, 2014). The research on automotive industry can be categorized according to extrinsic or environmental factors, and intrinsic or personal variables. Environment factors may include leadership styles of managers, pay, promotion, social interaction with peers, job content, and occupational level. Personal variables may include age, educational level, gender, and length of employment.

The Automotive manufacturing industry aims to make the Philippines a competitive manufacturing base of motor vehicles and parts and components, serving both the domestic and export markets, and a global hub for automotive-

related human resource development and process outsourcing based on the Total Quality Management.

The industry seeks to have a market share ratio by achieving full capacity utilization and achieving a 150.00 percent increase in nationwide capacity by 2022.

Its objective is to generate an additional P41 billion in investments, P151 additional production in related in related sectors, create 70,000 new jobs, and resume export operations.

For its development, the industry recommends the application of selective but wide application of fiscal incentives (to offset its cost handicaps) and implementation of industry-wide non-fiscal policy supports measures.

The manufacture of motor vehicle (excluding motorcycles, e-bikes and golfcarts) and motor vehicle parts and components is among the preferred activities listed in the IPP. This covers the assembly of motor vehicles, manufacture of parts and components, research & development, research/testing laboratories, and technical vocational education and training institutions.

For the manufacture of motor vehicles (excluding motorcycles, e-bikes and golf carts), including the manufacture of parts and components, any of the following may qualify as new: 1. Projects that will involve the establishment of a factory complete with production machinery/equipment and facilities. 2. Projects of an existing motor vehicle manufacturer/assembler of passenger car/commercial vehicle that involves the production of a new model or a full

model change (FMC) provided there is new investment of at least Php 200 million. 3. Projects on the manufacture/assembly of alternative fuel vehicle and electric vehicles. Alternative fuel vehicles include hybrid vehicles, and flexible-fuel vehicles. 4. Manufacture/assembly of brand new three or four-wheel Philippine utility vehicles for cargos and/or passengers.

The **Comprehensive Automotive Resurgence Strategy (CARS) Program** is being implemented in order to attract new investments, stimulate demand and effectively implement industry regulations that will revitalize the Philippine automotive industry, and develop the country as a regional automotive manufacturing hub.

The thrust of the CARS Program is to provide time-bound, and output or performance-based fiscal support to attract strategic investments in the manufacturing of motor vehicles and parts thereof. Other non-fiscal measures already provided by existing laws, rules and regulations shall continue to be systematically implemented by the relevant government agencies.

CARS is intended to augment and enhance the policy directions of existing motor vehicle development programs towards ensuring a resurgent automotive industry that supports innovation, technology transfer, environmental protection, and SME development; enable the country's automotive industry to seize market opportunities opened by the ASEAN Economic Community and deepen its participation in the regional supply chain;

and boost the manufacturing capability of the overall industrial sector, spur growth of SMEs and create more jobs in the country.

The CARS Program is limited to the manufacture of three models of four-wheeled motor vehicles, covering the following activities: Production of the enrolled Models; Manufacture of Body Shell Assembly and Large Plastic Assemblies of the Model; Manufacture of Common Parts and Strategic Parts not currently produced in the country at Original Equipment Manufacturer (OEM) standards of the Model/s; and Shared Testing Facility for vehicles and/or parts.

Total Quality Management is highly observed in Japan. Japanese automakers Toyota, Nissan, and Honda, among many others, have long been considered the leaders at producing smaller, fuel-efficient cars. Their vehicles were brought to the forefront, due to the 1973 oil crisis which had a major impact on the auto industry. For instance, the Honda Civic was considered superior to American competitors such as the Chevrolet Vega and Ford Pinto. The Civic is the best-selling car in Canada for 12 years in a row.

As well, the Nissan 240Z was introduced at a relatively low price compared to other foreign sports cars of the time (Jaguar, BMW, Porsche, etc.), while providing performance, reliability, and good looks. This broadened the image of Japanese car-makers beyond their econo-box successes, as well as being credited as a catalyst for the import performance parts industry.

Before Honda unveiled Acura in 1986, Japanese automobiles exports were primarily economical in design and largely targeted at low-cost consumers. The

Japanese big three created their luxury marques to challenge the established brands. Following Honda's lead, Toyota launched the Lexus name with the LS 400 which debuted at $38,000 in the U.S. (in some markets being priced against mid-sized six cylinder Mercedes-Benz and BMW models), and was rated by *Car and Driver* magazine as better than both the $63,000 Mercedes-Benz W126 and the $55,000 BMW E32 in terms of ride, handling and performance. It was generally regarded as a major shock to the European marques; BMW and Mercedes-Benz's U.S. sales figures dropped 29.00 percent and 19.00 percent, respectively, with the then-BMW chairman Eberhard von Kuenheim accusing Lexus of dumping in that market. The NSX was the world's first all-aluminum production car, and was also marketed and viewed by some as the "Everyday Supercar" thanks in part to its ease of use, quality and reliability, traits that were unheard of in the supercar segment at the time.

The success of the Japanese automakers contributed to their American counterparts falling into a recession in the late 1970s. Unions and lobbyists in both North America and Europe put pressure on their government to restrict imports. In 1981, Japan agreed to Voluntary Export Restraints in order to preempt protectionism measures that the US may have taken, where it be tariffs or import quotas. Consequently, Japanese companies responded by investing heavily in US production facilities, as they were not subject to the VER. Unlike the plants of domestic automakers, Japanese plants are non-unionized (save for NUMMI), so they have lower wage expenses and do not face the risk of

strikes. The VER was lifted in 1994 upon agreement of all members of General Agreement on Tariffs and Trade (GATT). Establishing US production facilities was also a significant step in improving public relations, along with philanthropy, lobbying efforts, and sharing technology. Europe has still largely maintained its protectionism policies against Japanese cars, though their varies considerably.

Toyota has always been by far Japan's largest automaker, and it recently overtook perennial world leader GM in both production and sales by early 2008. As the most aggressive of Japan's companies when it came to expanding into light trucks and luxury vehicles, this proved largely successful. Their high-end brand Lexus became the top-selling luxury marque worldwide in 2000, despite being only started up in 1989. Consequently, Toyota's stock price has traded at a much higher premium than other automakers. Nissan regained its position on second place, financial difficulties in the late 1990s caused it to lose its place to Honda before. Nissan is Japan's second largest automaker and ranks sixth in the world, behind Toyota, GM, Volkswagen, Ford, and Hyundai. Suzuki, Mazda, and Mitsubishi are in a distant fourth, fifth, and sixth place compared to the Japanese Big Three.

Toyota, Honda, and Nissan are all in the BusinessWeek magazine's *The 100 Top Global Brands* by dollar value, as ranked by leading brand consultancy Interbrand. The Toyota marque was valued at US$22.67 billion, ranking it ninth among all global brand names - automotive or non-automotive, edging out that

of Mercedes-Benz. 2010 end of year production figures from the International Organization of Motor Vehicle Manufacturers shows that Toyota holds the number 1 spot, Nissan number 6, and Honda number 7.

Related Studies

The Philippine automotive sector is relatively small, in terms of share in value added in manufacturing, size (number of players), and production especially if compared to its ASEAN neighbors such as Thailand, Malaysia and Indonesia. But recognizing the backward and forward linkages of the sector, the government continues to promote its expansion and improve its competitiveness. A major policy on the sector is the Motor Vehicle Development Program which aims to provide the automotive sector with comprehensive industrial policy and development direction. This law is adequate on promoting competitiveness and taking advantage of the tariff reduction schemes but seems to lack in supporting innovation in the automotive industry. And it does not help that, in the Philippine industries in general, the low R&D expenditure and the failing R&D indicators indicate how innovation is not getting enough attention in the country. Nonetheless, a recent case of innovation in the Philippines is the electric jeepney. Jeepney is a uniquely Filipino public transport]. This can be considered an innovation for local public utility vehicles in view of improving the fuel economy and reducing environmental impact. But other than this, innovation particularly in the automotive sector is not very active. Innovation

can be defined in terms of improvement or development of product, process, operations or systems, as well as formulation of technology strategies, to name a few. Innovation can be sourced within a company (internal), such as from its pool of engineers to R&D activities; or be acquired through linkages outside the company (external), through expertise coming from research institutes, universities or other networks. It would be interesting to look closely into the innovation situation in automotive firms and to assess how these firms fare in terms of innovation capability.

Programs to develop the industry were implemented starting in early 1970s. Examples of this program include: increasing local content requirement to promote the domestic manufacture of automotive components, and promoting manufacturing activities with small and medium enterprises. From 12 vehicle assemblers in 1960, there are now 52 of them in this subsector, and there are 256 parts and components manufacturers. From an annual demand of about 10,000 units in 1960, the automotive industry was able to produce more than 160,000 vehicles in 1996 (an all time high). From an economy's perspective, the transport sector - on average - accounts for only about 1 percent of total manufacturing gross value added.1 Despite this small share to manufacturing GVA, the machinery and transport equipment industry has - on the average - accounted for 4 percent of total Philippine exports from 2000 to 2009. In 2008, the total value of exports by the machinery and transport sector has amounted to US$2.1 billion

(F.O.B) beating out the garments sector as the second largest value of manufacturing export.

Still, in terms of number of players, the sector is considered small. Currently, there are only about 308 industry players in the automotive sector (excluding authorized dealers). Despite the relatively small size and lackluster performance of the automotive industry, the Philippine government has consistently issued policies aimed at improving the performance and increasing the size of the sector 3. The most recent of these policies would be the New Motor Vehicle Development Plan which provides incentives like tax breaks offered in free trade zone areas, income tax holidays, duty drawback arrangements and other benefits in order to encourage them to continue business in the Philippines. The Philippine government has recognized the importance of the sector because of its deep forward and backward linkages. The backward linkages are composed of the first tier industries that directly supply the needs of the local automotive industry, and the second and third tier industries that are the subcontractors of the first tier as well as providers of the raw materials that are needed by the first tier.

This study of Gopalan (2014) examined the concept and strategies of Total Quality Management (TQM), in order to develop a model of TQM based industry for implementation in India. It begins with a description of challenges of Indian automotive. After defining the concept of TQM, a philosophy developed for industry by W.E. Deming, it examines its application in the U.S.A.

and U.K. A study of the differences between the two nations leads to the analysis that TQM succeeds best as a local industry-based initiative. TQM is adaptable as a generic model suitable to the diversity in Indian automotive industry. The paper posits a model for TQM in industry, along with enabling conditions and possible pitfalls. TQM is an attitude towards automotive industry improvement broad enough to encompass the multifarious needs for industry reform in India. Based on the research work in the automotive industry of Karnataka, a detailed blueprint for reform is evolved, which incorporates the TQM way of thinking with the major requirements for industry improvement. These include: systemic thinking with the industry as organization, a decentralized structure, managerial development, teamwork and collegiality, managerial-level leadership, involvement of the community, focus on the process of learning, and non-threatening assessment.

The purpose of Toremen's study was to determine the extent of total quality management (TQM) practices in automotive industry based on employees' perceptions, and how their perceptions are related to different variables.

In this study, a survey based descriptive scanning model was used. This study was carried out in Malatya city centre on teachers working at automotive industry. Using stratified sampling method, 21 automotive industry and 420 employees working in these industry were selected randomly. A total of 396 of the questionnaires were validated and evaluated. A total of six-dimensioned and

a 60-item questionnaire were administered to these employees. The data were analyzed by SPSS program.

In the perceptions of employees, there were some problems with the indicators of TQM practices, especially on the dimension of change management. There were significant differences among employees' perceptions on TQM practices depending upon the variables of branch, level of industry and tenure, while there were no meaningful differences according to the gender variable.

The findings revealed the need for an effective change management, training of staff and utilizing human resources to attain a system-wide quality improvement, to implement the principles of TQM.

Quality improvement is a continual process that should be taken up from the operational level to senior management. Automotive industries, as the basic subsystem of business super-system, affect upper level automotive industry with their outcomes. So TQM efforts at automotive industry are fundamentally important to achieve a high quality of management. This paper sheds light on how to improve quality at this level.

Kosgei's (2012) study on the "Challenges Facing the Implementation of Total Quality Management in automotive industry, a Case of Eldoret East District, Kenya," examined the challenges facing the implementation of Total Quality Management in industry. The overall aim of this study was to evaluate the extent to which Total Quality Management principles are practiced in automotive industry in Eldoret East District. The study was carried out in

Eldoret East District, Kenya. The study employed use of a survey research design and utilized the stratified random sampling technique for data collection. The instruments used for data collection were questionnaires and document analysis. The target populations used were area managers, branch managers of studies and heads of departments of the selected automotive industry. A total of 15 industries in Eldoret East District participated in the study. The findings of the study revealed a number of challenges in the implementation of TQM as; Lack of commitment by the management and some staff members, Organizational culture in the industry, Poor documentation, Insufficient training of key team players, Ineffective communication.

The study is aimed at giving implementers a practical view of the implementation process of Total Quality Management with the involved loophole. Those who wish to further their studies would find new information, which would contribute to the building of their scholarly abilities and growth. It also gives a model to minimize these challenges.

Al-Jammal and Ghamrawi's (2013) study on "Total Quality Management Effectiveness in Lebanese Automotive Industry Perceptions of Managers and Employees" investigated the degree to which a sample of private industries in Beirut, Lebanon; were catering for Total Quality Management (TQM) in their contexts. The sample of this study consisted of 650 participants: 130 general managers and rest were employees. A survey was developed based on an extensive review of the literature. SPSS 21.0 was utilized to analyze data. Results indicate that the vast majority of managers

considered all TQM components to be effective in their industry. Conversely, all TQM components were perceived as ineffective by the majority of employees. All TQM components were considered to be ineffective by the majority of the respondents.

Thokozile's (2008) study on "Employees Views on total Quality Management in Automotive Industries in Eshowe Circuit" determined the views of employees on TQM in industries. The study aimed at finding out how TQM principles could be used to achieve quality management. The focus was on TQM as a universal management tool for quality improvement in industry. A questionnaire was administered to a total of eighty-eight respondents comprising ten general manager, ten area manager, sixty supervisors were selected from ten automotive industries in the selected circuit. The data were analyzed in percentages and recorded in tables. The results were also illustrated by means of the graphs to make interpretations easier.

Price and Muller (2012) stated that the Total Quality Management of Automotive Industry as the degree of positive affective orientation toward employment. This is similar to Vroom's (2004) understanding of on Efficient Automotive Management as the explicit attitudes toward the job. While Rahim (2012) viewed this as the variance between what one expects and what one actually experiences in profit for services provided. Addressing the needs fulfillment, Ugwuegbu and Ogundeyin (2014) emphasized TQM of automotive industry as the extent to which employees felt needs are fulfilled by the job they

perform. Therefore, any examination of TQM reveals the individual perceptual component.

Chapter 3

METHODOLOGY

This chapter presents the research design to be used, instrumentation, validation of instrument, population and sampling, research instrument, data gathering procedures, and the statistical treatment of data.

Research Design

This study made use of descriptive research design. A descriptive research describes the nature of the situation as it exists at the time of the study and to explore the causes of a particular phenomenon (McMillan, 2008). It is also designed to help determine the extent to which different variables are related to each other in the population of interest (Sevilla, 2008).

The descriptive research design was utilized in this study to assess the total quality management experiences of automotive graduates of Northwest Samar State University Philippines (NwSSU).

Descriptive research is usually the best methods for collecting information that will demonstrate relationships and describe the world as it exists. These types of studies are often done before an experiment to know what specific things to manipulate and include in an experiment. Bickman and Rog (2007) suggest that this study can answer questions such as "what is" or "what was."

The main instrument employed in this study was a survey questionnaire which was supplemented by the used of documentary analysis to elicit certain data that cannot be collected using the first instrument, as well as the cross-referencing of certain data entered by the respondents using the survey questionnaire.

The data gathered in this study were subjected to two types of statistical analysis: (1) using descriptive statistics, like frequency counts, conversion of percentages, and weighted mean; and (2) using inferential statistics like Pearson Product-Moment Correlation Coefficient or Person r for the determination of the level of significance of r values.

The abovementioned research design is appropriate in this study which intends to find out the total quality management experiences of automotive graduates of Northwest Samar State University Philippines (NwSSU).

Instrumentation

To get the data on the total quality management the researcher - made instrument was used.

The respondents were 50 randomly selected automotive graduates.

The research instrument used in the study was a survey questionnaire. It was a researcher-made questionnaire which was content validated for reliability through the evaluation of the three experts.

Table 1

Sampling Frame of the Study

Year	Total Number of Graduates Automotive	No. of Samples
1994 – 1995	9	0
1995 – 1996	8	0
1996 – 1997	7	0
1997 - 1998	16	0
1998 – 1999	14	0
1999 – 2000	10	0
2000 – 2001	19	3
2001 – 2002	23	5
2002 – 2003	12	3
2003 – 2004	16	5
2004 – 2005	17	9
2005 – 2006	14	0
2006 – 2007	8	6
2007 – 2008	19	7
2008 – 2009	8	5
2009 – 2010	13	7
Total	**213**	**50**

The questionnaire had three parts, Part I was designed to gather the respondents' profile such as: age, year graduated, TQM topics/contents in automotive course, number of years in industry, number of trainings related to

TQM, current position, and awards. Part II dealt with experiences of automotive graduates of Northwest Samar State University in terms of customer focus, leadership, people involvement, process approach, systematic approach to management, continual involvement, factual approach to decision making, and mutually beneficial supplier relations. Part III was designed expected to gather data on the employees' level of performance in industry.

Each item enumerated in the second part will be rated using the Five-Point Likert Scale, the following categories was utilized: Five (5) Outstanding, Four (4) Very Satisfactory, Three (3) Satisfactory, Two (2) Fairly Satisfactory, and One (1) Needs Improvement.

Validation of Instrument

The research instrument utilized in this study was validated using of validation procedures through expert validation.

The drafted survey questionnaire by the researcher was submitted to his adviser for expert validation focusing on the very content of the instrument. After which, the survey questionnaire was re-drafted by integrating all the suggestions provided by the researcher's adviser in preparation for the second validation procedure.

To ascertain the consistency of responses derived from the respondents and to determine the reliability and validity of the questionnaire, the coefficient

of correlation using Pearson-Product Moment Coefficient of Correlation (r) was employed. The result showed a high reliable result with r value at 0.885.

Upon attaining a valid and reliable instrument through expert validation, the instrument were administered to the main respondents of the study, the randomly selected automotive graduates of Northwest Samar State University, Calbayog City, during the school year 1994-1995 up to school year 2009-2010.

Sampling Procedure

The population of this study was composed of automotive graduates of Northwest Samar State University (NwSSU) from school year 1994 – 1995 to school year 2009 - 2010.

Considering the numbers of graduates assigned in NwSSU were 213 population sizes, the actual automotive graduate respondents of this study was 23.5% and resulted to 50, the researcher utilized the random sampling technique to be able to get the desired number of respondents.

Data Gathering Procedure

The data for this research were collected using a survey questionnaire. The following procedures were undertaken:

1. A letter was sent to the President of NwSSU and requested permission and secured the necessary data and information relevant to the study;

2. Upon the approval, the questionnaires were scheduled for distribution;

3. The names and address of the graduates of Northwest Samar State University Philippines from school year 1994 - 1995 to school year 2009 - 2010 was obtained from the registrar and the guidance counselor. Additional information as to whereabouts of the graduates was also taken from the Secretary of the Alumni Association and the job placement coordinator, and

4. After collecting the questionnaires, the answers were tabulated, analyzed, and interpreted.

Statistical Treatment of Data

The answers to the questions under the study were tabulated, analyzed and treated through the use of the Statistical Package for the Social Sciences (IBM SPSS version 21).

The following statistical treatment was used.

Frequency. It was the actual response to specific item/question in the questionnaire where the respondent ticks his choice.

Percentage. This was used as descriptive statistics or something that describes a part of the whole. To determine the data about the respondents' profile, frequency and percent was computed.

Weighted mean. This was used to get the average frequency of the responses in each weighted item.

The five-point Likert scale to determine the assessment of the respondent as to the following:

Total Quality Management

Scale	Numerical Value	Descriptive Value	
5	4.50 - 5.00	Outstanding	(O)
4	3.50 - 4.49	Very Satisfactory	(VS)
3	2.50 - 3.49	Satisfactory	(S)
2	1.50 - 2.49	Fairly Satisfactory	(FS)
1	1.00 - 1.49	Needs Improvement	(NI)

t-test. This was used to measure the significant relationship in the variables.

Pearson r correlation. This was conducted to test for significant relationship between TQM experiences of graduates in industry and their level of performance.

The ranges shown in the succeeding page guided the researcher in interpreting the computed r-value (Calmorin, 1994:256).

Ranges	Degree of Relationship
$\pm$1.00	Perfect Correlation
$\pm$0.71 to $\pm$0.99	High Relationship
$\pm$0.41 to $\pm$0.70	Marked or Moderate Correlation
$\pm$0.21 to $\pm$0.40	Low or Slight Correlation
$\pm$0.00 to $\pm$0.20	Negligible Correlation

The data was analyzed and interpreted through the use of the Statistical Package for the Social Sciences (IBM SPSS version 21).

Chapter 4

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

This chapter presents the findings of the study with the corresponding analysis and interpretation of data. Included herein are the following sub-topics: profile of the respondents; TQM industry experiences encountered of the respondents; level of performance of the respondents in industry; and relationship between TQM industry experiences and level of performance.

Profile of the Respondents

Tables 2 to 6 present the profile of the respondents in terms of their age, year graduated, TQM subject in automotive course, number of years in industry, number of trainings related to TQM, current position, and awards.

Age. Table 2 presents the age distribution of the automotive graduate respondents.

Table 2, presents the distribution of automotive graduate-respondents in terms of age obtained mean scores of 33.92 years old with a standard deviation of 3.23 years old. As shown in the Table 2, one of the respondent or 2.00 percent belongs to the age of 40 years old, three or 6.00.00 percent belongs to the age of 38 years old, six or 12.00 percent belongs to the age 37 years old, 12 or 24.00 percent belongs to the age 36 years old, four or 8.00.00 percent belongs to the age of 35, four or 8.00 percent belongs to the age 34 years old, four or 8.00 percent

belongs to the age 33 years old, four or 8.00.00 percent belongs to the age of 32 years old, four or 8.00 percent belongs to the age of 30 years old, three or 6.00.00 percent belongs to the age 31 and 29 years old, one or 2.00 percent belongs to the 28 years old and one or 2.00 percent belongs to the age of 24 years old.

Table 2

Age Distribution of the Automotive Graduate-Respondents

Age (in years)	f	Percent
40	1	2.00
38	3	6.00
37	6	12.00
36	12	24.00
35	4	8.00
34	4	8.00
33	4	8.00
32	4	8.00
31	3	6.00
30	4	8.00
29	3	6.00
28	1	2.00
24	1	2.00
Total	**50**	**100.00**
Mean	**33.92 yrs**	-
SD	**3.23 yrs**	-

It can be gleaned that most of the automotive graduate-respondents aged 36 years old.

School year graduated. Table 3 presents the school year of the automotive respondents graduated.

Table 3

School Year of the Automotive-Respondents Graduated

School Year	f	Percent
2009-2010	7	14.00
2008-2009	5	10.00
2007-2008	7	14.00
2006-2007	6	12.00
2004-2005	9	18.00
2003-2004	5	10.00
2002-2003	3	6.00
2001-2002	5	10.00
2000-2001	3	6.00
Total	**50**	**100**

Table 3, presents the automotive graduate - respondents in terms of school year graduated. As shown in the Table 3, seven or 14.00 percent belongs to 2009-2010 graduates, five or 10.00 percent belongs to 2008-2009 graduates, seven or 14.00 percent belongs to 2007-2008 graduates, six or 12.00 percent belongs to 2006-2007 graduates, nine or 18.00 percent belongs to 2004-2005 graduates, five or 10.00 percent belongs to 2003-2004 graduates, three or 6.00 percent belongs to 2002-2003 graduates, five or 10.00 percent belongs to 2001-2002 graduates, and three or 6.00 percent belongs to 2000-2001 graduates.

It can be gleaned that most of the automotive graduate-respondents graduated in 2004-2005.

TQM topics/contents in Automotive course. Table 4 illustrates the TQM subjects in automotive course earned by the respondents.

Table 4

TQM Topics/Contents in Automotive Course Earned by the Respondents

Year	F	Percent
Industrial Organization and Personnel Management	50	100.00
Fundamentals of Management	50	100.00
Project Management	50	100.00

Table 4, illustrates the TQM subjects in Automotive course earned by the respondents. In line of Industrial Organization and Personnel Management, 50 or 100.00 percent of the respondents earned this subject. For the Fundamentals of Management, 50 or 100.00 percent of the respondents earned this subject. And for Project Management, 50 or 100.00 percent of the respondents earned this subject.

It can be gleaned that all students earned TQM subjects in Automotive course. This means that TQM subjects played an important role to the curriculum of the students for them to learn the important skills needed for the management of the industry.

Number of years in industry. Table 5 presents the number of years in the industry of the respondents.

Table 5

Number of Years in the Industry of the Respondents

No. of Years	f	Percent
16	2	4.00
15	6	12.00
14	5	10.00
13	6	12.00
12	5	10.00
11	3	6.00
10	7	14.00
9	4	8.00
8	3	6.00
7	5	10.00
6	2	4.00
5	2	4.00
Total	**50**	**100.00**
Mean	**11.00 years**	**-**
SD	**3.10 years**	**-**

Table 5, presents the number of years in the industry of the respondents. Table 5 shows that out of 50 respondents, two or 4.00 percent of them have 16 years in service, six or 12.00 percent of them have 15 years in service, five or 10.00 percent of them have 14 years in service, six or 12.00 percent of them have 13 years in service, five or 10.00 percent of them have 12 years in service, three or 6.00 percent of them have 11 years in service, seven or 10.00 percent of them have 10 years in service, four or 8.00 percent of them have nine years in service, three or 6.00 percent of them have eight years in service, five or 10.00 percent of them have seven years in service, two or 4.00 percent of them have six years in service, and two or 4.00 percent of them have five years in service.

It can be gleaned from the study that most of the respondents have 10 years in service in the industry.

Number of trainings related to TQM. Table 6 illustrates the number of trainings related to TQM by the respondents.

Training attended by the respondents are the following:

1. 5S of Good Housekeeping
2. Advance Trainer's Training
3. Advance Sales Techniques Handling Objections
4. Automotive Functional Safety Training
5. Automotive Management Training
6. Automotive Service Repair Segment
7. Compliance and Ethics Training
8. Customer Service Program
9. Leadership and Management Development
10. Live In-Dealership Automotive Sales Training
11. Management Series – Sales Team/Team Leader Concept
12. Professional Salesperson Training
13. Stress and Time Management Workshop
14. Team Coaching

Table 6

Number of Trainings Related to TQM by the Respondents

No. of trainings	f	Percent
8	1	5.00
6	1	5.00
4	2	10.00
3	3	15.00
2	5	25.00
1	8	40.00
Not Specified	(30)	-
Total	**20**	**100.00**
Mean	**2 trainings**	-
SD	**2 trainings**	-

Table 6, illustrates the number of trainings related to TQM being attended by the respondents. The Table illustrates that one or 5.00 percent of the respondents have attended eight trainings, one or 5.00 percent of the respondents have attended six trainings, two or 10.00 percent of the respondents have attended four trainings, three or 15.00 percent of the respondents have attended three trainings, five or 25.00 percent of the respondents have attended two trainings, and eight or 40.00 percent of the respondents have attended one training.

It can be gleaned that majority of the respondents have attended one training in the industry. This means that training is important for the employees to gain knowledge and skills needed for the job.

Current position. Table 7 reveals the current position of the automotive graduate respondents.

Table 7

Current Position of the Automotive Graduate-Respondents

Current Position	f	Percent
Welder	1	2.04
Tool Custodian	2	4.08
Technician/Trainer	1	2.04
Technician/Driver	1	2.04
Technician	22	44.90
Sr. Technician	5	10.20
Parts Back Center Man	1	2.04
Mechanic	1	2.04
Junior Technician	3	6.12
Junior Mechanic	2	4.08
Checker	1	2.04
Auto Mechanic	7	14.29
Auto Electrician	2	4.08
Not Specified	(1)	-
Total	**49**	**100.00**

As shown in Table 7, it shows that one or 2.04 percent has a current position of a welder, two or 4.08 percent as tool custodian, one or 2.04 percent as a technician/trainer, one or 2.04 percent as a technician and driver, 22 or 44.90 percent are technician, five or 10.20 percent as sr. technician, one or 2.04 percent as parts back center man, one or 2.04 percent as mechanic, three or 6.12 percent

as junior technician, two or 4.08 percent as junior mechanic, one or 2.04 percent as checker, seven or 14, 29.00 percent as auto mechanic, and two or 4.08 percent has a current position of auto electrician.

As revealed by the data, majority of the current position is technician.

TQM Industry Experiences Encountered by the Respondents

Tables 8 to 15 reflect the TQM industry experiences encountered by the respondents in terms of customer focus, leadership, people involvement, process approach, systematic approach to management, continual involvement, factual approach to decision making, and mutually beneficial supplier relations.

Customer focus. Table 8 presents the customer focus of the respondents.

As presented in Table 8, in this study, the respondents have "satisfactory" experienced TQM in the industry with an obtained grand mean score of 3.29. A scrutiny of the means found in the same table reveals that the respondents obtained the highest mean score of 3.78 which means very "very satisfactory" in the indicator "Friendliness/courteousness of employees towards the customer." This was followed by the indicator "safety/risk of service" obtained the mean of 3.53 which means "very satisfactory." While they obtained the lowest mean score of 2.78 which means "satisfactory" in the indicator "billing or invoicing procedure is observed.

Table 8

TQM Industry Experiences Encountered by the Respondents in Terms of Customer Focus

Indicators	Weighted Mean	Inter-pretation
1. Friendliness/courteousness of employees towards the customer	3.78	VS
2. Responsiveness to request	3.16	S
3. Approachability of the service provider	2.98	S
4. Willingness to listen to customer	3.46	S
5. Honesty and ability to communicate in clear language	3.33	S
6. Billing/invoicing procedure is observed	2.78	S
7. Safety/risk of service	3.53	VS
Grand Total	**23.02**	
Grand Mean	**3.29**	**S**

The result implied that the respondents in this study experienced TQM in terms of customer focus this implies that the respondents are customer oriented.

Leadership. Table 9 presents the respondents experienced TQM in the industry in terms of leadership.

Table 9

TQM Industry Experiences Encountered by the Respondents in Terms of Leadership

Indicators	Weighted Mean	Inter-pretation
1. Maintain an environment that fosters employee responsibility	2.70	S
2. He/she fully grasp and proactive reactor to the external environment	2.56	S
3. Perform due diligence when researching the market in which they are competing	2.80	S
4. Unifies his/her subordinates	2.86	S
5. Encourages human relations	2.67	S
6. Controls stress level	2.84	S
7. Makes confident decisions on corrective actions when necessary	2.90	S
Grand Total	**19.33**	
Grand Mean	**2.76**	**S**

As presented in Table 9, the respondents experienced TQM in the industry in terms of leadership obtained the highest grand mean score of 2.76, interpreted as "satisfactory." The indicator "makes confident decisions on corrective actions when necessary" (2.98, rank =1), interpreted as "satisfactory." "Unifies his/her subordinates" (2.86, rank = 2), interpreted as "satisfactory". "Control stress levels" (2.84, rank=3), interpreted as "satisfactory." "Perform due diligence when researching the market in which they are competing" (2.80, rank=4), interpreted

as "satisfactory." "Maintain an environment that fosters employee responsibility" (2.70, rank=5), interpreted as "satisfactory." "Encourages human relations" (2.67, rank=6), interpreted as "satisfactory." While "he/she fully grasp and proactive reactor to the external environment" (2.56, rank=7), interpreted as satisfactory.

The results mean that the respondents experienced TQM in industry in terms of leadership because they possessed the leadership styles necessary for leading the organization.

People involvement. Table 10 revealed the respondents experienced TQM industry in terms of people involvement.

As revealed in Table 10, the respondents experienced TQM industry in terms of people involvement obtained the highest grand mean score of 2.88, interpreted as "satisfactory." The following TQM industry experienced by the respondents in terms of people involvement are the following: "Respond quickly to suggestions within specified period of time" (3.32, rank=1), as interpreted as "satisfactory." "Regularly asking the employees for suggestions" (3.18, rank=2), interpreted as "satisfactory." "Empowering members in an organizations to make decisions and to solve problems appropriate to their levels in the organization" (3.02, rank=3), interpreted as "satisfactory." "Simplify the process so it is easy to participate" (2.98, rank=4), interpreted as "satisfactory." "Remove fear by focusing on the process and not on the person" (2.73, rank=5) interpreted as "satisfactory." While "get involved on the training process" and "reward the

idea with published recognition so that everyone knows the value of contribution" obtained the lowest score (2.47), interpreted as "fairly satisfactory."

Table 10

TQM Industry Experiences Encountered by the Respondents in Terms of People Involvement

Indicators	Weighted Mean	Inter-pretation
1. Empowering members of an organization to make decisions and to solve problems appropriate to their levels in the organization	3.02	S
2. Simplify the process so it is easy to participate	2.98	S
3. Respond quickly to suggestions and within specified period of time	3.32	S
4. Reward the idea with published recognition so that everyone knows the value of contribution	2.47	S
5. Regularly asking the employees for suggestions	3.18	S
6. Get involved on the training process	2.47	FS
7. Remove fear by focusing on the process and not on the person	2.73	S
Grand Total	**20.17**	
Grand Mean	**2.88**	**S**

The results implied that respondents experienced TQM industry in terms of people involvement because they believed this is necessary to be competent to continually improve their effectiveness, and the organization should establish,

document, implement and maintain processes for competence acquisition and people involvement.

Process approach. Table 11 revealed the TQM industry experienced by the respondents in terms of process approach.

As presented in Table 11, the TQM industry experienced by the respondents in terms of process approach obtained the highest grand mean score of 2.97, interpreted as "satisfactory." The following indicators are: "Identify process improvement opportunities" (3.20, rank=1), interpreted as "satisfactory". "Forming the process management team, which includes representatives from each major part of the process" (3.10, rank=2), interpreted as "satisfactory." "Translate customer needs and requirements into measures of process performance" (3.08, rank=3), interpreted as "satisfactory." "Establish quality improvement teams to pursue specific improvement opportunities" (2.94, rank=4), interpreted as "satisfactory." "Carefully define the process so everyone working within the process has a shared understanding of how it operates" (2.92, rank=5), interpreted as "satisfactory." "Ensuring all aspects of process management and improvement are performed like creating documentation, tracking performance, and securing and allocating resources" (2.80, rank=6), interpreted as "satisfactory." While "establishing process performance measures that adequately characterize the efficiency and effectiveness of the process in meeting the needs of all customers and other interested parties" (2.74, rank=7), interpreted as "satisfactory."

Table 11

TQM Industry Experiences Encountered by the Respondents in Terms of Process Approach

Indicators	Weighted Mean	Inter-pretation
1. Identify process improvement opportunities	3.20	S
2. Establish quality improvement teams to pursue specific improvement opportunities	2.94	S
3. Translate costumer needs and requirements into measures of process performance	3.08	S
4. Carefully define the process so everyone working within the process has a shared understanding of how it operates	2.92	S
5. Ensuring all aspects of process management and improvement are performed like creating documentation, tracking performance, and securing and allocating resources	2.80	S
6. Establishing process performance measures that adequately characterize the efficiency and effectiveness of the process in meeting the needs of all customers and other interested parties	2.74	S
7. Forming the process management team, which includes representatives from each major part of the process	3.10	S
Grand Total	**20.78**	
Grand Mean	**2.97**	**S**

The results mean that the respondents aim to seek satisfaction of people's needs: consumers through quality, employees through human growth, shareholders through productivity and the community through social contribution.

Systematic approach to management. Table 12 reveals the respondents experienced TQM industry in terms of systematic approach to management.

Table 12

TQM Industry Experiences Encountered by the Respondents in Terms of Systematic Approach to Management

Indicators	Weighted Mean	Inter-pretation
1. Roles and responsibility is clearly defined	3.52	VS
2. Every activity or tasks being done in the organization have an input and output, whether tangible or intangible	2.74	S
3. It has predictable outputs	2.60	S
4. Decision-making processes end with concrete objectives and a clear phased plan so that the intended objectives can be realized	2.78	S
5. Break down barriers between departments	2.68	S
6. Remove barriers to pride of workmanship	2.50	FS
7. Management and workforce must work Together	3.28	S
Grand Total	**20.10**	
Grand Mean	**2.87**	**S**

As revealed by the data presented in Table 12, the respondents experienced TQM industry in terms of systematic approach to management obtained the highest grand mean score of 2.87, interpreted as "satisfactory." The following indicators are: "Roles and responsibilities is clearly defined" (3.52, rank=1), interpreted as "very satisfactory." "Management and workforce must

work together" (3.26 rank=2), interpreted as "satisfactory." "Decision-making processes end with concrete objectives and a clear phased plan so that the intended objectives can be realized" (2.78, rank=3), interpreted as "satisfactory." "Every activity or tasks being done in the organization have an input and output, whether tangible or intangible" (2.74, rank=4), interpreted as "satisfactory." "Break down barriers between departments" (2.68, rank=5), interpreted as "satisfactory." "It has predictable outputs" (2.60, rank=6), interpreted as "satisfactory." While, "remove barriers to pride of workmanship" (2.50, rank=7).

The results imply that the respondents understand fully the operation of an entity, the entity viewed as a system and this requires understanding the interdependence of its parts.

Continual involvement. Table 13 revealed that the respondents experienced TQM industry in terms of continual involvement.

As presented in Table 13, the respondents experienced TQM industry in terms of continual involvement to management obtained the highest grand mean score of 2.90, interpreted as "satisfactory." The indicators are the following: "Build work teams and employee involvement" (3.50, rank=1), interpreted as "satisfactory." "Utilize problem-solving techniques within work teams" (3.32, rank=2), interpreted as "satisfactory." "Provides support and guidance to employees" (2.91, rank=3), interpreted as "satisfactory." "Train employees in the methods of statistical process control (SPC) and other tools for improvement quality" (2.76, rank=4), interpreted as "satisfactory." "Make SPC methods a

normal aspect of daily operations" and "develop a sense of operator ownership of the process" (2.72, rank=5), interpreted as "satisfactory." "Involving employees in Total Quality Management" (2.38, rank=6), interpreted as "fairly satisfactory."

Table 13

TQM Industry Experiences Encountered by the Respondents in Terms of Continual Involvement

Indicators	Weighted Mean	Inter-pretation
1. Train employees in the methods of statistical process control (SPC) and other tools for improvement quality	2.76	S
2. Make SPC methods a normal aspects of daily operations	2.72	S
3. Build work teams and employee involvement	3.50	S
4. Utilize problem-solving techniques within work teams	3.32	S
5. Develop a sense of operator ownership of the process	2.72	S
6. Involving employees in Total Quality management	2.38	FS
7. Provides support and guidance to Employees	2.91	S
Grand Total	**20.31**	
Grand Mean	**2.90**	**S**

The results implied that the bases of the continuous involvement are the beliefs that virtually any aspect of an operation can be improved and that the

people most closely associated with an operation are in the best position to identify the changes that should be made.

Consequently, employee involvement plays a big role in continuous improvement programs.

Factual approach to decision making. Table 14 revealed the respondents experienced TQM industry in terms of factual approach to decision making.

Table 14

TQM Industry Experiences Encountered by the Respondents in Terms of Factual Approach to Decision Making

Indicators	Weighted Mean	Inter-pretation
1. Informative decisions are made	3.00	S
2. Employees have confidence in the decision	3.21	S
3. Effective decisions are based on the analysis of data and information	3.10	S
4. Fact (data) is based on decision making to ensure customer satisfaction and overall improvement in the organizational performance	2.80	S
5. Organization generate right quality and quantity of data at right place	2.80	S
6. The management encourages an origination to do quantitative or statistical analysis based on data before making any conclusion or decision at any level within the organization	2.84	S
7. Information in the form of quantitative data if used as a raw material or as an input of decision making process	2.82	S
Grand Total	**20.57**	
Grand Mean	**2.94**	**S**

As reflected in Table 14, the respondents experienced TQM industry in terms of factual approach to decision-making obtained the highest grand mean score of 2.94, interpreted as "satisfactory." The indicators are the following: "Employees have confidence in the decision-making" (3.21, rank=1), interpreted as "satisfactory." "Effective decisions are based on the analysis of data and information" (3.10, rank=2), interpreted as "satisfactory." "Informative decisions are made" (3.00, rank=3), interpreted as "satisfactory." "The management encourages an origination to do quantitative or statistical analysis based on data before making any conclusion or decision at any level within the organization" (2.84, rank=4), interpreted as "satisfactory." "Information in the form of quantitative data if used as a raw material or as an input of decision making process" (2.82, rank=5), interpreted as "satisfactory." While, "fact (data)is based on decision making to ensure customer satisfaction and overall improvement in the organizational performance" and "organization generate right quality and quantity of data at right place" (2.80, rank=6), interpreted as "satisfactory."

The results mean that the effective decisions are based on the analysis of data and information. It is very important for an organization to generate right quality and quantity of data at right place (i.e. measurement system should be implemented).

Mutually beneficial supplier relations. Table 15 reveals the respondents experienced TQM industry in terms of mutually beneficial supplier relations.

Table 15

TQM Industry Experiences Encountered by the Respondents in Terms of Mutually Beneficial Supplier Relations

Indicators	Weighted Mean	Inter-pretation
1. Recognition from the supplier	2.74	S
2. There is an improve quality of service or raw material from the supplier	2.90	S
3. There is an transparent communication	2.90	S
4. There is always a cordial/favorable or win-win relationship between the organization and the supplier	2.90	S
5. Organizations trains and meets with the suppliers to make them understand their requirements	2.84	S
6. Get suppliers involved in the early stages of research, development, and design	2.26	FS
7. Long-term commitment to TQM and to the partnering relationship between the parties	2.44	FS
Grand Total	**18.98**	
Grand Mean	**2.71**	**S**

As revealed by the data presented in Table 15, the respondents experienced TQM industry in terms of mutually beneficial supplier relations obtained the highest grand mean score of 2.71, interpreted as "satisfactory." The indicators are the following: "There is an improved quality of service or raw material from the supplier", "there is a transparent communication", and "there is always a cordial/favorable or win-win relationship between the organization and the supplier" (2.90, rank=1), interpreted as "satisfactory." "Organization

trains and meets with the suppliers to make them understand their requirements" (2.84, rank=2), interpreted as "satisfactory." "Recognition from the supplier" (2.74, rank=3), interpreted as "satisfactory." While, "long-term commitment to TQM and to the partnering relationship between the parties" (2.44, rank=5), interpreted as "fairly satisfactory" and "get suppliers involved in the early stages of research, development, and design" (2.26, rank=5) interpreted as "fairly satisfactory."

The results mean that an organization and its suppliers are interdependent and a mutually beneficial relationship enhances the ability of both to create value.

Level of Performance of the Respondents in the Industry

As shown in Table 16, the level of performance of the respondents in the industry. The competency indicators are the following: "Teamwork" (3.59, rank=1), interpreted as "very satisfactory", "strategic planning" (3.33, rank=2), interpreted as "satisfactory", "quality improvement" (3.26, rank=3), interpreted as "satisfactory", "problem solving" (3.18, rank=4), interpreted as "satisfactory", "service focus" (2.93, rank=5), interpreted as "satisfactory", "stewardship and managing resources" (2.67, rank=6), interpreted as "satisfactory", "decision making" (2.62, rank=7), interpreted as "satisfactory", "principles of community" (2.54, rank=8), interpreted as "satisfactory", "leadership" (2.40, rank=9),

interpreted as "fairly satisfactory". While, "communication" (2.08, rank=10), interpreted as "fairly satisfactory."

Table 16

Level of Performance of the Respondents in the Industry

Competency Indicator	Weighted Mean	Inter-pretation
1. Communication	2.08	FS
2. Decision making	2.62	S
3. Leadership	2.40	FS
4. Principles of community	2.54	S
5. Problem solving	3.18	S
6. Quality improvement	3.26	S
7. Service focus	2.93	S
8. Stewardship and managing resources	2.67	S
9. Strategic planning	3.33	S
10. Teamwork	3.59	VS
Grand Total	**28.60**	
Grand Mean	**2.86**	**S**

It can be deduced from the table that the grand total mean of the level of performance of the respondents in the industry is 2.86 which means "satisfactory."

It further shows that the level of performance of the respondents confines of the TQM.

Relationship Between TQM Industry Experiences and Level of Performance

As shown in the Table 17, it shows the relationship between TQM industry experiences and level of performance was strongly significant at the 0.01 level. It further shown in the table that the area of TQM industry which had the highest relationship was the process approach got .781. Followed by factual approach to decision making got .773. Next, was the systematic approach to management got .764. Then, people involvement got .691. Continual involvement got .683. Mutually beneficial suppler relations got .678. While, the customer focus got .632 and leadership got .604.

Table 17

Relationship Between TQM Industry Experiences and Level of Performance

Areas of TQM Industry	Performance
Customer Focus	.632(**)
Leadership	.604(**)
People Involvement	.691(**)
Process Approach	.781(**)
Systematic Approach to Management	.764(**)
Continual Involvement	.683(**)
Factual Approach to Decision Making	.773(**)
Mutually Beneficial Supplier Relations	.678(**)

**Correlation is significant at the 0.01 level (2-tailed).

It implies that there is a significant relationship between TQM industry experiences and level of performance.

Implications

As revealed by the results of this study, the automotive industry should strictly observe and practice the principles of Total Quality Management to further enhance the efficacy of the management. Likewise, the Northwest Samar State University (NwSSU) must modify their curriculum in BS in Industrial Technology. The curriculum developer must include more subjects that confines with TQM so that the knowledge will instill in the minds of the students and this knowledge could be applied in their future endeavor.

Chapter 5

SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

This chapter presents the summary of findings with the corresponding conclusions drawn and recommendations from the drawn conclusions from the findings of the study.

Summary of Findings

The salient findings of the study are the following:

1. On the profile of the respondents in terms of age, year graduated, TQM subject in automotive course, number of years in industry, number of trainings related to TQM, current position.

Majority of automotive graduates or 24.00 percent were 36 years old, nine or 18.00 percent graduated in 2005, 50 or 100.00 percent of graduates earned automotive course, seven or 14.00 percent of the respondents have 10 years in service in the industry. Majority of the respondents have attended 1training. Majority were technician, who were composed 22 or 44.00 percent of the automotive graduates.

2. On TQM experiences encountered of the respondents in terms of:

2.1 costumer focus

The automotive graduates have "satisfactory" experienced in TQM of the industry with an obtained grand mean score of 3.29.

2.2 leadership

The automotive graduates experienced TQM in the industry in terms of leadership obtained the highest grand mean score of 2.76, interpreted as satisfactory.

2.3 people involvement

The automotive graduates experienced TQM industry in terms of people involvement obtained the highest grand mean score of 2.88, interpreted as satisfactory.

2.4 continual involvement

The automotive graduates experienced TQM industry in terms of continual involvement to management obtained the highest grand mean score of 2.90, interpreted as satisfactory.

2.5 supplier involvement

The automotive graduates experienced TQM industry in terms of mutually beneficial supplier relations obtained the highest grand mean score of 2.71, interpreted as satisfactory.

3. On the level of performance of the respondents in industry. The relationship between TQM industry experiences and level of performance was strongly significant at the 0.01 level.

4. On the significant relationship between TQM experiences of graduates in industry and their level of performance. There is significant relationship between TQM industry experiences and level of performance.

Conclusions

In view of the foregoing findings, the following conclusions were drawn:

1. The automotive graduates are predominantly 36 years old, graduated in 2005, earned automotive course, 10 years in service in the industry.

2. From the assessment on TQM industry experiences encountered of the respondents are satisfactory particularly on costumer focus, leadership, people involvement, process approach, systematic approach to management, continual involvement, factual approach to decision making, and mutually beneficial supplier relations.

3. The relationship between TQM industry experiences and level of performance was strongly significant.

4. There a significant relationship between TQM industry experiences and level of performance.

Recommendations

Based on the above findings and conclusions, these recommendations were forwarded by the researcher:

1. Conduct training for employees focused on enhancing their competence and management skills to develop their duties and professional development.

2. Automotive industry should strictly maintain and observe the total quality management to further strengthen employees' commitment to serve and

remain serving the people as their clients.

3. Continuous encouragement of employees' involvement in industry's should be observed to maintain the highest level performance.

4. Formulate designated program to engage in continuing professional and skill development activities relevant to their needs based on TQM principles.

5. Total quality management subjects should be added more to the curriculum of the course and to give more emphasis on the intended learning outcomes the graduates may acquire for them to be prepared for their future job requirements in the industry.

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APPENDICES

Appendix A

LETTER REQUEST FOR APPROVAL OF RESEARCH TITLE

Republic of the Philippines
SAMAR STATE UNIVERSITY
COLLEGE OF GRADUATE STUDIES
Catbalogan City, Samar

October 21, 2017

DR. FELISA E. GOMBA
Acting Dean, College of Graduate Studies
This University
Catbalogan City, Samar

Sir/Madam:

I have the honor to submit the following titles for my thesis proposal, preferably number one:

1. Total Quality Management Practices, Competence, and Performance of the Department Heads of Industrial Technology Department of the Selected State Universities and Colleges in Samar: Basis for an Intervention Program

2. Employability and Productivity of the Graduates of Bachelor of Science in Industrial Technology of the Northwest Samar State University: An Assessment

3. Stress and Teaching Performance of Industrial Technology Faculty of Samar: Basis for a Proposed Stress Management Program

Anticipating for your favourable actions on this matter.

Respectfully yours,

(Sgd.) FERNANDO A. GARIANDO
Researcher

Appendix B

LETTER REQUEST FOR ASSIGNMENT OF ADVISER

Republic of the Philippines
SAMAR STATE UNIVERSITY
COLLEGE OF GRADUATE STUDIES
Catbalogan City, Samar

October 23, 2017

DR. PONCIANO P. MACAPAÑAS
Dean, College of Industrial Technology
This University
Catbalogan City, Samar

Sir/Madam:

Please be informed that you have been designated of MR. FERNANDO A. GARIANDO candidate for the degree Master in Technician Education (MTE) major in Automotive who proposes to write a thesis entitled "Total Quality Management Practices, Competence, and Performance of the Department Heads of Industrial Technology Department of the Selected State Universities and Colleges in Samar: Basis for an Intervention Program".

Thank you for your cooperation.

Very truly yours,

(Sgd.) FELISA E. GOMBA, Ph.D.
Acting Dean, College of Graduates Studies

CONFORME:

(Sgd.) PONCIANO P. MACAPAÑAS, Ph.D.
Adviser

Appendix C

LETTER FOR THE AUTOMOTIVE GRADUATE-RESPONDENTS

Republic of the Philippines
Commission on Higher Education
Region VIII
SAMAR STATE UNIVERSITY
COLLEGE OF GRADUATE STUDIES
Catbalogan City, Samar

Date: _____

Dear Respondents:

Good day!

The undersigned is a student of the Master in Technician Education (MTE), Major in Automotive. As part of the requirements for graduation from the said degree, he is conducting a study entitled, "TOTAL QUALITY MANAGEMENT INDUSTRY EXPERIENCES OF AUTOMOTIVE GRADUATES OF NORTHWEST SAMAR STATE UNIVERSITY PHILIPPINES".

In this regard, the undersigned would like to ask favor from you to provide information relative to you and your choice of a career in the attached survey questionnaire especially designed for the purpose. Rest assured that your responses will be treated with the utmost confidentiality.

Thank you very much and God bless.

Respectfully yours,

(Sgd.) FERNANDO A. GARIANDO
Researcher

Appendix D

SURVEY QUESTIONNAIRE FOR THE RESPONDENTS

Part I. Profile of the Respondents

Directions: Please answer each item. Rest assured that your answers will be treated with utmost confidentiality.

A. Name (Optional) _____
Age _____ Year Graduated _____
TQM Subject in Automotive Course _____
Number of Years in Industry _____
Number of Trainings Related to TQM_____
Current Position _____
Awards _____

Part II. TQM Industry Experiences Encountered of the Respondents in Work

Directions: Please assess the total quality management industry experiences encountered of the respondents in work in terms of costumer focus, leadership, people involvement, process approach, systematic approach to management, continual involvement, factual approach to decision making, and mutually beneficial supplier relations using the numerical and descriptive ratings below. Please check your corresponding response.

SCALE	DESCRIPTION
5	**Outstanding**
4	**Very Satisfactory**
3	**Satisfactory**
2	**Fairly Satisfactory**
1	**Needs Improvement**

Customer Focus	5	4	3	2	1
1. Friendliness/courteousness of employees towards the costumer					
2.Responsiveness to requests					
3. Approachability of the service provider					

Customer Focus	5	4	3	2	1
4. Willingness to listen to customer					
5. Honesty and an ability to communicate in clear language					
6. Billing/invoicing procedure is observed					
7. Safety/risk of service					
Leadership	5	4	3	2	1
1. Maintain an environment that fosters employee responsibility					
2. He/she fully grasp and proactive reactor to the external environment					
3. Perform due diligence when researching the market in which they are competing					
4. Unifies his/her subordinates					
5. Encourages human relations					
6.Controls stress level					
7. Makes confident decisions on corrective actions when necessary					
People Involvement	5	4	3	2	1
1. Empowering members of an organization to make decisions and to solve problems appropriate to their levels in the organization					
2. Simplify the process so it is easy to participate					
3. Respond Quickly to suggestions and within specified period of time					
4. Reward the idea with published recognition so that everyone knows the value of contribution					
5. Regularly asking the employees for suggestions					
6.Get involved on the training process					
7. Remove fear by focusing on the process and not on the person					
Process Approach	5	4	3	2	1
1. Identify process improvement opportunities					
2. Establish quality improvement teams to pursue specific improvement opportunities.					
3. Translate customer needs and requirements into measures of process performance.					
4. Carefully define the process so everyone working within the process has a shared understanding of how it operates					

Customer Focus	5	4	3	2	1
5. Ensuring all aspects of process management and improvement are performed like creating documentation, tracking performance, and securing and allocating resources					
6. Establishing process performance measures that adequately characterize the efficiency and effectiveness of the process in meeting the needs of all customers and other interested parties					
7. Forming the process management team, which includes representatives from each major part of the process					
Systematic Approach to Management	5	4	3	2	1
1. Roles and Responsibilities is clearly defined					
2. Every activity or tasks being done in the organization have an input and output, whether tangible or intangible					
3. It has predictable outputs					
4. Decision-making processes end with concrete objectives and a clear phased plan so that the intended objectives can be realized.					
5. Break down barriers between departments					
6. Remove barriers to pride of workmanship					
7. Management and workforce must work together					
Continual Involvement	5	4	3	2	1
1. Train employees in the methods of statistical process control (SPC) and other tools for improvement quality					
2. Make SPC methods a normal aspect of daily operations					
3. Build work teams and employee involvement					
4. Utilize problem-solving techniques within work teams					
5. Develop a sense of operator ownership of the process					
6. Involving employees in Total Quality Management					
7. Provides support and guidance to employees					
Factual Approach to Decision Making	5	4	3	2	1
1. Informative decisions are made					
2. Employees have confidence in the decision					
3. Effective decisions are based on the analysis of data and information					

Customer Focus	5	4	3	2	1
4. Fact (data)is based on decision making to ensure customer satisfaction and overall improvement in the organizational performance					
5. Organization generate right quality and quantity of data at right place					
6. The management encourages an origination to do quantitative or statistical analysis based on data before making any conclusion or decision at any level within the organization					
7. Information in the form of quantitative data if used as a raw material or as an input of decision making process					
Mutually Beneficial Supplier Relations	5	4	3	2	1
1. Recognition from the supplier 2. There is an improved quality of service or raw material from the supplier					
3. There is a transparent communication					
4. There is always a cordial/favorable or win-win relationship between the organization and the supplier					
5. Organization trains and meets with the suppliers to make them understand their requirements					
6. Get suppliers involved in the early stages of research, development, and design					
7. Long-term commitment to TQM and to the partnering relationship between the parties					

Part III. Employees' Level of Performance in Industry

Directions: Please assess the total quality management practices in the industry using the numerical and descriptive ratings below. Please check your corresponding response.

SCALE	DESCRIPTION
5	**Outstanding**
4	**Very Satisfactory**
3	**Satisfactory**
2	**Fairly Satisfactory**
1	**Needs Improvement**

Competency Indicators	5	4	3	2	1
1. Communication					
2. Decision Making					
3. Leadership					
4. Principles of Community					
5. Problem Solving					
6. Quality Improvement					
7. Service Focus					
8. Stewardship and Managing Resources					
9. Strategic Planning					
10. Teamwork					

Appendix E

LETTER FOR VALIDATION OF INSTRUMENT

Republic of the Philippines
NORTHWEST SAMAR STATE UNIVERSITY
Rueda Street, Calbayog City

December 22, 2017

Fritz N. Turla
Service Manager
Toyota Calbayog Branch
Brgy. Bagacay, Calbayog City

Sir:

Good day!

I have the honor ask permission from your good office to administer the attached survey questionnaire on December 27-29, 2017 to the BSIT Automotive Graduates of Northwest Samar State University for validation purposes.

This request is made in connection with the study I am undertaking entitled **"TOTAL QUALITY MANAGEMENT INDUSTRY EXPERIENCES OF AUTOMOTIVE GRADUATES OF NORTHWEST SAMAR STATE UNIVERSITY"**, in partial fulfillment of the requirements for the degree in Master in Technician Education, major in Automotive at Samar State University, Catbalogan City.

Anticipating for your favorable actions in this request.

Very truly yours,

(Sgd.) FERNANDO A. GARIANDO
Researcher

Approved by:

(Sgd.)FRITZ N. TURLA
Service Manager

Appendix F

LETTER OF REQUEST FROM THE NWSSU REGISTRAR TO COLLECT THE DATA

Republic of the Philippines
NORTHWEST SAMAR STATE UNIVERSITY
Rueda Street, Calbayog City

December 18, 2017

Engr. Ryan Emil T. Zosa IV
University Registrar
NwSSU, Main Campus
Calbayog City

Sir:

I am presently conducting a study for my master's thesis titled **"Total Quality Management Industry Experiences of Automotive Graduates of Northwest Samar State University Philippines"** in partial fulfillment of the requirements for the degree in Master in Technician Education, major in Automotive at Samar State University, Catbalogan City.

In this connection, I would like to request permission from your good office to allow me to request and to receive the list of graduates from SY 1994-1995 up to SY 2009-2010 so that I could administer my research instrument among the graduates of Northwest Samar State University (NwSSU).

Rest assured that the data gathered in this study will be used only for research purposes.

Your favorable approval on this request is highly solicited.

Very truly yours,

(Sgd.) FERNANDO A. GARIANDO
Researcher

Approved by:

(Sgd.) ENGR. RYAN EMIL T. ZOSA IV
University Registrar

CURRICULUM VITAE

CURRICULUM VITAE

PERSONAL DATA:

Name: Fernando A. Gariando

Date of Birth: December 12, 1985

Place of Birth: Calbayog City

Civil Status: Single

Citizenship: Filipino

Father: Gonzalo L. Gariando

Mother: Phiebe A. Gariando

EDUCATIONAL BACKGROUND:

Graduate Studies:

Samar State University
Catbalogan City, Philippines
April 2013 - March 2018
Master in Technician Education
Major in Automotive

Eulogio "Amang" Rodriguez Institute of Science and Technology
GMA, Cavite, Philippines
April 2011 - March 2013
Master in Business Administration

Tertiary:

Northwest Samar State University
Calbayog City, Philippines
June 2003 - March 2010
Bachelor of Science in Industrial Technology
Major in Automotive

Secondary:	San Isidro National High School San Isidro, Northern Samar, Philippines June 1999 – March 2003
	Secondary Laboratory School Tiburcio Tancinco Memorial Institute of Science and Technology Calbayog City, Philippines June 1998 – March 1999
Primary:	San Isidro Central Elementary School San Isidro, Northern Samar, Philippines June 1997 – March 1998
	Calbayog Pilot Central Elementary School Calbayog City, Philippines June 1992 – March 1997
Kinder:	Brgy. Rawis Day Care Center Brgy. Rawis, Calbayog City, Philippines June 1991 - 1992

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