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Impact on Social Sciences, Humanities, and Business
(TSSHB)**

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Proceedings of the International conference on Technology and its Impact on Social Sciences, Humanities, and Business (TSSHB)

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CONFERENCE CHAIR MESSAGE

Dr. Shahid Mehmood

Knowledge Hub Connect} is a platform that thrives to support the worldwide scholarly community to analyze the role played by the multidisciplinary innovations for the betterment of human societies. It also encourages academicians, practitioners, scientists, and scholars from various disciplines to come together and share their ideas about how they can make all the disciplines interact in an innovative way and to sort out the way to minimize the effect of challenges faced by the society. All the research work presented in this conference is truly exceptional, promising, and effective. These researches are designed to target the challenges that are faced by various sub-domains of the social sciences and applied sciences.

I would like to thank our honorable scientific and review committee for giving their precious time to the review process covering the papers presented in this conference. I am also highly obliged to the participants for being a part of our efforts to promote knowledge sharing and learning. We as scholars make an integral part of the leading educated class of the society that is responsible for benefitting the society with their knowledge. Let's get over all sorts of discrimination and take a look at the wider picture. Let's work together for the welfare of humanity for making the world a harmonious place to live and making it flourish in every aspect. Stay blessed.

Thank you.

Dr. Shahid Mehmood

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The Quality Management about Process of Electronic Parts Manufacturing: The case study of XYZ Co., Ltd.

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Abstract From the study of this research had following objectives, (1) In order to study the process of electronic parts manufacturing. (2) In order to study the method to improve quality of electronic parts by use PDCA and 5 s Activity. XYZ Co., Ltd. was the company manufacturing of electronic parts. The researcher had used the form qualitative research was applied in conducting the research. The population to be used in the study were the head of the manufacturing department and related staffs. This had done the study to gather the information from documents, related researches, websites and doing the interview in order to bring the information to use in analyzing of the process of electronic parts manufacturing in order to adjust to have more efficiency. Main process of electronic parts manufacturing were as follows; 1) Issue of electronic parts materials from the store 2) Drilling, Determining the working position of work pieces 3) Bonding of work electronic pieces 4) Baking of work pieces with the glue tightly and had no dust 5) Washing, this had to wash work pieces and this mightn't let work pieces to attach with the dust or the glue 6) Magnetize to press the magnetic field in work pieces 7) Assembling work pieces 8) Packaging, before this had done the packaging, this might have to inspect the product condition not to be defected or damaged 9) Finished work pieces, prepared to delivery. It was result from the research of XYZ Co., Ltd. that the company had rapid the process of electronic parts manufacturing that would help the manufacturing department to have the time in manufacturing products more. And study the Quality Management about process of electronic parts manufacturing by PDCA cover since the receiving of orders from customers, the disbursement of manufacturing equipment, the working systematization including delivering of products to customers. And the company had the controlling of the manufacturing process of electronic parts by focusing on quality and rapidly. And XYZ Co., Ltd use 5s activities to clean the equipment after operation finish to reducing of the dust problem that had an effect on work pieces.

Keywords: Quality Management, Efficiency, The Manufacturing Process , Electronic Parts

INTRODUCTION

The electronics industry was held as the industry that had the importance for the economic sector of the country and had the important role in developing continuously. The development of the modern industry was due from equipment components, tools, machines that the human was the person who had invented the new technology in order to create the competitive advantage for the own business. The increasing of the efficiency in the working process in the production to have the correctness, the accuracy, the rapidity and had reduced the time and had increased the most productivity. This would be one way that would help to contribute the administration to let the business to be able to move forward. The electronics industry was held to create the convenience, the comfort for the human more. This would reduce the procedure, the working time and could control the working automatically and efficiently that was the thing that everyone were familiar with and had become the one part of living of peoples in the current situation inseparably. By many electrical products and electronic products had been used widely. No matter would be electrical machines in the house (such as, the television, the mobile phone, the refrigerator, the washing machine and the computer etc.). This would make the electrical machines and electronics industry was the industry that had the importance for Thai economy system very much.

The electronics industry had used consumer goods more due to the higher population rate. Hence, the production process that had used human labors in controlling in the past couldn't increase the production rate more as required. This had to use machineries to help in the production process to reduce the using of human labors. This would make products that were produced to have low prices, high quality and the regular production process. And the electronics industry were held as the industry that had expanded in the economy quite high due to electronic equipments were composed of various products that had the continuity in the production process and was the industry that had the connection with producing of other many products. The industrial production index in March, 2015 had increased by 2.5 % but when this had compared to the last year. This had reduced by 1.8 % from the export industry as the main issue that had the lower production such as, the hard disk drive, the television and the electrical machine due to the world economy problem had recovered slowly than the expectation (Office of Industrial Economics, March, 2015) The Thai electronics industry had the limitation and the risk for both the export structure and the production that most of it were in the computer and equipment group. This had lacked the connection of the industry, the more competition in the world market and the risk in the moving of investments of foreign investors. Thailand would hurry to adjust. In order that, in order to face with the challenge of Thai electronics industry, in the future, Thailand would need to develop the capacity in the growing of the industry and increase the capacity in the competition. No matter would be the adjustment of products, the innovation and the technology, the expansion of product bases including the creation of the connection of the industry by the public sector might have the way to contribute and support (Kasikorn Research Center, September, 2013, Thai electronics structure with the changing trend and the adjustment direction in the future).

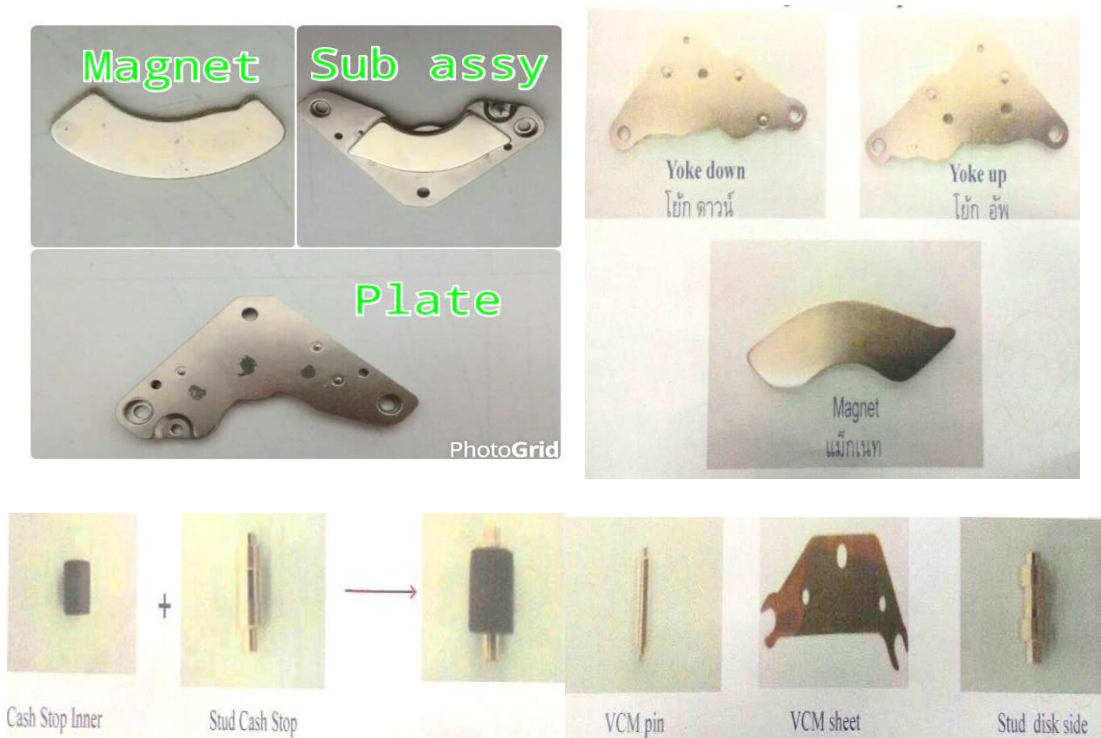
In the case of XYZ Co., Ltd., this had kept the quality of the production process of electronic equipment components by using PDCA and 5S activities in controlling the production that had 5 components that were (cost), (quality), (quantity) and (method) by covering since the production process of electronic equipment components by using PDCA as follows; The planning before working (Plan) since the disbursement process of equipments and planning to prepare to design products, the readiness of staffs, equipments, machines, materials in order to reduce all mistakes that would create the lateness and this had performed (Do) of all production processes. The company had controlled the production process of electronic equipment components by focusing on producing of quality products, producing according to customer requirements. The checking (Check) would have QC staffs to check work pieces before the packaging every time and the adjustment to solve (Action) for damaged products. The researcher had procedures in studying of the research that were the study of the working operation in the production process of electronic equipment components, the keeping of the quality with PDCA and 5S activities. This research result could use to be the way in adjusting in order to increase the efficiency in working of the company and developing the organization to create the highest benefit for the business continuously.

OBJECTIVES

In order to study the process of electronic parts manufacturing. In order to study the method to improve quality of electronic parts by use PDCA and 5 s Activity.

LITERATURE & THEORY

The researcher had prepared the qualitative research by gathering of the information by requesting of the cooperation in interviewing to ask the information from staffs in the organization of XYZ Co., Ltd. XYZ Co., Ltd. was the company that had operated the business type of manufacturing of other electronics components that had manufactured following component parts such as, Yoke Down, Yoke Up, Magnet, Sub Assy, Plate etc. that those equipment were components of the refrigerator, the computer, the hard disk drive and the telephone. The population to be used in the study were the head of the manufacturing department and related staffs.



PDCA (plan-do-check-act, sometimes seen as plan-do-check-adjust) is a repetitive four-stage model for continuous improvement (CI) in business process management. And 5S is a simple tool for organizing your workplace in a clean, efficient and safe manner to enhance your productivity, visual management and to ensure the introduction of standardized working. 5S is a team run process and should be conducted by the people who work within the area in which the principles of 5S are being applied, it is not a tool that can be applied by an outsider onto an area without the knowledge and cooperation of the people within it.

RELATED WORKS

Phatrawat (B.E. 2544) had studied the quality management plan in the factory of accessories. This was found that the factory example had many mistakes such as, the quality target wasn't clear, the form of the organizational structure wasn't clear and there was no preparing of the detail to determine the function. This had lacked the clearness in preparing to be the document of the working method standard and this had lacked the information technology in the quality. Those other mistakes had effects to create other problems such as, the problem in management, the problem of the creation of the waste and the problem in the delivery not in time according to the determination etc. The researcher would propose the guideline to adjust mistakes of the plan in 3 sides as follows; this had proposed the layout of the organizational structure for managing of the quality and preparing to do the detail of the job description in other positions clearly and had more efficiency. There was preparing of the quality plan for the production process, accessories, the working procedure manual and the manual of other working operation methods in the form of the document clearly and preparing the storing system of the information of the waste that would help the executive to have the information in evaluating, analyzing, adjusting and controlling the quality that would make to create the solving of the problem systematically and performing continuously according to the cycle of P-D-C-A. From the case study, this could reduce the percentage of the waste in the foundry from 5.49% to be remained only 3.06%.

Thanawan (B.E. 2535) had proposed the guideline in increasing the productivity in the factory producing toys that had used the driving and iron furnitures by adjusting the working method and planning the production plan. This was found that the preparation of the standard time, the setting of the layout of the factory had created the convenience to reduce the time and the damage from moving, the setting of the quality control system, the arrangement of the job in order to make the machine to create the least leisure time, the planning of using of materials and the placement of the document system to be used in that factory that would help to make the production system more rapid.

PrakaneKeereewan (B.E. 2554) had studied about the increasing of the efficiency in the process of transporting and storing canned fruits by using the study technique of the movement and the time by reducing the time and the labor cost in the department closing the can cover and the storing department. This was found that before the adjustment, in the department closing the can cover and the storing department had low efficiency, high labor costs and product codes mixing together. This had done the analysis of the problem condition with 7 qualitative tools. This had used the study principle of the time and the movement. This had adjusted by using the increasing of equipments to work instead of working of staffs. After this had adjusted, This was found that the department closing the can cover had the transportation of canned longans in the area of the head and the tail of the disinfection rail, No. 3 that had the time period in the production per kilogram to be reduced by 7.49% and 8.07%. The productivity had been increased by 15.40% and 15.37% respectively. All labor costs were reduced by 50.16% in the storing department. The storing of canned longans in the point No.1,2,3 and 4 had the time period in the production per kilogram to be reduced by 9.56%, 9.99%,13.33% and 13.33% respectively. The productivity was increased by 10.59%, 11.08%, 15.42% and 15.39% respectively. Labor costs were reduced by 25%.

METHODS

In the study of the research about The Quality Management about Process of Electronic Parts Manufacturing . The researcher had prepared the qualitative research by gathering of the information by interviewing to ask the information from staffs in the organization of XYZ Co., Ltd. and had studied of the content, searched for the information from other documents, books, theses and related researches with the increasing of the efficiency of the manufacturing process of electronics equipments. The population that were used in this research, were the head of the manufacturing department and staffs that had worked in the manufacturing process of electronic parts for 15 persons.

The study of The Quality Management about Process of Electronic Parts Manufacturing by having following procedures; Studied the information from the real place that was gathering of the information from interviewing and observing from working staffs and taking notes to record the information. Studied the manufacturing process of electronic parts since the disbursement to receive equipments until to delivering of completed equipments to the store. Analyzed to find the cause that was the happened main problem that hadn't increase the value inside the manufacturing process of electronics equipments.

RESULTS

Before XYZ Co., Ltd. improve new process of electronic parts , they use old process of electronic parts that increase the time in the procedure of receiving raw materials from suppliers because they can't control supplier to deliver electronic parts. The new process of electronic parts manufacturing would make the manufacturing department to be able to produce products easily and when had finished manufacturing products, this would bring the finish goods to send to the store directly. Main process of electronic parts manufacturing were as follows;

- 1) Issue of electronic parts materials from the store by writing about other required equipment that according to purchase orders of customers that what electronic parts did they want?, How much of those amount?, by writing in the form in order to be ready to bring into the manufacturing process.
- 2) Drilling, Determining the working position of work pieces this would perform to determine the drilling position, the position of the walking blade, the position of assembling of electronic parts, drilling of electronic parts such as, Yoke Down, Yoke Up, Magnet Down, Magnet Up, Plate.
- 3) Bonding of work electronic pieces this would bring work pieces that were drilled to do the Auto bonding. The process that had used the machine as the assembly. This would do by bringing the plate with the magnet to bond together by using the machine as the automatic assembly.
- 4) Baking of work pieces with the glue tightly, work pieces were attached with the glue tightly and had no dust.
- 5) Washing, this had to wash work pieces and this mightn't let work pieces to attach with the dust or the glue.
- 6) Magnetize to press the magnetic field in work pieces , when this had finished cleaning it, This would bring work pieces to magnetize to press the magnetic field in work pieces by bringing the plate to press the magnetic field with the magnet. This would come out to be the Sub Assy.
- 7) Assembling work pieces , the process of assembling components with the plate and the magnet, and the Cash stop inner would assemble with Stud cash stop. From the study, this was found that most of the waste would be happened from the assembling process. Due to this might inspect work pieces that had standard sizes, not defected. When this had assembled together, this won't have the problem of work pieces didn't fit to the lock, didn't be able to assemble together.
- 8) Packaging, before this had done the packaging, this might have to inspect the product condition not to be defected or damaged.
- 9) Finished work pieces, prepared to delivery.

In the case of XYZ Co., Ltd., this had kept the quality of the production process of electronic equipment components by using PDCA and 5S activities in controlling the manufacturing. The quality management (PDCA) were as follows;

1. The planning (Plan) before working would make to create the readiness in working really. The production department would receive purchase orders of customers from the sales department. When the production department had received the information that, How much work pieces did customers want?, What types? and the production department would produce according to the schedule. Later, the production department would contact to the warehouse (Store) that the purchasing department had prepared all materials there in order to disburse of equipments and plan to prepare to design products, the readiness of staffs, equipments, machines, materials in order to reduce all mistakes that could create the lateness. The sales department would forecast customer requirements (demand forecasting) in advance annually that in each year, How much jobs did customer want? and then the sales department would breakdown the detail monthly. Later, the sales department would send the information of the production amount for the production department to produce products to keep in advance for 7 days (Make to Stock) in order to support customer requirements. In the case of some days that customers would like to have more or less work pieces and How much work pieces did customers want?, customers would plan for the factory that What date?, What model? and How much work pieces did they want?
2. The performing (Do) to produce work pieces according to the determined process that was Jigging that had done the function to determine the drilling position, the position of blading, the position of composing components of Yoke down, Yoke up, Magnet down, Magnet up, Plate. Later, this would bring work pieces to have the auto bonding and when this had finished bonding, this would magnetize and bring all work pieces to compose components with bases of work pieces and the magnetic disk that was the plate with the magnet. When this had finished composing together, this would check work pieces not to be damaged. If work pieces were damaged, this might bring to solve again and when work pieces were completed, this would bring it to pack in packages in order to deliver to customers. When this had performed according to the determined process, this would create the smoothness. This wouldn't make the job to be obstructed.
3. The checking (Check) before the production would disburse electronic equipment components. This would have to check the component of each model. This had to receive components to the production department in order to be ready to produce and after this had finished producing work pieces. This would have QC staffs to check work pieces before packaging every time. If work pieces couldn't pass the standard, it had to be sent back to solve and produce again.
4. The adjustment to solve (Action) in the case that working results weren't as the target. This would have to check that what procedure that would create the mistake such as, the machine system was defected, this would make work pieces have the mistake. The production department would have engineers to check the machine and solve it immediately in order not to create the lateness in working.

After this had finished produced work pieces, the factory would have 5S activities for every staffs to participate to help to keep clean. By 5S activities were as follows;

1. Sort This had to clear up, every staffs would have to check other things in the factory especially in the responsibility area and might distinguish needed things and unneeded things separately. Every staffs had to get rid of unneeded things or things that had too much for the need.

2. **Set In Order** This had to be convenient, this should place needed things to be easily for bringing to use by storing neatly to be convenient to pick that was needed very much to have to study the method to place things by considering of the quality, the efficiency, the safety. Every point of the factory might have the clear notice board. This had to determine to place clearly. This had to separate the zone to place things by drawing the line to see clearly. This had to put the label to show the place to place that things and the area of the footpaths mightn't have garbage's or barriers to block footpaths to make to walk inconveniently. And when this had brought things to use. This should focus to bring to store in the same place. Things that were used daily should be placed near the body.
3. **Sanitation** This had to keep clean, that was keeping clean of the place, equipment, things, tools to be looking good all the time. Points that should be interested in keeping clean, were the wall floor, the corner area of the room, footpaths might be kept clean, the area of machines and equipment and the body of machines. This might have to wash to keep clean every time by having not allow to create the dust such as, Keeping clean of clean room garments.
4. **Standardize** This might have the hygiene, that was the clean condition, the neatness by keeping of the first of 3S to preserve or make it better as always. The good hygiene would be happened when we had done the first of 3S continuously and try to adjust better in order to check that this had done the first of 3S continuously or not. The factor would let the head of the department to check the area often and the obtaining benefit from doing to have the good hygiene was the good health of staffs both the body and the mind, the working place that was neat, clean, pleasant to work, had the safety in working.
5. **Sustain** This had to create the good habit, the correct performing and doing as the good habit of 5th S was the important point of 5S activities because this activity would be good or not, this would depend on the person to bring activities to use. The factory would foster staffs to have the good attitude to adjust the job better as always by the head of the department would have to be the good pattern for staffs to see as the example.

CONCLUSION

The dust was the main problem that was happened in the manufacturing process of electronic parts. If the dust had entered to contaminate in the board and the hard disk drive. This would make the board and the hard disk drive to have the electric shock and couldn't be used. This would make customers to refuse to receive products and reduce purchasing orders because products had no quality and this still had an effect on the company in the job quality that was reduced. The productivity was lower. There was no reliability and the company had no net profit. The company would need to have to discard or have to bring to do it again. This would make to waste the time and lose the expense in bringing to solve it again. If that work pieces were too much damaged and it couldn't solve it, this would have to destroy that work pieces. This would have to call the head in each related department that were the engineering department, the manufacturing department and the finance department together to take the responsibility. Because the destruction of one delivering work piece, this would have an effect on the expense and the investment fund in purchasing of things to do work pieces of the company. The company would give the importance in the caution of the dust that had the very small particle. This would create the clean room to control the cleanness and the moistness.

In order to get rid of the dust not to pass into the clean room, the company would set the rule to let staffs might pass the air shower before passing to the clean room and staffs had to wear dresses to cover all bodies such as, shoes, the mask, glasses, the hat to protect the contamination and this might have to check up bodies to be clean as always including materials and other parts might be cleaned before passing to the clean room. QC staffs would have to check every staff before entering into the clean room by there was the prohibition to apply the powder, make up. This was allowed to apply some creams that each room would be different such as, the Auto Bonding, this would have the dust only 1,000 microns. In each room would have staffs to inspect the dust in order not to over the standard and QC staffs would have to evaluate cosmetics of staffs that had determined according to the rule.

From gathering of the information in this time, this would make to know that the company had the happened problem in the manufacturing department that was the dust had given an effect on work pieces to create the damage. This would make customers to refuse to receive products. This would make the company to have the solving method by creating the clean room to protect the dust and there were QC staffs to perform to examine every staffs to clean their bodies and wear dresses to protect the dust such as, the hat, glasses, shoes, the suit and had the cosmetics audit by prohibiting to apply the powder, make up and could apply some creams before entering to the clean room. If staffs didn't follow this rule, staffs would be punished. The first time would be the warning. Later, This had to have the job suspension. Because for the way that the dust had attached to work pieces, this would make work pieces to have the electric shock and be damaged. Customers didn't receive products. This would make to pay the expense and waste the time in solving work pieces again.

The company had adjusted the manufacturing process in the new form by reducing working procedures to create the working rapidly by comparing with the old manufacturing process and the new manufacturing process. The new manufacturing process could help the manufacturing department to be able to reduce the time in the procedure of receiving raw materials from suppliers and inspecting raw materials including cleaning of raw materials that the department had used the time from that part to increase the production capacity to be able to manufacture products in time in order to know the requirement clearly. The company had forecasted customer requirements in advance annually in order to know the amount of products to be produced to be able to respond customers immediately. When the sales department had the certain information, the sales department would send the information about the amount to be produced to the manufacturing department to keep the stock in advance for 7 days in order to respond to each customer requirement that wanted different amount of products. And customer would like to get how much of the job.

The sales department would plan the job for the manufacturing department that what day customers would like to get the job. What was the kind of the model?, and How much of the amount of products?, and the manufacturing department would coordinate with the engineering department to perform to take care of the machine, inspect other equipments to be ready to be used all the time before starting of the manufacturing every time in order to reduce the lead time in waiting to repair the machine and create the discontinuity in working.

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INTERNET OF THINGS ON INSURANCE BUSINESS

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Abstract: In recent years, Internet of Things has gained its popularity. We study insurance industry could get benefit from Internet of Thing devices. The study is to show how Internet of Thing devices could help insurance industries- life insurance, property insurance and auto insurance in term of evaluating policyholder risk, detecting fraud claim and managing claim process. To better understand potential Internet of Thing application, we describe the meaning and the characteristics of the Internet of Thing. Based on the analyses of data collected from scholarly research paper, professional discussion with insurer and online databases, we found IoT has a positive impact on insurance industry. Our analysis suggest that it is important for insurer to take IoT devices into account when making their operational decisions.

Keywords— Internet of Thing technology, Insurance industry, Evaluating policyholder risk, Detecting fraud claim Managing claim process

INTRODUCTION

Insurance is one of the world's oldest industries. The idea of risk-sharing began 5,000 years ago when Chinese merchants combined their cargo on multiple ships. Merchants had insurance because there was risk if a ship going down. Consumers are not likely transporting merchandise across the sea today but the basic method of insurance has not changed much. Nevertheless, this dinosaur industry is being pushed into modern era with the help of Internet of Thing. This technology has the power to change the way insurance companies act which it comes with its own challenges (Morgan,2018).

The Internet of Things provides a prime example of how new information sources, better information, and ongoing information reporting are laying the foundation to transform industry by enabling insurance companies to more effectively model risk and underwrite policies. These smart devices can include everything from home security systems, wearable health monitoring units, automobiles and so on. Data from connected devices help insurers to know their customers on a deeper level with more precise personal information (Morgan,2018). In this paper, we review Internet of Thing literature relating insurance business and commercial products associated with the IOT using for insurance. One purpose is to provide knowledge how IoT devices can utilize in insurance business.

FINDINGS

This section presents the finding from our review of 25 papers and commercial products related to the IoT for insurance industry.

REVIEWING LITERATURE

Definition

There is no unique definition available for Internet of Things which is acceptable by the world community of user. In fact, there are many various groups including innovators, developers, academicians, practitioners, and corporate people which have defines the term, although its intimal use has been attributed to Kevin Ashton, an expert on digital innovation (Somayya, R. & Siddharth, 2015). Simultaneously, an acceptable alternative definition has been proposed. Some of these definitions may be found on things that become connected in the IoT (Luigi, Antonio and Giacomo, 2010).

CHARACTERISTIC OF INTERNET OF THINGS

There are four significant essential characteristics for a device to be considered a “things” in IoT terms (Palma, Agudo, Sánchez, and Macías, 2014). The device must have the ability to collect and transmit information. Internet of Thing device must exist in environment in which data would be collected and either sent to another device or directly to the Internet. The device must be capable of operating with action-based responses. Internet of Things devices can be programmed to act according to particular conditions. The device must have the ability to receive data. Internet of Thing device must be capable of receiving data from the network. The device must have the ability to support communication. Internet of Thing device by nature belong to a network of devices which can communicate with each other through other nodes in the same network.

Which IoT devices could help insurance industry?

Health and Life Insurance

Reinsurance Group of America, Incorporated (2017) investigated that many life insurance companies are interested in offering wellness-related discount to customers who participate in health activities. Wearable technology offers for these discount on insurance products by quantifying and verifying the activities with health lifestyles. In United State, life insurance companies typically involve collecting information from wearable devices, such as FitBit and Nike + Fuel Band, to more accurately assess the health of the client. From here, the company can adjust the pricing of its life insurance policies as necessary (Meola, 2016). Garbriel (2017) reported that the insurtech Lapetus allows customers interested in life insurance coverage to upload a selfie, which will assess an individual's age, gender, and body mass index, then refine by asking the customer follow-up questions. After a quote is defined, a more robust underwriting process occurs before a policy is bound.

Fitbit, Nike or Jawbone: Who Will Win The Fitness Tracker Crown?

BY WATCHGEEK · PUBLISHED FEBRUARY 25, 2014 · UPDATED NOVEMBER 2, 2015



Figure 1. A listing on <http://www.bestsmartwatchescompared.com/video-reviews/fitbit-nike-fuelband-or-jawbone-who-will-win-the-fitness-tracker-crown/>

Property Insurance

Silverberg, French, Ferenzy, Liebergen and Berg (2016) found that Smart house monitoring systems will provide homeowners and their insurers information on, and control over, major risks. It is expected to decrease premium as claims and losses are minimized. For instant, a startup located in Los Angeles, builds HD video doorbells which help to prevent break-ins. The Internet-connected doorbell help users to see and communicate with visitors at their door using their smart phone from anywhere in the world

Stacey (2016) found that Insurers across the U.S. are offering incentives to install one of half a dozen connected devices, ranging from moisture sensors to video doorbells. State Farm offers a discount on your home policy for installing a Canary home security monitor, for example. Liberty Mutual, one of the insurance companies, will send customer a Nest Protect smoke detector, worth \$99, free of charge and cut the cost of fire coverage. Kari (2016) found that some of those companies, like State Farm, offer customers discounted insurance coverage if they take measures like automating light and energy management from an app or use smart fire and water monitors. These measures could help consumers to prevent losses. One study showed that these measures can help insurance companies too. For example, the installation of a smart fire detector could save companies an average of \$35,000 in insurance payouts.



Figure 2. A listing on <https://safetechalarms.com/residential/smart-home-monitoring-toronto/>

Auto Insurance

Michelle, John and Bram (2016) found that auto insurance utilizes telematic sensors to evaluate individual risk. Telematic sensors in the car monitor can create personalized information collection. The key value for insurance company is that sensors can closely monitor individual driving behaviors, which directly correspond to risk, for more accuracy in underwriting and pricing. Richard (2017) stated that organizations Octo Telematics have transformed how insurers assess risk, deliver crash and claim services and detect fraud. Octo can now analyze 11 billion data points daily from five million connected cars. Machine learning is helping insurer to make more accurate predictions and risk models. It works by fitting a black box to a customer’s car, which constantly records information such as GPS location, driving speed, distance and time of drive, monitors rapid or smooth acceleration style and braking and cornering habits.

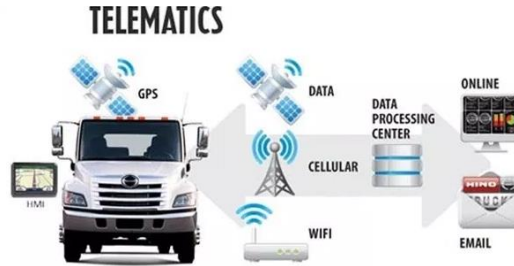


Figure 3. A listing on <https://www.bimabazaar.com/insurance-news/irda-in-india/4652-irdai-launches-telematics>

METHODOLOGY

To understand how Internet of Thing devices could help insurance industry. We surveyed articles relating to Internet of Thing on insurance industry.

Choose Databases: Papers published in academic journals were collected from electronics databases, including Science Direct, Google. In addition, we select most articles from notable private and public organization.

Choose keywords: Keywords used for the searches were ‘Internet of Things’, ‘IoT’, ‘IoT’ and a combination of terms including: ‘insurance’, ‘life insurance’, ‘property insurance’, and ‘auto insurance’

Choose time range: The search was restricted to papers, published between 2015-2018.

Choose Exclusion Criteria: The academic search was restricted to papers in English. In addition to research paper, a search from news stories and insurance reports were added. Searching & Recording: For each collected paper, the following data recorded including author(s), year of publication, journal, country where the research was carried on. Each paper was categorized based on the methods used and whether analysis was qualitative, quantitative or mixed. The rest of the criteria are involved the researched topic, it classifies the application areas as property insurance, auto insurance and life insurance used Internet of Thing.

Result and discussion

As literatures above, we conclude that IoT technology devices can help insurance industries in the table below.

Insurance Industry	Life Insurance	Auto Insurance	Property Insurance
Evaluating policyholder risk	FitBits, Fuel Band, Insurtech Lapetus	Telematic sensors, Octo Telematics	Smart house monitoring, moist censor, video doorbell and Smart fire detector
Detecting fraud claim	FitBits, Fuel Band	Telematic sensors and Octo Telematics	Smart house monitoring, moist censor and video doorbell
Managing claim process	All devices	All devices	All devices

CONCLUSION

The Internet of Things is the network or system of interrelated devices, sensors, living creature or other objects which have unique identifier and can communicate with other devices. Data is directly accessible to insurer via sensors or mobile devices. Therefore, it is clear that these characteristics impact insurance industries, from property, automotive to healthcare. Due to insurance business depending on data predication, IoT can provide volume of data. Therefore, insurer get deep real-time insights into policyholder behavior and gain the advantages of better managing price policy, assessing risk more precisely and improving business practices. In addition, there are benefit of policyholder such as discounts and personal offering, simplified contract process and management of personal risk during a policy year.

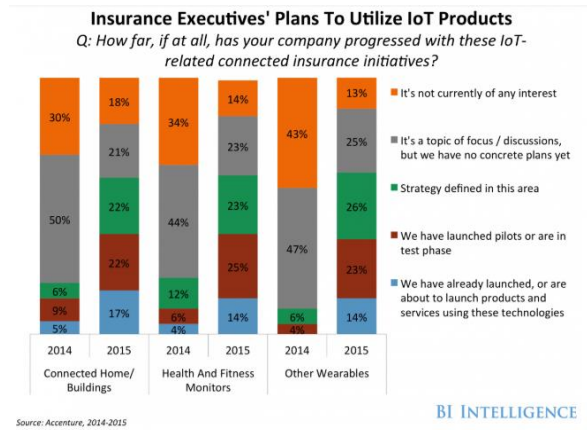


Figure 4. A listing on <http://uk.businessinsider.com/internet-of-things-insurance-home-life-auto-trends-2016-10>

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Tourism Logistics Management for Muang Pattaya in Chonburi Province

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Abstract: The objectives of this study were 1) to study the logistics situation for tourism in Pattaya Chonburi province 2) to study the satisfaction of tourists towards the components and the logistics management for tourism in Pattaya Chonburi province 3) to study the logistics management for tourism in Pattaya Chonburi province from the perspective of tourists 4) to collect data to be a guideline for the development of the logistics management for tourism in Pattaya Chonburi province. The sample group used in the research was 400 tourists in Pattaya. The tools that were used for data collection were questionnaire and statistics used for data analysis: frequency distribution, percentage, mean, standard deviation, t-test and F-test by using One-Way ANOVA. The benefit from this article can be used to improve the tourism logistics management for function and department concern.

Keywords: Tourism Logistics Management, Pattaya, Chonburi Province

INTRODUCTION

In 2017 - 2019, the Thai economy expanded in the first half of the year, driven primarily by both external and domestic demand. But in the second half of the year, the export demand of foreign demand clearly decreased Especially the product export sector of Thailand since beginning to be affected by the trade war between the United States and China And the economic slowdown, the trading partners that come from other factors And it is expected that the effects of the trade war will become clearer Which is an important factor that pressures the growth of the Thai economy this year (Sirawit Woramongkol, 2019) which the tourism sector gradually recovered. Thailand's tourism sector, which has expanded well in the first half of 2017 - 2019, had to stumble from a boat crash in Phuket in July 2018 which affected confidence. The safety of Chinese tourists severely. The tourism sector began to signal. The recovery continues after the government has accelerated the promotion of tourism safety standards. Including using various stimulus measures Resulting in Chinese tourists beginning to have signs of improvement. In addition, tourists from other countries continued to expand well and should have continued growth in the year 2019, but the problem of excess usage of various airports. Is still a significant supply constraint to the Thai tourism sector (Sirawit Woramongkol, 2019) Tourism Authority of Thailand (TAT) announced the direction of tourism promotion for the year 2017 - 2019, emphasizing that TAT will adjust the marketing plan to focus on reducing serious inequality and pushing the distribution of income to travel provinces to travel in every season Increase the target from tourism income to grow at least 11.5 percent by mentioning the national strategy which is Long-term national development framework in order for the country to achieve its goals. Covering from 2017 - 2037 in the tourism industry the target is to be a world-class travel destination. Or is a world-class tourist magnet by the concept of creative economy which this year 2017 - 2019 TAT has set a target for revenue of both foreign and domestic tourists to increase by not less than 11.5 percent by setting the growth target of international markets 12 percent and domestic 10 percent, up from year 2018 which will not focus solely on increasing economic income in a specific area but will give importance to income distribution to reduce inequality and at the same time having to consider the environmental and community impacts quality tourism emphasizing the environment and safety while promoting secondary cities and communities (Tourism Authority of Thailand, 2019). Tourism in Pattaya in Pattaya Chonburi province is a special administrative area established under the Pattaya City Administration Regulations, dated 29th November 1978, equivalent to the municipality of Chonburi province. Considered as a world-renowned international tourist destination, especially the beaches that stretch along the coastline. Organized as beautiful in Thailand, Pattaya is also a popular tourist destination for both Thais and foreigners. In which tens of millions of tourists visit Pattaya each year Because Pattaya has everything that a tourist needs Since the accommodation which has sufficient tourist support and there are many styles to choose from the travel is convenient. Whether private cars, buses or taxis from Bangkok to Pattaya, because the distance is not very far. (Tourism Authority of Thailand, 2019).

In 2017 - 2019, TAT Pattaya Office has set a target for total revenue of 2017. There are 17.4 million tourists in Pattaya and Chonburi, increasing by an average of 2.4 billion baht, an increase of 16%. The numbers will increase both the income and the number of tourists. Year 2018 will increase by not less than 7% in 2019. As for the growth of tourism

revenue as a whole, will try to maintain 16% of the number of tourists each 14.7 million people are Thai people. Nearly 9 million members and more than 6 million foreigners. Consisting of the top 5, namely China, Russia, Korea, India, Germany will accelerate the engine to grow more than 10% or more depending on the future situation next year which we will see that If the logistics management system is good, it will be able to service tourists to tourist destinations in different regions of Thailand in many directions and also able to accommodate the number of both Thai and foreign tourists visiting Chonburi causing tourists to be impressed with good management. Generate income from tourism in the province, increasing the proportion of tourism income to gross domestic product (GDP) at the national level. From a study of past research data about tourism in order to use the results to develop the tourism industry to be sustainable Able to generate income for the country That province and locality There must be something that can attract tourists to visit and make tourists satisfied while traveling. Until after traveling back, there is still a need to visit again next time Those attractions often include various tourist attractions or various activities which helps to encourage tourists to travel, such as accommodation availability local food, excellent service friendliness of the local people. Which these are what make the tourists satisfied in using the service and causing tourists to come back and travel repeatedly many times.

The researcher is therefore interested in studying the situation of the tourism logistics management system of Pattaya in Chonburi province to study an overview of the logistics management system for tourism in Pattaya in Chonburi province. Currently, studies on tourist satisfaction have also affected the various aspects of tourism logistics management systems in order to encourage repeat visitors. A study of the concept of developing a logistics management system for tourism in the perspective of direct tourists. Therefore, it is very important in the planning of sustainable tourism development in Pattaya in Chonburi province.

RESEARCH OBJECTIVE

Research on tourism logistics management for muang Pattaya in Chonburi province have established important objectives as follows.

1. To study tourists' satisfaction with components and logistics management for tourism.
2. To study tourism behavior in Pattaya Chonburi province in the perspective of tourists.
3. To study and compare the satisfaction of tourists towards the logistics management for tourism classified by personal factors.
4. To study the guidelines for the development of logistics management systems for tourism in Pattaya Chonburi province.

LITERATURE REVIEW

In this research, the researcher studied about logistics management concepts, tourism and types of tourism, concept of tourism logistics management, concepts and theories about tourist satisfaction.

Logistics Management Concepts

Logistics management (Stock & Lambert, 2001) is the process of moving goods and services in both the manufacturing and service sectors. In the service sector, there are government sectors, hospitals, banks, wholesale and retail trade. Which must consider the final management, eliminate the transformation, the logistics management has a higher scope of responsibility Which is not only related to the production process but the logistics activities will be relevant in every activity.

Logistic management, it is an element of supply chain management in planning. Storage control Operation Procurement activities Moving collection and the distribution of raw materials, finished product services Efficiency and effectiveness There is coordination in the operation of information linking. Each step systematically under the appropriate total cost from the beginning to the end of consumption by taking into account the satisfaction and needs of customers is important.

In summary, logistics management refers to a storage control plan. And then proceed with the procurement operations and distributing raw materials, finished products efficiently and a systematic procedure from the beginning of work until the end of work.

Tourism and Types of Tourism

Chalongsri Pimonsompong (2007) said that when taking the definition of tourists and tourism Come together "Tourist" means a person who travels from a normal place of residence to another location. Temporarily voluntarily and for any purpose that is not a career or to earn more than 24 hours round trip (must stay overnight in the destination or tourist attractions), which is a journey that has 3 important conditions, which are 1) Travel on a voluntary basis. 2) Traveling temporarily from a normal place of residence to another location. 3) Travel for any purpose, but not for a career or income. Office of Tourism Development (2009) said that the definition of tourism as World Tourism Organization (WTO) means travel with 3 conditions which are 1) Travel means a trip that is not forced or rewarded. By planning travel from one location to another and use vehicles for a short distance or Can be a long distance. 2) Destinations means having a destination to temporarily stay Then have to travel back to the original address or original copy as a place that tourists choose to visit and spend a period there where there are facilities and sufficient services to meet the needs and satisfaction for tourists visiting. 3) Purpose means any purpose or purpose for traveling who is not for a career or to earn income with the intention of traveling more than one time.

Chantouch Wanthanom (2009) said that tourism is a journey from normal housing. To be temporarily elsewhere for the purpose of resting, enjoying, or for any non-occupation purpose. In summary, tourism is any activity related to travel movement. Of a person from a normal place of residence temporarily for any purpose which is not for earning money. In which such activities causing phenomena and relationships resulting from interaction between persons traveling (tourists or visitors) businesses in the tourism industry that manufacture products and services to meet the needs of tourists' government that oversees tourism and communities in the tourist area.

Concept of Tourism Logistics Management

Conceptual framework used to determine the causal relationship between logistics management. With loyalty to tourist attractions, it is an assessment of the satisfaction of tourists received from the logistics management of tourist attractions in 3 points (Thakerngsak Chaichan, 2012) as follows 1) Financial Flows: Financial management, payment, currency exchange and various forms of tax refunds. 2) Physical Flows are operations in relation to tourism management of tourists. Accommodation management, baggage, security tour program for convenience and the safety of tourists. 3) Information Flows is the management of information. From the information that makes decisions about choosing a tourist destination to the information received when arriving at various attractions Which tourists should access information conveniently, quickly, and correctly receiving information.

Butsaba Sittikarn & Siri wattana Chaima (2009) have the idea that various tourism resources categories that can attract tourists to travel to that tourist destination Should have characteristics of at least 6 elements or 6As. 1) Attraction means tourism resources that help attract Causing tourists to be interested or to make it look attractive, attractive, and has a unique charm Mainly due to the beauty of nature such as on the beach, coral reefs are colorful Including various fish species Or caused by the beauty that humans have created, such as lakes or resorts in the valleys. 2) Accessibility means to make tourists interested in traveling to travel Which if tourists traveled to travel comfortably Because if the tourist attraction is beautiful but the travel is difficult It's difficult for tourists to travel. Therefore, the agency responsible for tourist attractions should create comfortable travel.

3) Amenity means that tourists travel to various locations. What tourists want from tourism is the convenience of traveling. By agencies involved in tourism Will construct the facilities which the infrastructure such as electricity, water supply, roads, communication systems. 4) Accommodation means the place to stay for tourists. Because traveling may sometimes have to stay overnight in the tourist location. Therefore, as a facility Therefore has a place to stay for tourists. 5) Activity means activities that are organized in tourist attractions, such as organizing festivals, rafting, hiking, boating, etc. 6) Ancillary Service in tourist attractions requires various services. To facilitate tourists such as banks, hospitals, tourist service centers and petrol station etc.

Concepts and theories about tourist satisfaction

Service satisfaction is the highest and most important goal of service work. Creating satisfaction for users until feeling good. Impressed and returned to use the service again. Considered to be a true success of the service. Therefore, studying the satisfaction of users is important. That relevant persons, whether service providers or operators, must always be aware of. Because that means sustaining existence and the importance of satisfaction with service users that the service organization must give priority (Chittinan Dechakup, 2008) as follows

- 1) The satisfaction of users determines the features of the service. Corporate executives and service workers need to survey the satisfaction of users. Regarding the products, services, and the nature of the presentation of the services that users are satisfied and liked. Because the said information shows the evaluation of the feelings and the opinions of the users. Want to show the response to the needs of each user desire. This is good for service providers to be aware of the needs of users. And can make it match the needs of users.

- 2) Customer satisfaction is an important variable in evaluating service quality. Offer good quality services that match the needs and expectations of users. Resulting in the user being satisfied with the service and is likely to return to use again including locations good personality of the staff the reliability of the service which will make the service able to build trust and understanding with others.

Lovelock & Witz (2011) discusses the importance of customer satisfaction, which provides many benefits to service organizations. And the satisfaction of users at a high level will lead to corporate loyalty in the long run. If better retain users, than to incentivize or develop new users to replace those who have passed away. Users with the highest satisfaction will spread the word positively, becoming advertising to service organizations. This will reduce the cost of finding new users. This is very important for service providers. Because reputation and spreading are important sources of news for new users. Service quality is important to make users happy. And the benefits of satisfaction will positively impact the service organization.

RESEARCH METHODOLOGY

1. Population and the sample selection are Tourists in Pattaya Chonburi province 400 people by accidental selection method with a simple sampling method.

2. The instrument used in this research were questionnaire and interview information which has general information for tourists who came to travel in Pattaya is divided into 4 parts as follows: 1) General information about respondents. 2) Information about tourism behavior resulting from tourist satisfaction. 3) Information about tourist satisfaction with the components of logistics system for tourism. 4) Other suggestions.

3. In this research, the researcher has compiled data from data sources as follows: 1) Primary data from the survey questionnaire from tourists in Pattaya Chonburi province. 2) Secondary data obtained from researches from journals, research articles related from various government agencies, including from various websites.

4. Data Processing, the researcher will investigate all issues and queries that have been selected to complete a questionnaire to 400 samples and analyzed using computer software.

5. Data analysis and statistic will use are percentage (Percentage), score average (Mean), standard deviation (S.D.), t-test and F-test by using one-way ANOVA defining the significance level at 0.05.

Independent Variables		Dependent Variables
Logistic elements - Physical flow - Information flow - Service process aspect - Location - Marketing promotion - Personnel - Regarding returning / sharing experiences - Expenses	Tourist Satisfaction level	Development guidelines logistics management for Muang Pattaya in Chonburi province

Table 1 : The conceptual framework of the study-

EXPECTED BENEFITS

1. Able to bring logistic management factors that tourists are satisfied with in order to improve it until it has the potential to help attract more tourists to come to Pattaya.
2. Introduce logistics management guidelines to develop readiness to support tourists in Pattaya Chonburi province.
3. The data studied will be able to become a database of public and private sectors. In order to develop the entrepreneur efficiently as well as a guideline to promote new entrepreneurs.

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Forming Tourism Logistics Service Quality of the State Railway of Thailand: A Case Study of the Special Train Tour Death Railway Route

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Abstract: This Quantitative research aimed to (1) evaluate the Forming Tourism Logistics Service Quality of the State Railway of Thailand: A Case Study of The Special Train Tour Death Railway Route and (2) study the expectation and perception of the Forming Tourism Logistics Service Quality of the State Railway of Thailand, in the forming of tourism logistics service quality, location, staff, timing and security. The tool was a questionnaire with the sampling group of 400 people who used the state railway service, by using the table of Taro Yamane. The statistics which used to compile the data were frequency, percentage, average and standard deviation, T-Test and One-way ANOVA. The research found that overall scores of the train location station, staff service and security service were moderate. Each section had a different opinion except the staff serving with a good personality dress modestly and security service in the cabin topics. For the station comfortable was consistent to the hypothesis no1. Except the train location, heading of cleanliness and the period of service were inconsistent with the hypothesis no 3. For personal factors in age, average income per month and the average cost per month found that there had a different aspects opinions on the tourism logistics service model of the State Railway of Thailand that consistent to the hypothesis no 2, 5 and 6 with the statistically significant at the 0.05 level.

Keywords: Service Quality, Tourism Logistics, the State Railway of Thailand

INTRODUCTION

Thailand is renowned for its diverse attractions, the tourism industry of Thailand has created and distributed to the public in the enormous economy. Thailand's tourism sector has been supported by various organizations, especially from the public sectors. The Ministry of Tourism and Sports has prepared a reform strategies tour of Thailand (2015-2017) connected to the National Tourism Development Plan No. 2 (2017-2021). At present, the State Railway of Thailand has launched a special train tour into two forms: a morning trip and overnight stay, but has not shown the results of the study on the management model tourism logistics service for rail travel which is substantial. That could lose the chance to compete for business and implementation of the rehabilitation plan, the State Railway of Thailand (2015-2024), the strategic actions are required to improve service quality (Parasuraman et al., 1985, 1988, 1991, 1991a, 1994) and increase the number of passengers. Forming tourism logistics service (Sun, Yoo and Yang, 2015, 2016) quality for rail travel is required to attract tourists, to satisfy the need, to make an impression and come over next time. Process management, tourism logistics activities have to provide continuous service by focusing on the management of the value chain (Porter 1985; Sultan & Saurabh 2013 and Kumar & Rajeev P. V. 2016) and service supply chain management (Sakhuja & Jain 2012). However the State Railway of Thailand's main task is the field of rail transport services with a public service of the country, which is operating at a party, offer to other parties. Sometimes the process can be bound to a given product but it is the invisible, intangible and could not be owned. It is the economic activities that create value and provide benefits to customers in time and location specific. Which has many related in logistics service activities, the main goal is to deliver the transport service from one source to another (physical distribution) to meet the needs and satisfaction of tourists under the effective supply chain management. This study was aware of the tourism logistics service quality (Sun, Yoo and Yang, 2015, 2016) management, to understand the situation for rail tourism, user opinions and logistics problems in the tourism logistics industry to enhance management standards and acceptable to both Thai and foreign tourists. Moreover, the results of the study will be the guide line for forming tourism logistics service quality model development. Which will create a competitive edge, service quality improvement and increasing the number of passengers to maximize the State Railway of Thailand revenue.

RESEARCH OBJECTIVE

1. To study the opinions of service users that affect to the tourism logistics service quality: A Case Study of The Special Train Tour Death Railway Route.
2. To study the expectations and perceptions of service users that affect to the tourism logistics service quality: A Case Study of The Special Train Tour Death Railway Route.

HYPOTHESIS OF RESEARCH

Based on the research problems and framework above therefore the hypothesis of this research are as follows:

Assumption H1: Different service users personal factors has direct influence to forming tourism logistics service quality management

Assumption H2: Different forming tourism logistics service has direct influence to forming tourism logistics service quality management

RESEARCH FRAMEWORK

Research framework of this research is shown in figure 1.

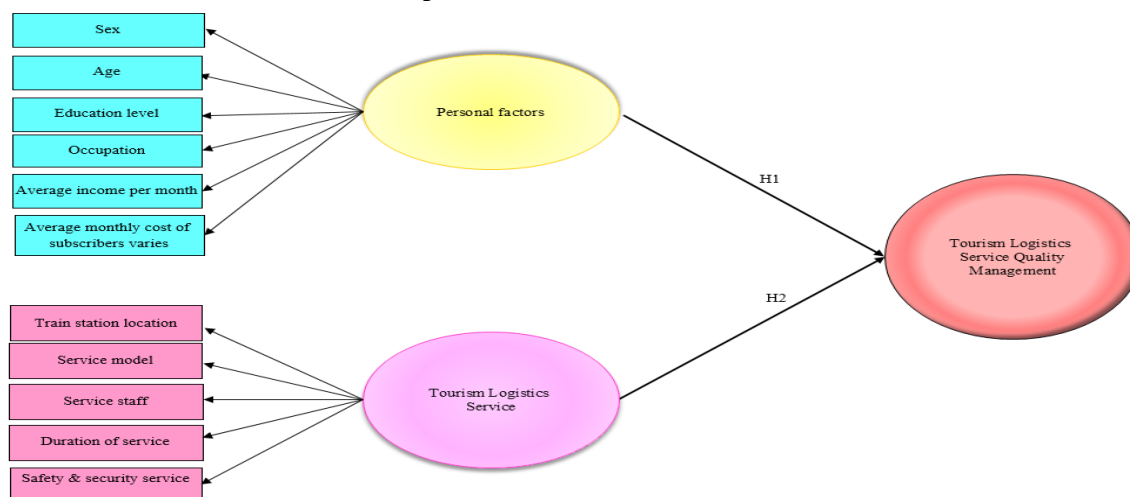


Figure 1. Research framework

LITERATURE REVIEW

Crompton and Mackay (1989) defined service quality as the quality of service attributes and investigations on the importance of those attributes based on types of service categories, which included: high staff intensives with high facility intensives, high staff intensives with low facility intensives, low staff intensives and high facility intensives and low staff intensives and low facility intensives. Results from the study also showed that capabilities to perform stated and promised service reliably and precisely are important. The service quality model, SERVQUAL by Parasuraman et al. (1985, 1988) is widely applicable and can be generalised to various service contexts (Bigne et al. , 2003) provided evidences on the applicability of SERVQUAL in travel agencies.

Narayan, Rajendran and L. PrakashSai (2008) studied the Scales to measure and benchmark service quality in tourism industry. Found that the hospitality, food, logistics, security, and value for money have significant impact on satisfaction, while amenities, core-tourism experience, hygiene, fairness of price, information centers, culture, distractions, personal information, and pubs did not have a significant impact.

Daniel and Berinyuy (2010), service quality and customer satisfaction were very important concepts that companies must understand in order to remain competitive in business and hence grow. It was very important for companies to know how to measure these constructs from the consumers' perspective in order to better understand their needs and hence satisfy them. Service quality was considered very important because it led to higher customer satisfaction, profitability, reduced cost, customer loyalty and retention.

Geetika and ShefaliNandan. (2010) studied the Determinants of Customer Satisfaction on Service Quality: A Study of Railway Platforms in India. The study was exploratory in nature and uses factor analysis to identify the most important factors of customer satisfaction with service quality. The research methodology was empirical, and a survey of passengers (customers) was conducted. The findings reveal that five factors were considered important for determining satisfaction with railway platforms, the most important of which were refreshments and behavioral factors. Managerial and theoretical implications are drawn and discussed in the paper, and a model was proposed.

Irfan, Kee and Shahbaz. (2012) studied the Service Quality and Rail Transport in Pakistan: A Passenger Perspective. Customer satisfaction and retention was one of the key determinants to measure the quality of products or services and hence the organizational performance. Due to the growing importance of quality in our life, customers desire to enjoy a relatively better quality of products or availing superior quality services had been increased. Pakistan was the sixth highly populated country of the world and its rapid population growth also contributes to an increase of people's traveling demands. In Pakistan, train was the cheapest and comfortable mode of traveling especially for long distances. This paper aimed to investigate the passengers' perceptions about the service quality of rail transport system in Pakistan while traveling between the major cities especially from Lahore to Karachi, Multan, Peshawar and Rawalpindi. A modified SERVQUAL instrument including eight service quality constructs: empathy, assurance, tangibles, timeliness, responsiveness, information system, food and safety and security were employed to measure the passengers' perceptions about the service quality of railways. Out of 700 respondents, only 493 were selected and these respondents were frequent railway traveler on these routes. Results indicate that passengers perceived that quality of services delivered to them is not satisfactory

MukhlesAl-Ababneh (2013) studied the Service Quality and its Impact on Tourist Satisfaction. This study aimed to assess tourists' perceptions towards quality tourism services provided at Petra historical site, and to measure tourist satisfaction by examining the impact of quality tourism product on overall tourist satisfaction. In this study, four hypotheses were developed are proposed a study model. The empirical data were collected from tourists via a survey that yielded 180 usable questionnaires, these data were analysed using a series of multiple regressions to determine the relationship between service quality and tourist

satisfaction. The findings confirmed that service quality directly impacted tourist satisfaction throughout destination facilities, destination accessibility and destination attraction. As a result, this study argued that there was a significant impact of the service quality on tourist satisfaction, and therefore service quality plays an important role in tourism by increasing the level of tourist satisfaction. The results in this study supported the evidence that there were positive impacts of components of tourism product on tourist satisfaction. This study provided some theoretical and managerial implications based on the findings to academicians and tourism sector.

Sheeba. A. A and K. Kumuthadevi (2013) studied the Service Quality of South Indian Railway Determinants of Passenger Satisfaction in Trains found that the most important factors determining satisfaction of passengers in train were serially comes as basic facilities, hygiene , safety & security(Panichayakorn, 2017), catering , health care service, punctuality, behavior towards passengers.

Sabir, Javed, Ahmad, Noor and Munir (2014) studied the Assessing Customer Satisfaction Level of Transport Services Using Servqual: A Case OF Daewoo Express, Pakistan. The aim of this study was twofold; first, to find out the impact of SERVQUAL model dimensions on customer satisfaction, and secondly, to measure the satisfaction level of customers using transport services in Pakistan. Responses were accumulated from two hundred subjects by a mean of questionnaire. The study used descriptive statistics, regression and correlation analyses. Findings of the study depict that all the dimensions of the SERVQUAL were positively correlated with customer satisfaction. "Empathy" was most strongly correlated with customer satisfaction as compared to other dimensions. As far as regression analysis was concerned; adjusted R² showed that 66.2% customer satisfaction was affected due to independent variables. Descriptive analysis highlighted the overall satisfaction of customers with Daewoo bus service with a mean value of 3.008 which reveals that customers were satisfied with Daewoo service, yet, not pleased. There was a need to improve Daewoo's fare strategies, and, to further improve its services to make their customers feel valued. This study was important for Daewoo Express to work out on the dimension that was most preferred by the customers.

Latiff and SiewImm (2015) studied The Impact of Tourism Service Quality on Satisfaction to examine the relationship between tourism service quality with overall satisfaction, intention to revisit and willingness to recommend to relatives and friends. There were three notable findings; first, there was a significant relationship between accommodation service quality, hospitality, entertainment, transportation, taxi service quality and overall satisfaction. Second, there was a significant relationship between overall satisfaction and intention to revisit Kuala Lumpur. Third, there was a significant relationship between overall satisfaction and willingness to recommend Kuala Lumpur to friends and relatives.

Riduan, Suharyono, Achmad, Fauzi and Darminto (2015) studied The Effect of Tourism Service Quality, Tourist Destination Image and Experience of Tourist towards Tourists Satisfaction, Tourism Word of Mouth, Tourist Destination Preferences, and Tourist Destination Loyalty (A Study on Foreign Tourists in Tourist Destinations Area in Indonesia). This study aimed to examine the concept of Tourism marketing in the perspective of foreign tourists in three Tourist Destination Area in Indonesia, namely Kepulauan Riau, North Sumatra, and East Nusa Tenggara. The study also seeked to develop concepts and models of Tourism Word of Mouth. The results of this study showed that there were Tourism marketing strategies in the context of improving Tourism service quality, formation of travel destinations image, creation and fulfillment of tourist experience and satisfaction; all of those were antecedent forming word of mouth which finally will directly or indirectly affect tourist behavior related to destination preference and decision to show loyalty to tourist destinations in Indonesia.

Yahyazadeh and Omrani (2015) studied the Evaluating Supply Chain Management and its Impact on Service Quality Management in Tourism Industry. The results of analysis of research questions/hypothesis showed that different dimensions of supply chain management (communication, cooperation, commitment, dependency, coordination and trust) had meaningful effect over quality of rendered services by the Organization.

Sun, Yoo and Yang (2016) studied The Empirical Study of Logistics Service Quality Factors influencing Service Satisfaction on Supplying the Industrial Goods in the Tourism and Leisure Industry: Focusing on the Moderating Effects of Job Type to find out which logistic service factors affect the field and administrative staff's perception of service quality satisfaction. It also tried to find out if there was a difference in perception due to job-type. As the result of analysis, the following implications can be gained. First, independent sample t-test results showed that based on the job types, there is an average difference on economic feasibility, stability, and service satisfaction. Second, the results showed that service quality factors all have a positive influence on service satisfaction. Third, although there was difference in view between field staff and administrative staff on each variables, there was no moderating effect between service quality including each subordinate factors and service satisfaction.

RESEARCH METHODOLOGY

This research was a quantitative research and data collection by questionnaires. Sample used in this research determine the sample regardless of probability (nonprobability sampling) with 400 simple sampling is from train service users. Using Taro Yamane's prepared table according to the recipe with the likelihood of error tolerance 0.05. Researcher had defined the characteristics of the tools used to collect data and construct the tools used in this research. Questionnaires had been developed based on objectives and conceptual frameworks of research on tourism logistics service model management. The questionnaire was divided into 3 parts.

Part 1: the service user's personal factor on sex, age, education level, occupation, average income per month and the average monthly cost of subscribers varies.

Part 2: Information on the management of tourism logistics service of the State Railway of Thailand: A Case Study of The Special Train Tour Death Railway Route. It covered the train station location, service model, service staff, duration of service and safety & security service.

Part 3: Problems and Suggestions.

Researcher had created tools to collect data. The steps were as follows

- Study concepts and theories from academic papers, textbooks, websites, and related research of similar nature to bring information from various sources as a guideline to create a questionnaire.
- Analyze the objectives, content and structure of the research to determine the guidelines and scope of the questionnaire.
- Create a draft questionnaire, by defining the scope and scope of the question in accordance with the objectives of the research.
- Bring the draft questionnaire to the advisor for review, consideration and correction, and provide the experts with knowledge and experience in tourism transportation service. By statistics research and consider the questionnaire for 3

persons to review and make further recommendations. As well as content validity. Understanding and using the language to evaluate the results of the decision to find the Index of Item Objective Congruence (IOC).

- Complete a complete questionnaire for use in the research sample.

The researcher selected the questions with the IOC value of over 0.6 as a question. As well as improving the questionnaire was clear and comprehensive for the purpose of this research. The researcher used a questionnaire that was subjected to expert review and tried out the sample with the similarity to the sample with the similar characteristics.

The data analysis was a statistical computer analysis program. Compare the difference between the personal data of the sample, the mean and standard deviation of the opinions on the management of the tourism logistics service model, using T-Test and One Way Anova statistics to test hypotheses that the users of sex, age, education level, occupation, average income per month and the average monthly cost of subscribers varies.

RESEARCH RESULT

The research found that most of the users were male age between 21-40 years old with a bachelor's degree, occupation as a private employee. The average monthly income was 10,001-20,000 baht and the average monthly cost of subscribers varies was 5,001-10,000 baht. The results of the analysis of opinions about tourism logistics service management

Table 1: Train station location

Train station location	Mean	S.D	Tourism Logistics Service Level management
Convenience of the station	2.87	0.43	Moderate
Cleanliness of the terminal	2.92	0.33	Moderate
Cleanliness of the bathroom	3.01	0.18	Moderate
Cleanliness of train seats	2.97	0.25	Moderate
Cleanliness of the toilet	3.01	0.11	Moderate
Average	2.96	0.26	Moderate

Table 2: Service model

Service model	Mean	S.D	Tourism Logistics Service Level management
Labeling, publishing, fast information	3.00	0.00	Moderate
Facilitating passengers to easily follow the news	4.43	0.49	Highest
There are no complicated payment procedures	4.31	0.46	Highest
Average	3.91	0.32	Most

Table 3: Service staff

Service staff	Mean	S.D	Tourism Logistics Service Level management
Attentive to service willingly	2.99	0.30	Moderate
Knowledge and ability to service	3.28	0.57	Moderate
Personality and dress appropriately	4.37	0.57	Highest
Average	3.55	0.48	Most

Table 4: Duration of service

Duration of service	Mean	S.D	Tourism Logistics Service Level management
Appropriate to maintain the train	2.93	0.24	Moderate
The suitability of the service period	3.01	0.13	Moderate
Appropriate to train schedule	3.47	0.49	Most
Average	3.14	0.29	Moderate

Table 5: Safety & security service

Safety & security service	Mean	S.D	Tourism Logistics Service Level management
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Security in the station area	3.35	0.47	Moderate
Cabin safety	3.05	0.34	Moderate
There are measures to prevent theft of property	2.92	0.34	Moderate
Average	3.11	0.39	Moderate

Comparison of expectations and perceptions of individuals with different personal factors toward the tourism logistics service management of the State Railway of Thailand, classified by train station location, service model, service staff, duration of service and safety & security servicesafety, there was a difference opinions about tourism logistics service quality management if the sex, age, education level, occupation, average income per month and the average monthly cost of subscribers varies.

DISCUSSION

This research found that the service users had opinions about the tourism logistics service quality management, classified according to the train station location, service model, service staff, duration of service and safety & security service safety at the average score in the moderate level.As a result, the view of the State Railway of Thailand service users had not been able to meet the needs of the users in managing the tourism logistics service as much as possible.

Based on the study of expectations and perceptions of service users, by comparing personal factors and opinions about the tourism logistics service quality management of the State Railway of Thailand.In terms of the train station location, service model, service staff, duration of service and safety & security service safety, when considering each side, it was found that service users with different sex had different opinionsin all topics.Except for the service staffhad a good personality, dress appropriately and security service in the cabin topics.Therefore, it was advisable to compare the personal factors with the opinions on tourism logistics service quality management there had also a gap between expectations and perceived service (Cavana and Corbett, 2007; Chowdhury, Alam and Ahmed, 2015).

It can be said that the forming tourism logistics service management model was essential for the tourism business organization to develop the tourism business to meet the needs of all service users in accordance with vision and mission of the organization. The coordination between activities, systematically, covers planning, transporting tourists, and luggage from destination to destination. Providing and receiving information and getting paid which can be used as a guideline to improve the development of the tourism logistics service quality management system (Eraqi, 2006; Sun, Yoo and Yang, 2015, 2016)of the State Railway of Thailand.

CONCLUSION AND RECOMMENDATIONS

For the policy recommendations; it should be established or assigned to the authorities of the State Railway of Thailand to supervise, manage the tourism logistics service and supply chain as well as the strategic planning which can monitor and assess the situation in all areas.It should cooperate with government and private sectors by implementing tourism logistical service management concepts regarding joint forecasting and fulfillment (CPFR: Collaborative Planning Forecasting and Replenishment) in supply chain planning. The needs of those involved in the supply chain enable all organizations to collaborate and exchange information to meet their common goals.It will make sales of goods and service, reduce the amount of inventory and increase the level of customer satisfaction. They can also increase the level of mutual trust that enables them to exchange information more effectively including the development of a tourism logistics service model.This will reduce the logistics costs and increase the long-term revenue of the State Railway of Thailand.

For the practical suggestions; based on the study of expectations and perceptions of service users with sex different education levels and occupations. TheState Railway of Thailand have to create a gap model to measure tourism logistics service quality, to realize the real gap between expectations and perception of service (GAP 5).

Suggestions for the next research

1. Research should be conducted on the establishment of a travel business network to improve tourism logistics service management efficiency for rail travel. And should study the gap between expectations and perceptions of tourists. To improve the management of tourism logistics service model for the State Railway of Thailandto cover all aspects and impress tourists.
2. There should be comparative research on the management of tourism logistics services for the State Railway of Thailandon other routes. With other service business competitors such as low cost carriers, the bus company, vans run on various routes, etc., to evaluate the tourism logistics service strategies appropriate to the service business to meet the needs of tourists and create a competitive advantage in a professional way.
3. Research should be conducted on service behavior of employees, talent worker to find out the performance of the person. Explicit knowledge is provided to the staff at the station and on the train to use them as a guide for self-development and build a good image in the service of the State Railway of Thailand.

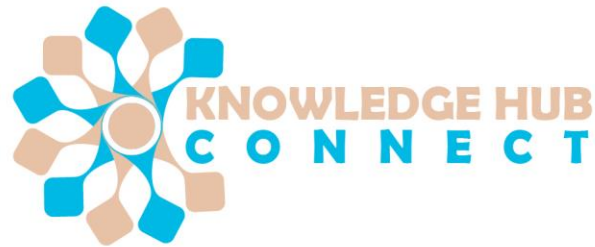
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