

WEI

Vienna, Austria,
April 16-18,
2019

2019 WEI
**INTERNATIONAL
ACADEMIC**
CONFERENCE PROCEEDINGS

Business & Economics

by the WEI

1

ISSN 2167-3179 (Online) USA

Table of Contents

Table of Contents

BUSINESS & ECONOMICS	1
<u>THE IMPACT OF CORPORATE GOVERNANCE COMPONENTS ON FINANCIAL REPORTING QUALITY</u>	<u>3</u>
ABDULAZIZ ALZEBAN	3
<u>LENIENCY AND WHISTLEBLOWERS IN US AND EU COMPETITION LAW</u>	<u>4</u>
ALEKSANDER MAZIARZ	4
<u>ANALYSIS OF CHANGES IN THE STRUCTURE OF HOUSEHOLD FINANCES RELATED TO HAVING A CHILD - VALUATION OF LOST BENEFITS</u>	<u>5</u>
ANNA JĘDRZYCHOWSKA	5
EWA POPRAWSKA	5
<u>IMPACT OF CSR ACTIVITIES AND CSR COMMUNICATION IN INDIA</u>	<u>7</u>
DASGUPTA DASGUPTA	7
<u>COST OF TREATMENT FOR DRUG-RESISTANT TUBERCULOSIS IN DIFFERENT MODELS OF DELIVERY IN SOUTH AFRICA</u>	<u>8</u>
EDINA SINANOVIC	8
<u>THE IMPACT OF DESIGN THINKING ON FINANCIAL INNOVATION IN ACADEMIA</u>	<u>9</u>
HANAN MOHAMED	9
AHMED ROMOUZY-ALI	9
<u>FACTORS AFFECTING THE DECISION MAKING TO USE SERVICE OF SAMCHUK HOSPITAL IN SUPHANBURI PROVINCE</u>	<u>21</u>

KANOKKARN KLOMKLAW ¹ , LADDAWAN SOMERAN ² , NOPMALLEE TAECHAWATCHANANONT ³ ,	21
KANOKPORN PAKEECHAI ⁴	21

JOB SATISFACTION FACTORS AND QUALITY OF WORK LIFE FACTORS AFFECTING WORK EFFICIENCY OF EMPLOYEE AT METROPOLITAN ELECTRICITY AUTHORITY, NONTABURI 32

LADDAWAN SOMERAN, CHONTHICHA KANPAKDEE	32
--	----

COST STRATEGIES POSSIBLE TO IMPLEMENT IN INSURANCE COMPANY 38

MAGDALENA CHMIELOWIEC-LEWCZUK	38
WROCLAW UNIVERSITY OF ECONOMICS.....	38
MAGDALENA.CHMIELOWIEC-LEWCZUK@UE.WROC.PL	38

THE FACTOR AFFECTING ON DECISION MAKING TO RENT DORMITORIES OF STUDENTS CASE STUDY: RAJAMANGALA UNIVERSITY OF TECHNOLOGY SUVARNABHUMI, SUPHANBURI CAMPUS 39

NOPMALLEE TAECHAWATCHANANONT, LADDAWAN SOMERAN, KANOKPORN PAKEECHAI	39
---	----

INFLUENCING FACTORS AFFECT THE LOYALTY OF USING SERVICES OF AGRICULTURE COOPERATIVE CUSTOMERS AT DON CHEDI BRANCH SUPHANBURI PROVINCE 46

SASINAN SASTSARA, LADDAWAN SOMERAN ,NOPMALLEE TAECHAWATCHANANONT,KANOKWAN OPARTPHINIT.....	46
--	----

ENVIRONMENTAL FACTORS AND SERVICE QUALITY FACTORS THAT AFFECT THE SATISFACTION OF USERS OF ONE STOP SERVICE CASE STUDY SUPHAN BURI POST OFFICE..... 54

SORAYA SUPAPHOL ¹ NOPMALLEE TAECHAWATCHANANONT ² KITISAK TABTIMDEE ³	54
---	----

THE IMPACT OF ACCOUNTING CONSERVATISM ON THE VALUATION PROPERTIES OF EARNINGS OF LISTED COMPANIES ON THE STOCK EXCHANGE OF THAILAND..... 61

SURACHAI AM-UGSORN, JINTANA SOMSODA, SUKANYA WONGLAKORN	61
---	----

EXPERIENTIAL LEARNING FOR BUSINESS LAW WITH PADLET IN AN UNDERGRADUATE CLASSROOM 69

THUM CHENG CHEONG	69
-------------------------	----

The Impact of Corporate Governance Components on Financial Reporting Quality

Abdulaziz Alzeban

Abstract: The purpose of this study is to examine the influence of corporate governance components on financial reporting quality, these being: audit committee, executive management, and external auditor. Data obtained from 212 Malaysian companies. Two measures are used as proxies of financial reporting quality, abnormal accruals and accruals quality. Results of regression analysis indicate that all these components have a positive impact on financial reporting quality, and audit committee has the most effect size on the quality of financial reporting. Findings also suggest that audit committee moderate the effect of executive management on financial reporting quality. Alternative tests and different measures of the variables confirm the robustness of the results obtained. These results provide a valuable contribution to the literature as it provides insights on the effect of corporate governance on financial reporting quality and the component that has most effect.

Leniency and whistleblowers in US and EU competition law

Aleksander Maziarz

Fighting cartels is one of the most serious activities of anti-trust authorities. However, this is not an easy task, as the activity of competition-restricting agreements is usually secret. They can be detected by antimonopoly authorities through inspection activities, based on the received notifications or market analysis. The voluntary cooperation of one of the cartel participants with the antimonopoly authority makes it possible to detect and sanction the cartel in a much simpler way. For this reason, it is in the public interest to establish such regulations that will favor those cartel members who decide to cooperate with antitrust authorities.

The leniency program is designed to significantly reduce the difficulty, time and administrative costs of intelligence collection and evidence of cartel violations, as the anti-monopoly authority receives assistance from the leniency program through its leniency applications and their further cooperation during the administrative procedure.

The scientific objective of the paper is to examine currently applicable leniency programs in US and EU competition law and to propose a model solution that would take into account best practices and effective solutions and mutual recognition of leniency programs, coordination between these programs and international provisions to protect these enterprises that have benefited from such a program.

Research is also aimed at examining the weaknesses of current leniency programs. First of all, it will be examined how leniency programs affect the traceability of agreements restricting competition. In addition, it will be analyzed how it can be prevented that the enterprises that were already the initiators of the prohibited agreement did not benefit from the benefits of these programs.

Analysis of changes in the structure of household finances related to having a child - valuation of lost benefits

Anna Jędrzychowska

Department of Insurance
Faculty of Management, Informatics and Finance
Wrocław University of Economics
anna.jedrzychowska@ue.wroc.pl

Ewa Poprawska

Department of Insurance
Faculty of Management, Informatics and Finance
Wrocław University of Economics
ewa.poprawska@ue.wroc.pl

This article is part of the wider research of the scientific team, which concern the financial consequences of loss of health and life by the households' members. In this context, consideration is given to a problem related to the economic consequences of a child's death in a household. This problem is important in the context of calculation the value of compensation for this loss (eg compensation from liability insurance). These consequences can be divided into:

A. Previously incurred costs:

A.1 Previously incurred financial expenses for a child ("child services", including costs of pregnancy, the purchase of food, clothes, etc.),

A.2 Work previously done for the child (non-financial expenditures, eg bringing a child to school, preparing meals, doing homework, cleaning),

A.3 Lost benefits (including those related to the loss of spare time and changes in the career path),

B. Direct cost related to the child's death:

B.1. Direct expenses related to funeral,

B.2 Costs of treatment and psychological consultations related to trauma after losing a child,

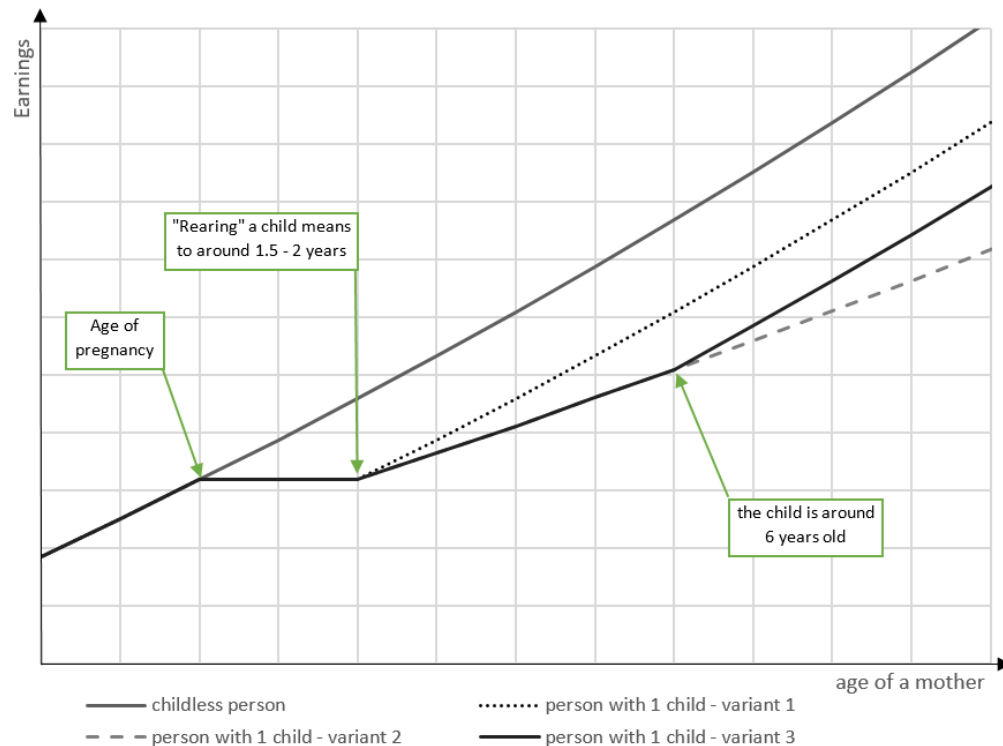
C. Expected benefits from having a child in the future:

C.1 Lost expected work performed by a child for a household (non-financial losses, especially important in agricultural families and large families, eg care for younger siblings, help with house and agricultural work),

C.2 Loss of expected old-age care (maintenance obligation of children to parents).

The article broadly analyze one of these aspects, ie. lost profits (A.3). We focus on two aspects of this problem:

- I. Lost expenditures of free time (eg resignation from social events, personal interests in order to devote time to the child) - here we illustrate the scale of the problem, based on the data of the Central Statistical Office in Poland.
- II. Changes in the career development (especially in the case of the mother) related to the break and its slowdown as a result of birth and subsequent care of the child. Selected scenarios of career path development will be considered and an income gap assessment model will be proposed. This gap arises as a difference between the expected career path of a childless person and a person with a child.



This problem takes a different scale depending on the economic situation of the country, social policy, social security in a given country, as well as cultural differences resulting from tradition, mentality and the dominant family model, etc. The problem is international and so it will be described. The created model of the valuation of the income gap is also universal. However, the numerical illustration will be based on the Polish reality.

Keywords: value of life, cost of maternity, household loss, personal finance management, insurance

JEL codes: G22, K13, K41

Impact of CSR activities and CSR Communication in India

Dasgupta Dasgupta

Indian Institute of Management Ranchi (India)

The aim was to explore the role of CSR activities and communication channels in shaping the reputation and non-financial performance in India. Data were collected from executives during May 2018 to July 2018 in organisations located in the states of West Bengal and Jharkhand (Eastern India) with the help of structured questionnaire. The overall fit, validity and reliability of the proposed model was tested with the help of confirmatory factor analysis (CFA). Structural equation modelling (SEM) was also adapted for further analysis. Findings suggest that the CSR activities enhance reputation and reputation enhances non-financial performance. However, reputation does not influence non-financial performance. Also, the most important source of information through which the employees get informed about the CSR activities is “Official Website of the Organisation”, followed by “Annual Report of the Organization”.

Cost of treatment for drug-resistant tuberculosis in different models of delivery in South Africa

Edina Sinanovic

Health Economics Unit
School of Public Health & Family Medicine Health Sciences Faculty
University of Cape Town
South Africa

Abstract

Setting: The cost of multi-drug resistant tuberculosis (MDR-TB) treatment is a major barrier to treatment scale up in South Africa.

Objective: To estimate and compare the cost of treatment for rifampicin-resistant tuberculosis (RR-TB) in South Africa in different models of care in different settings.

Design: We estimated the costs of different models of care with varying levels of hospitalisation. These costs were used to calculate the total cost of treating all diagnosed cases of RR-TB in South Africa, and to estimate the budget impact of adopting fully or partially decentralised versus a fully hospitalised model.

Results: The fully hospitalised model was 42% more costly than the fully decentralised model (US\$ 13 432 vs. US\$ 7 753 per patient). A much shorter hospital stay in the decentralised models of care (44 – 57 days), compared to 128 days of hospitalisation in the fully hospitalised model, was the key contributor to the reduced cost of treatment. The annual total cost of treating all diagnosed cases ranged from US\$ 110 million in the fully decentralised model to US\$ 190 million in the fully hospitalised model.

Conclusion: Following a more decentralised approach for treating RR-TB patients could potentially improve the affordability of RR-TB treatment in South Africa.

The Impact of Design Thinking on Financial Innovation in Academia

Hanan Mohamed

Assistant Professor of Economics

Faculty of Commerce & Business Administration, Helwan University, Egypt

Ahmed Romouzy-Ali

Assistant Professor of Industrial Product Design

Faculty of Applied Arts, Badr University in Cairo BUC and Helwan University, Egypt

Abstract

Financial Innovation aims at creating new financial instruments; such innovations can affect the financial sector, relate to changes in business structures, to the establishment of innovative financial products as well as new financial technologies, institutions, and markets. Design Thinking is an approach used for practical and creative problem-solving.

This study scrutinised how Design Thinking can enable a financial product innovation in academic institutions. Decidedly, this innovative approach can be used to develop innovative financial products within academia, consequently this will facilitate engaging more financially disadvantaged individuals.

This research has employed Helwan University students from Faculty of Applied Arts, Industrial Design and Faculty of Commerce and Business Administration, Economics—in a focus group in which they have developed new five financial products to overcome the existing real-world financial challenges in academia. This has also empowered the students to explore new practices on the road to financial innovation by disrupting the existing conventional financial practice. A thematic analysis of students' reflections recognised Financial Innovation and Design Thinking to execute a new approach towards a successful finance in academia.

Keywords

Financial innovation; Design Thinking; Academia

Introduction

Financial Innovation provides new solutions, instruments, and ideas to support families in providing better levels of education for their children. The role of Financial Innovation in academia is crucial. This importance stems from the essential role that education plays in the economy. Education is considered as the engine of the development of any economy. This is because a well-educated individual in the economy provides the country with a productive human capital which in turn would accelerate the economic growth of the country and maintain sustainable development. Lucas (1988) has emphasized the role of human capital in motivating economic growth. He has showed that investment in human capital increases the number of skilled labors which affects economic growth positively. In addition, Romer (1990) has showed that economic growth depends on the number of skilled and innovative labor who are conducting R&D. According to the Education Commission report 2016, it was found that investing additional dollar in an additional year of schooling, generates earnings and health benefits of \$10 in low-income countries and nearly \$4 in lower-middle income countries (Report.educationcommission.org, 2016). This emphasizes that financing education is crucial for motivating economic growth. It is important to note that Financial Innovation differ from financial inventions, where Financial Innovation is concerned with improving an existing financial product or process, while financial invention is to develop a new product or process which didn't exist before.

This research is concerned with the role of Financial Innovation in academia which is developed as a response of the demand for the educational services that consume a huge part of the families' income especially in developing countries. The UNESCO Institute for Statistics (UIS) data has revealed that families in developing countries are spending on education greater proportion of their average GDP per capita than those in developed countries. This indicates that in these countries, a huge burden of financing education lied on the shoulders of the parents. Statistics show that household expenditures on secondary education amount to 20-25% of average GDP per capita in low-income countries and exceeds 30% in other countries. On the contrary, this share in almost all rich countries does not exceed 5% (Uis.unesco.org, 2019) and this can be attributed to the higher government expenditures on education in developed countries than in developing countries. The Education Commission report, 2016 also has emphasized on the international level, financing education need to increase from international financing for \$16 billion per year currently to \$89 billion per year by 2030 which is very critical for low-and middle-income countries to cover these funds (Report.educationcommission.org, 2016). Where the Commission has found that spending on education has to increase in low- and middle-income countries from \$1.2 trillion per year currently to \$3 trillion by 2030. Consequently, it has asserted that it is essential to mobilize innovative approaches for financing education by developing smart ways for enabling families to raise more funds for education (Report.educationcommission.org, 2016).

In Egypt, there are some sources of education finance other than the government. Healey et al (2014) has mentioned that the decentralization of financing education has become a new trend in many countries (Haley et al, 2014: 3). Hence, this can encourage other financial institutions to offer new programs for financing education. Some banks in Egypt has launched financing programs for education such as Emirates NBD which can provide Loan amount up to EGP 100,000 and flexible ways for repayment up to 36 months, the Arab African International Bank has offered the Edu-Invest program for financing education in the stages of school, university, and post-

graduate studies. This program offer loans that are covering up to 100% of the tuition fees and offers flexible repayment methods reaching up to 84 months, Qatar National Bank (QNB ALAHLI) offers education loan for financing up to 95% of the tuition and books fees with a limit of EGP 500000 and can be repaid over 48 months. The Commercial International Bank (CIB) offers a loan amount reaching up to EGP 200,000 with flexible repayment methods up to 60 months. Bank Misr financing up to 100% with a limit of 500000 of the value of the tuition fees which can be repaid over a period up to 84 months.

On the other hand, Design Thinking is ‘an approach, once used primarily in product design, is now infusing corporate culture’, said Jon Kolko (Kolko, 2015). Grunewald et al (2016) arguably stated that with the aim of healthier recognition of the end-user challenging needs and benefits in mind, Design Thinking is a leadership approach that empowers institutions to survive and achieve that aim efficiently. Moreover, it is highly predicted that deployment of Design Thinking will upsurge inevitably the organisational innovativeness. Consequently, more innovative business models with emerge in addition to a very diverse economies of products and services, resulting in competitive Financial Innovation.

Design Thinking process for problem solving and innovation

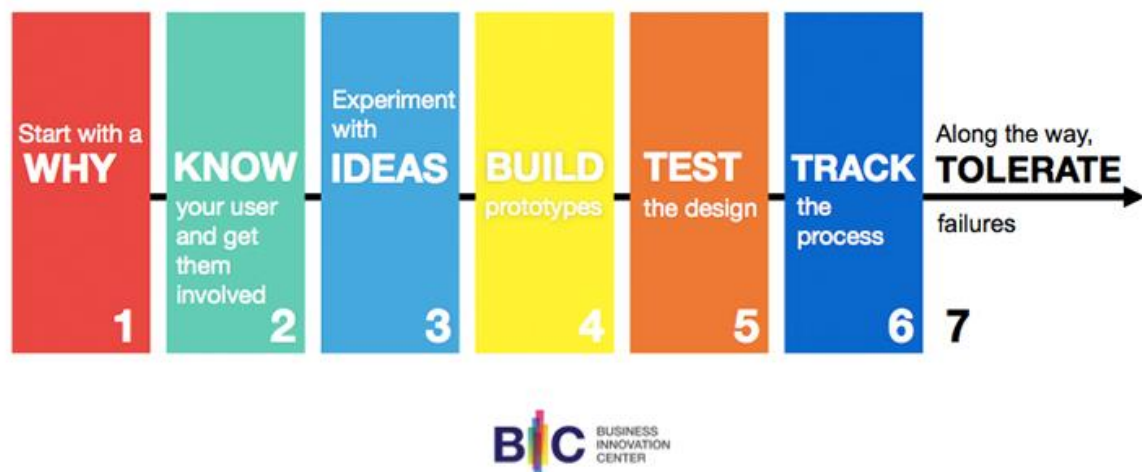


Figure from (Konica Minolta Business Innovation Center, North America, 2019)

“If I had an hour to solve a problem and my life depended on the solution, I would spend the first 55 minutes determining the proper question to ask, for once I knew the proper question, I could solve the problem in less than five minutes.”

— Albert Einstein

This is where it all begins. Everything starts in Design Thinking, with the proper question. According to Charlie Cannon (Yale Insights, 2019), Chief Design Officer at Epic Decade, Design Thinking is “the application of design techniques, design methods, and design frames of mind, not for the production of new artifacts or objects, but to the application of developing new models of business value, potentially new business themselves [...] from the design of things to the design of ideas.”

Data Collection

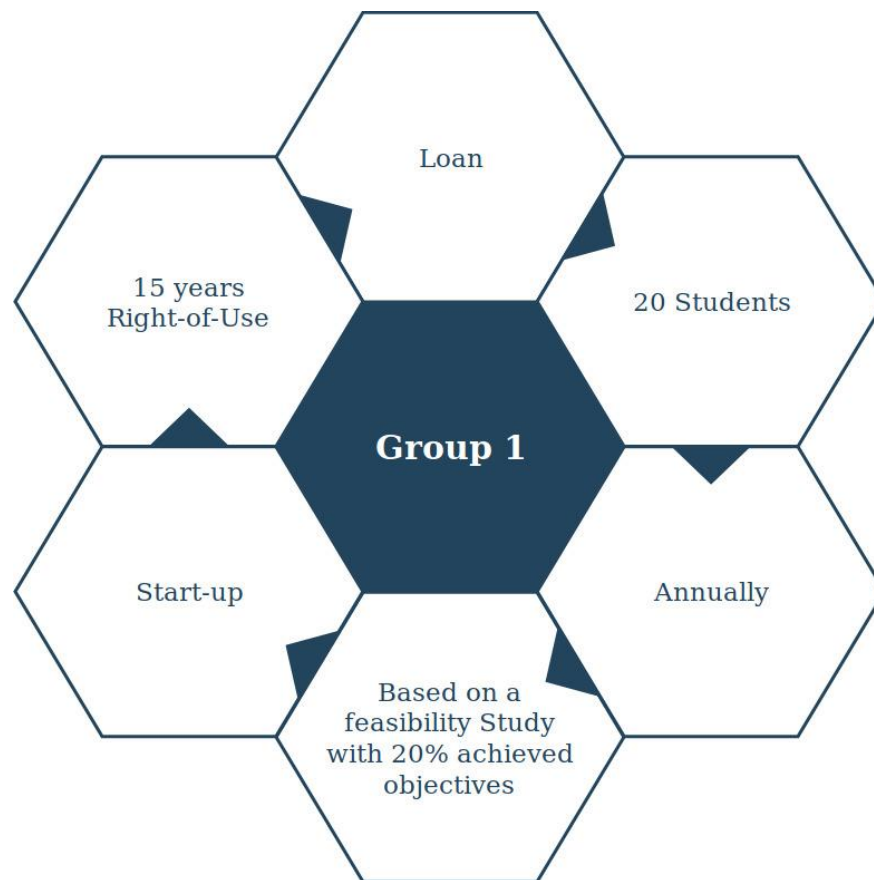
Data were collected primarily through a one-day focus group with structured discussions, and with every possible documentation produced by the participants. We conducted the focus group with 20 final-year students, 10 Industrial Design students and 10 Economics students, then they were divided into 5 groups- each group 2 Industrial Design students and 2 Economics students. The students received two short talks, one on the education financial products, and the second of design thinking and its approaches toward creative solution.

The focus group questions orbited around the real-world meanings of Financial Innovation, its context of use, the initial motivation for adopting Design Thinking, and what the universities and financial institutions do, their experience of the key benefits and core challenges linked to using Design Thinking. We focused on how the participants perceived Design Thinking and how it is used to create new financial innovation.

All the group were supervised by the two of us, and all their queries were answered instantly. The focus group lasted 6 hours with half an hour break in the middle and were recorded, later transcribed and analysed using a thematic analysis approach. A Thematic Analysis of participants' reflections and thoughts was conducted which recognised Design Thinking -based- Financial Innovation to execute a new approach towards a successful finance in academia.

Results

The emerging themes have resulted in 5 new Financial Innovation proposals have been introduced, which were at that point summarised and produced in the five following models. All of the proposed model depends of the ability of the students to creatively and innovatively show high potential with low risk in investing in their future education, in which they have articulated these ideas in a way that seemed as if They were born with these ideas that are pouring out of them.

**Group 1**

The students suggested in this model the following:

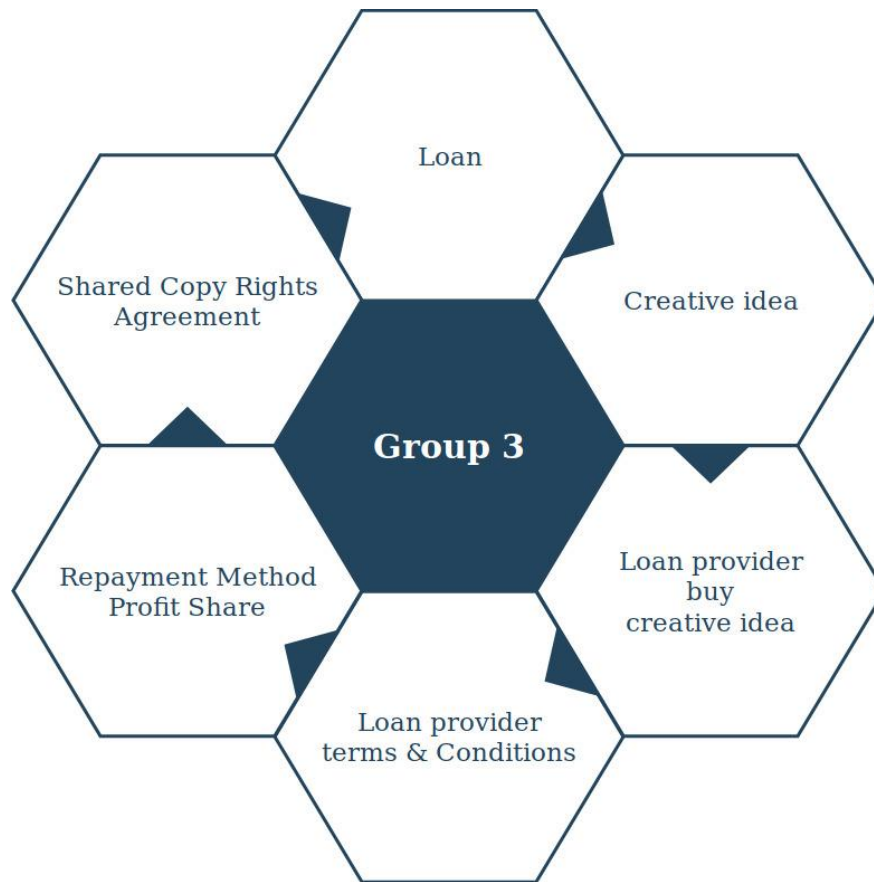
- An Annual 20 Academic Study Loans;
- Offered Competitively;
- Subject to a feasibility study with 20% of its elements achieved already;
- The feasibility Study MUST exhibit the potential of a Startup at the end;
- Successful Loan-takers to sign a 15 years Right-of-Use contract;
- The Financial Service Provider is an official Partner.



Group 2

The students suggested in this model the following:

- An Annual Academic Study Loans;
- University Acceptance Letter is a MUST;
- Employment Offer is a MUST (student hours or paid training);
- Startup Proposal showing a creative/innovative idea to invest in;
- Loan-Takers are subject to academic progression tracking system;
- Loan-Repayments: Profit-Share in the case of Startup or Salary-Deduction in case of a salaried job.



Group 3

The students suggested in this model the following:

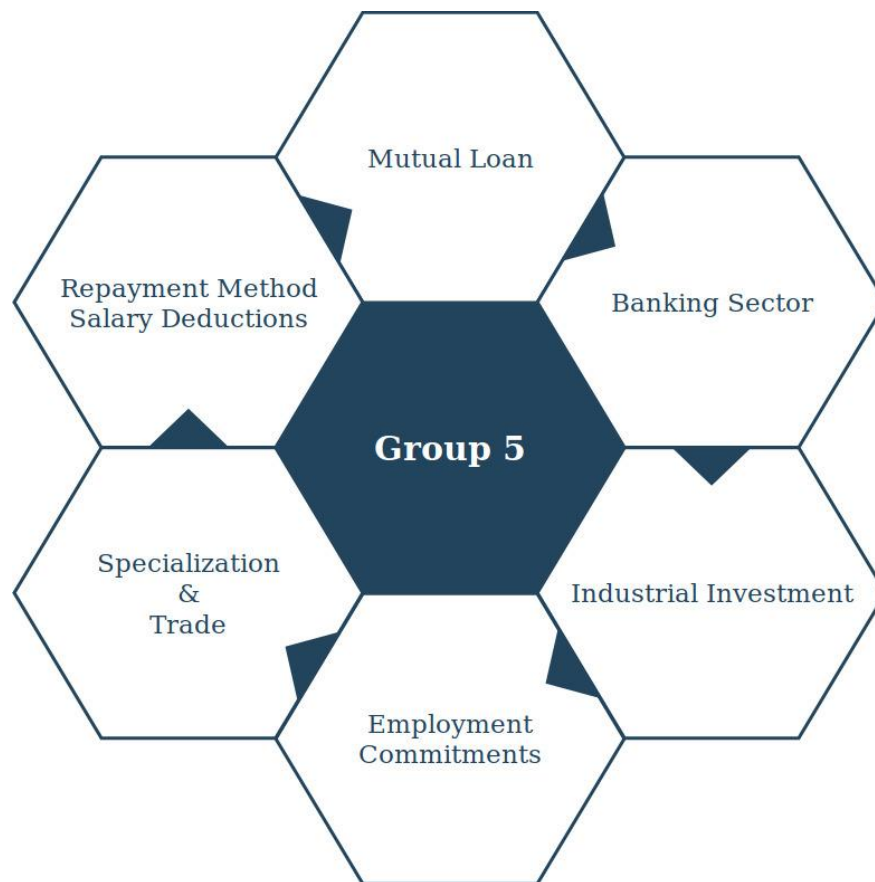
- An Annual Academic Study Loans;
- Providing a Creative Idea is a MUST;
- The Loan Provider buys the idea initially;
- Loan-Provider and Loan-Taker to agree on the Terms & Condition of the Contract;
- Loan-Repayments: Profit-Share;
- Mutual Copy-Rights Agreement to be signed;
- Monthly stipend for the student from the Profit-Share.



Group 4

The students suggested in this model the following:

- An Annual Academic Scholarships;
- Offered Competitively;
- On a Mobile Application;
- Meeting the Eligibility Criteria is a MUST;
- Priority is given to Middle- & Low-Income Applicants and/or Refugees;
- Employment Contract to be signed with the Scholarship provider.



Group 5

The students suggested in this model the following:

- An Annual Academic Joint/Mutual Study Loans;
- Industrial and banking matched fund;
- Employment Commitments to be agreed on and signed;
- Loans are offered on a specialty or trade basis;
- Loan-taker to secure a potential job/training offer with the Loan-Provider partners;
- Loan-Repayments: Salary-Deduction out of a salaried job.

Discussion

This research has not addressed extensively neither the probable positive impacts nor the negative impacts that Design Thinking approaches may produce in this context. The proposals presented in this research provide the first initial steps towards the financial innovation in academia.

However, the critical issue of avoiding a situation that could lead to (Kaba et al, 2016) the risk of ‘groupthink’ and group conformity bias, which may lead to poorer decisions and low-quality outcomes, has been absent. As half of the participants were an Industrial Design student, whom are broadly and professionally trained to use brainstorming, they engaged and blended nicely with the Economics students. They have adopted a practice that enhanced the focus group to the extent with which in one of the groups, the students exchanged the roles of each other’s field, the Economics students generated an Industrial Product idea while the Industrial Design students did the business model. This actually and similarly, supports (Henningsen et al, 2018) definition of Brainstorming as “a technique to promote idea generation that may also promote cohesiveness in idea generating groups”; and Brewer (2017) statement that “In most cases, under proper conditions, groups are capable of achieving more creative output than individuals for very specific cognitive and psychosocial reasons. Group thinking, done properly, remains one of the most powerful ways to access creativity and generate new ideas.”

The approach we are promote in this research represents one innovative deployment route for Design Thinking in an interdisciplinary context, in which and according to Liedtka (2015) conquer “the challenges of conducting academic research on a practice like design thinking, one that is obviously popular in management circles but appears resistant to rigorous empirical inquiry because of the multifaceted nature of its ‘basket’ of tools and processes, and the complexity of measuring the outcomes it produces”. The multifaceted nature of the Design Thinking process utilised in this research is in fact more of an added value rather than a challenge, as when talking about financial innovation we are talking about different individual circumstances and different needs as well. Therefore, the variety of Design Thinking tools and processes serve perfectly the problem of financing innovatively in the academic sector.

Conclusions and Future Work

Financial Innovation is a relatively novel approach, according to the empirical research review. Comparable to Design Thinking though, it delivers so far new insight into the value of this creative problem-solving activity. There is a certain essence of critical collaboration within the Economics Community, as expressed by the concept of Financial Innovation in tandem with Design Thinking. Elements of a common philosophy of Design Thinking and in the Economics Community, can influence and improve Financial Innovation in academia. Overall, it advocates that using Design Thinking tools in financial institutions will generate a pragmatic Financial Innovative Products that in due course support the development of financial institutions performance, that sequentially will be backing the more of design thinking tools.

This concept was noticeably recognised through the work done in this research, yet it’s in its very early stages. The outcome of this research represented in these five promising models, increase the interest in following on with developing the process and take it further to the next level. These perceptions advise that future research should continue to explore more of Design Thinking approaches can offer to improve the way we develop innovative bespoke financial products of institutional cultural change, rationality, strategy formation, and Product/service customization in financial institutions. We hope that our research will establish a new paradigm

in the Economics Community and provide incentive for Design Thinking as well as Financial Innovation scholars to pursue and publish more insights related to academia.

Acknowledgements

This research is based upon work supported by the participation of final year students of the Economics Department- Faculty of Commerce and Business Administration, and final year students of the Industrial Design Department- Faculty of Applied Arts, graduation 2019 at Helwan University in Egypt. We would also like to thank Mr. Amr Mustafa, Prof. Mayada Belal, Prof. Mona Fouad, and Prof. Maged Negm for their support of this work.

Biographies

- **Dr Hanan Mohamed** BSc (Hons), MSc, PhD (hanan.amin@hq.helwan.edu.eg) is an Assistant Professor of Economics at the Faculty of Commerce & Business Administration, Helwan University, Egypt. She is conducting research in the field of Financial Innovation with a specific focus on the financial instruments for Academia. She is currently Deputy Head of Partnerships & Networks Division- International Relations Office, Helwan University. Further, Hanan has been teaching Economics and Business-related topics in university as well as other academic Insinuations.
- **Dr Ahmed Romouzy-Ali** BSc (Hons), MSc, PhD (ahmed_romouzy@hq.helwan.edu.eg) is an Assistant Professor of Industrial Product Design at the Faculty of Applied Arts, Badr University in Cairo BUC as well as Helwan University, Egypt. His research is focused mainly on Disruptive Technology, Design Thinking, Financial Innovation, Management of Innovation, R&D Design Activities and Change Management. Ahmed is currently Head of Promotion and Engagement Division, International Relations Office- Helwan University, and Board Member of the Technical Support, Monitoring and Impact Assessment Office at the Academy of Scientific Research and Technology (ASRT) in Egypt. He is also interested in how SMEs can work to develop creative and innovation capabilities, with the appropriate deployment of Disruptive Technology.

Bibliography

- Braun, V., Clarke, V., Hayfield, N. and Terry, G., 2019. Thematic analysis. Handbook of Research Methods in Health Social Sciences, pp.843-860.
- Brewer, M.B., 2017. Groupthink is not a dirty word: Human-centered strategies for better ideation. unpublished work, Bentley University, USA.
- Carey, M.A. and Asbury, J.E., 2016. Focus group research. Routledge.
- Fox, S., 2018. Addressing the influence of groupthink during ideation concerned with new applications of technology in society. Technology in Society.
- Grunewald, C. and Kohler, S., 2016. What Restricts Design Thinking in its Execution?: An analysis of organisational restrictions Design Thinking faces in its execution.

- Healey, F.H., Crouch, L. and Hanna, R., 2014. Education Finance in Egypt: Problems and a Possible Solution. Occasional Paper. RTI Press Publication OP-0017-1401. RTI International.
- Henningsen, D.D. and Henningsen, M.L.M., 2018. Does brainstorming promote cohesiveness? How the rules of brainstorming mirror symbolic convergence. *Communication Reports*, 31(2), pp.103-114.
- Jordan, S. and Lande, M., 2016. Additive innovation in design thinking and making. *International Journal of Engineering Education*, 32(3), pp.1438-1444.
- Kaba, A., Wishart, I., Fraser, K., Coderre, S. and McLaughlin, K., 2016. Are we at risk of groupthink in our approach to teamwork interventions in health care?. *Medical education*, 50(4), pp.400-408.
- Kolko, J., 2015. Design thinking comes of age.
- Konica Minolta Business Innovation Center, North America. (2019). 7 ways to use design thinking to innovate your business - Konica Minolta Business Innovation Center, North America. [online] Available at: <https://www.kmbic.com/7-ways-to-use-design-thinking-to-innovate-your-business/> [Accessed 30 Apr. 2019].
- Lahn, L.C. and Erikson, T., 2016. Entrepreneurship education by design. *Education+ Training*, 58(7/8), pp.684-699.
- Liedtka, J., 2015. Perspective: Linking design thinking with innovation outcomes through cognitive bias reduction. *Journal of Product Innovation Management*, 32(6), pp.925-938.
- Lucas Jr, R.E., 1988. On the mechanics of economic development. *Journal of monetary economics*, 22(1), pp.3-42.
- Report.educationcommission.org. (2016). the Learning Generation | the Education Commission Report. [online] Available at: <https://report.educationcommission.org/report/> [Accessed 2 May 2019].
- Romer, P.M., 1990. Endogenous technological change. *Journal of political Economy*, 98(5, Part 2), pp.S71-S102.
- Saulnier, C., Ahn, B., Bagiati, A. and Brisson, J., 2015. Changes in design thinking through participation in design based wilderness education.
- Uis.unesco.org. (2019). The World's Families: Hidden Funders of Education | UNESCO UIS. [online] Available at: <http://uis.unesco.org/en/blog/worlds-families-hidden-funders-education> [Accessed 30 Apr. 2019].
- Wrigley, C. and Straker, K., 2017. Design thinking pedagogy: The educational design ladder. *Innovations in Education and Teaching International*, 54(4), pp.374-385.
- Wrigley, C., 2016. Design innovation catalysts: Education and impact. *She Ji: The Journal of Design, Economics, and Innovation*, 2(2), pp.148-165.
- Yale Insights. (2019). Does Design Thinking Make Better Businesses?. [online] Available at: <https://insights.som.yale.edu/insights/does-design-thinking-make-better-businesses> [Accessed 30 Apr. 2019].

Factors Affecting the Decision Making to use service of Samchuk Hospital in Suphanburi Province

Kanokkarn Klomklaw¹, Laddawan someran², Nopmallee Taechawatchananont³,
Kanokporn Pakeechai⁴

Faculty of Business Administration and Information Technology, Rajamangala University of
Technology Suvarnabhumi, 19 U-Thong Rd. Phranakhon Si Ayutthaya, 13000, Thailand.

chomphu.econ@gmail.com, noinoi5202@gmail.com, nopmallee@gmail.com, kartoonake@gmail.com

Abstract

This research aimed to study the marketing factors that affecting the decision making to use service of Samchuk Hospital in Suphanburi Province and to analyze the quality of services that affect the decision making to use service of Samchuk Hospital in Suphanburi Province. The sample group used of 385 users who regularly use Samchuk Hospital in Suphanburi Province service. The researcher used the statistical software program as follows; Frequency, Percentage, Mean, Standard Deviation and Stepwise multiple regression analysis by determining the significance at the level of 0.05. The results of the analysis showed that the respondents had comments on marketing factors in terms of products, price, contact channels and location of services, processes, people, physical evidence aspects at a high level. For marketing promotion, there is a moderate level of opinion. In the analysis of service quality is at a high level. There are Reliability, Understanding and Sympathy of service recipients and in terms of the fairness of the service. The hypothesis testing found that the service quality factor was reliability, understanding and sympathy of service recipients and the fairness of the service affecting the decision making to use service of Samchuk Hospital in Suphanburi Province by including forecasting the decision making to use the service at 17.10 %.

Keywords; decision making to use the service, marketing factors, service quality

Introduction

At present, the world situation has been changing rapidly, including medical care which is from many reasons such as the rapidly economic changing, society and cultural conditions. Therefore, various

strategies and new technologies are used more in the treatment services. In order to improve the quality of treatment of Samchuk Hospital to be more satisfied and impressed with the service, including medical treatment, medical service recipients, there is a tendency to care and pay more attention to physical health. And be aware of providing knowledge to help prevent various ailments.

Since Sam Chuk Hospital is an important health service facility. Then, the government has built more buildings to ensure adequate the use of patients and provided more specialized doctors. In order to be effective in providing treatment and covering people in Samchuk District, Suphanburi Province, hospitals where are considered as public health facilities must measure service quality levels in accordance with the mixed marketing and must affect the decision making to use the service. The needs of users do not meet their expectations. It might lead the users to be unhappy with the treatment. Therefore, it is the duty of the staff to provide quality services. Staff have been polite and can provide basic services to people who use the service quickly in order for the users to feel satisfied. It affects the treatment and efficiency of nursing. Eventually, it enhances a good reputation of the hospital.

Government hospitals are mostly had limitation of resources and that is less than private hospitals. The use of the service in private hospital is highly competitive. The government hospitals have a large number of clients. There are causes of convenience and low cost. The majority of people who access the government hospitals are low-income people and government officers who are able to reimbursement of medical expenses. And a number of clients have been increasing every year. As a result, the hospitals have insufficient service areas to service clients. Likewise, the hospitals have insufficient service areas for service recipients since the location and the buildings have not been completed yet. Therefore, it affects the service quality of Samchuk Hospital. Staff cannot cover all patients because the clients have been more and more while there is not enough staff to meet the clients' needs. Sometimes, clients need to take a long time to access the service. Moreover, medicine and medical supplies budget that the government has allocated, sometimes, it may not be enough to distribute on the purchase of essential medicine and medical supplies. As mentioned problems, they can affect the decision to choose government public hospitals.

The researcher has been interested in researching Factors Affecting the Decision Making to use service of Samchuk Hospital in Suphanburi Province. To know the marketing factors and analyze service quality that affecting the decision making to use the service of users. To bring the primary results to improve the quality of Samchuk Hospital. And also bring that to present to executives in order to improve service quality in responding to the policy framework and the direction of operation of Samchuk Hospital in order to achieve the organization's goals in the future.

Research objectives

1. To study the marketing factors that affecting the decision making to use Samchuk Hospital in Suphanburi Province.
2. To analyze the quality of services that affecting the decision making to use Samchuk Hospital in Suphanburi Province.

Research hypothesis

There is at least 1 service quality factors affect the decision making to use Samchuk Hospital in

Suphanburi Province

Method

Population and sample

The used population in the study is people who use Samchuk Hospital in Suphanburi Province, and the number of people who come to use the service are unpredictable.

The sample group in this research: Since the number of users the services of Samchuk Hospital in Suphanburi Province are unpredictable, so the research team used the formula W.G. Cochran (1953) by determining the confidence value at 95% at the $\pm 5\%$ the following simple formula can be used:

$$n = \frac{P(1 - P)Z^2}{E^2}$$

Where n = sample size

P = expected prevalence or proportion = 0.5

Z = Z statistic for a level of confidence

E = precision = 0.05

$$n = \frac{(0.05)(1 - 0.5)(1.96)^2}{(0.05)^2}$$

$$= 384.16$$

Therefore, the sample size of 385 people.

Research tools

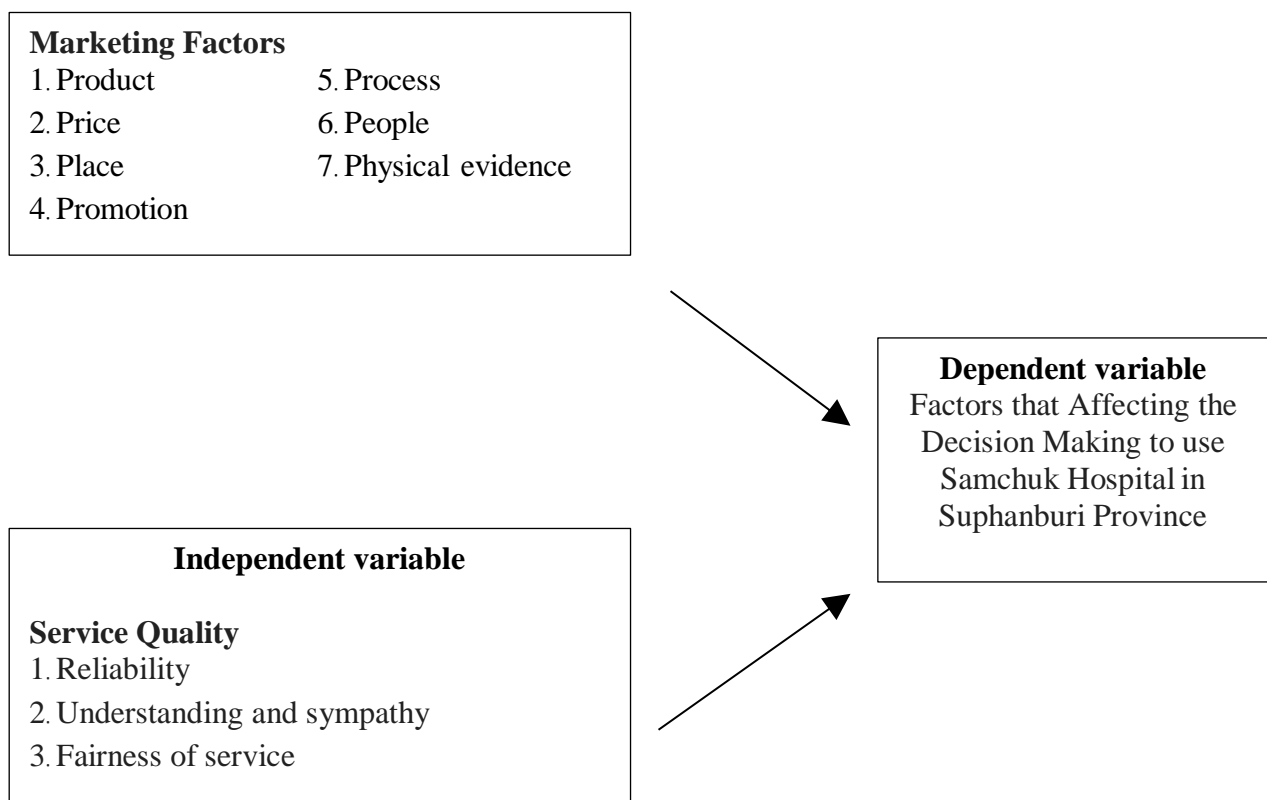
The used tool to collect this information is questionnaires by considering limiting the conceptual framework and various variables to create a questionnaire. The structure consists of closed-end and open-end questions. The questionnaire is divided into 4 parts with criteria for each level. There are Most (5) Very (4) Medium (3) Less (2) and Minimal (1) and interpret mean average score comments on each side are as follows: 4.50 - 5.00 (most agreeable) 3.50 - 4.49 (highly agreeable) 2.50 - 3.49 (agree medium) 1.50 - 2.49 (agree less) and 1.00 - 1.49 (least agree)

The test for the reliability of the questionnaire about service quality factors that affecting the decision making to use Samchuk Hospital in Suphanburi Province. The research team used the questionnaire to experiment (Try out) marketing mix and service quality with the groups that are similar to the sample group of 30 people, and then analyze the reliability of the Reliability questionnaire. To measure the internal stability using the Cronbach's Alpha Coefficient. The reliability of the whole questionnaire is 0.721, which is greater than 0.70, therefore it can be considered that the questionnaire is reliable and can be used in education.

Data analysis

1. Descriptive Statistic: Frequency, Percentage, Mean and Standard Deviation
2. Inference Statistics: Stepwise Multiple Regression Analysis.

Conceptual Framework



Picture 1 shows the conceptual framework for research on factors that affecting the decision making to use Samchuk Hospital in Suphanburi Province

Research result

Most of Medical service users of Samchuk Hospital in Suphanburi Province are female, with 208 persons, representing 54.03 percent, and 115 persons of aged more than 41 years, accounting for 29.87 percent, Users who having marital status are 198 persons, accounting for 51.43 percent. About education, they are 122 persons who graduated bachelor's degree, 31.69 percent and most of them are Merchant 136 person, accounting for 35.32 percent.

The study of marketing factors that affecting the decision making to use Samchuk Hospital in Suphanburi Province. It was found that the overall marketing factors had an effect on the selection of services in hospitals at a high level. Considering each aspect, found that the marketing factors in choosing the most Samchuk hospital service is physical evidence $\bar{x} = 4.43$, $SD = 0.64$ (, followed by people $\bar{x} = 4.15$, $SD = 0.83$ (, price $\bar{x} = 4.12$, $SD = 0.73$ (, product $\bar{x} = 3.95$, $SD = 0.67$ (, process $\bar{x} = 3.89$, $SD = 0.94$ (and place $\bar{x} = 3.74$, $SD = 0.82$ (which has a high level of thinking as for promotion $\bar{x} = 3.43$, $S.D. = 0.79$ (, there is a moderate level of opinion, respectively, as in Table 1.

Table 1 shows the average and standard deviation of marketing factors that affecting the decision making to use Samchuk Hospital in Suphanburi Province

List	Mean	S.D.
1. Product	3.95	0.67
2. Price	4.12	0.73
3. Place	3.74	0.82
4. Promotion	3.43	0.79
5. Process	3.89	0.94
6. People	4.15	0.83
7. Physical evidence	4.43	0.64

The results of service quality analysis that affecting the decision making to use Samchuk Hospital in Suphanburi Province. It was founded that the overall service quality had an effect on the selection of services in hospitals at a high level, considering each aspect found that Maximum of Service quality factors affecting the decision making to use hospital is Reliability ($\bar{x} = 4.31$, $SD = 0.82$), followed by understanding and sympathy for service recipients $\bar{x} = 4.15$, $SD = 0.76$) and the fairness of service ($\bar{x} = 3.98$, $SD = 0.71$) respectively, as shown in Table 2

Table 2 The average and service quality standard deviation affecting the decision making to use Samchuk Hospital in Suphanburi Province.

List	Mean	S.D.
1. Reliability	4.31	0.82
2. Understanding and sympath	4.15	0.76

3. Fairness of service	3.98	0.71
------------------------	------	------

Hypothesis testing, basic agreement examination by stepwise multiple regression analysis in the analysis of the preliminary agreement of service quality factors affecting the decision making to use Samchuk Hospital in Suphanburi Province. By using linear multiple regression analysis where this technique has the following conditions.

1) The average of the error is equal to 0, with the least squares method having the average equal to 0.

2) Examination of Multicollinearity problems, that is, all independent variables must not have a relationship. By using statistics to check the relationship between multiple independent variables, the Collinearity Statistics which is less than 10 indicates that there is no Multicollinearity Problems or do not create interrelated relationships between independent variables.

3) Checking the independence of errors, the correlation coefficients between independent variables were between 0.073 - 0.378 (r less than 0.80) (Kalya Vanichbancha, 2007). Which appears that every pair has a relationship not more than 0.80, representing all independent variables without Multicollinearity problems.

4) Errors are independently based on the Durbin-Watson value of 2.00, which is in the range between 1.50 - 2.50 (Kalya Vanichbancha, 2007), it showed that Error between variables is independent. When testing the above conditions, it can be concluded that the data set meets the defined conditions. Therefore, analyzing the quality of services affected the decision making to use Samchuk Hospital in Suphanburi Province.

Table 3 Results of service quality analyzes that affecting the decision making to use Samchuk Hospital in Suphanburi Province.

Service Quality Factors	Decision Making to Use Service					*p < .05, **p < .01
	b	β	SE	t	p	
Constant	2.03		0.26	7.91	0.000	From Table 3, it was found that service quality factors were
1. Reliability	0.25	0.29	0.04	5.93*	0.000	
2. understanding and sympathy	0.21	0.22	0.04	4.70*	0.000	
3. Fairness of service	0.10	0.12	0.04	2.41	0.017	
Adjust R Square = 0.171 R = 0.421 R Square = 0.177 Durbin-Watson = 2.000						

Reliability, Understanding and Sympathy in the service recipients and the Fairness of service affecting the decision making to use the services of Samchuk Hospital in Suphanburi Province. The independent variable can be predicted the variable according to 17.10 percent. By considering the Adjusted R Square value equal 0.170, indicating that the service quality factor has at least 1 variable that can predict the decision making to use the service with statistical significance level 0.05, therefore accepting the hypothesis.

The analysis of data on the trend of demand for Samchuk Hospital services according to marketing factors

1. Product
 - 1) It should be more extensive services.
 - 2) It should be a variety of health services and more modern.
2. Price
 - 1) The cost is quite expensive.
3. Place
 - 1) Limited parking lot.
 - 2) Quite difficult to travel to the hospital.
 - 3) Contact channels should be improved to be more convenient.
4. Promotion
 - 1) It should have more promotions.
 - 2) It should be more variety of promotions.
5. Process
 - 1) It should be improved in service; it should be faster

- 2) Lack of modern technology in service
- 6. People
 - 1) Staff should be accurate in providing information to people
 - 2) Responding to the problems of the staff is less.
- 7. Physical evidence
 - 1) It should improve the sign more clearly
 - 2) It should improve the place to be clean and more modern.

Discussion

The study of the factors of decision making to use Samchuk Hospital in Suphanburi Province. Can summarize the discussion of results According to the objectives as follows

Marketing factors that affect the decision making to use Samchuk Hospital in Suphanburi province found that marketing factors in terms of products, price, place, promotion, process, people and physical evidence consistent with the research of Chantana Raknak (2011). In marketing factors affecting the decision to use the service in hospitals in Bangkok by studying in the sample group of 400 people who chose to use the hospital in Bangkok. It was found that the marketing factors affecting the decision to receive hospital services in Bangkok that is important in a high level as products, price, place, promotion, process, people and physical evidence. However, marketing factors in marketing promotion Is important in the medium level The physical factor consists of arranging the premises within the hospital. Including outside locations, convenient parking, and adequate seating places Which this factor has the highest average And have a high level of opinion In accordance with the study of Arunee Nettakun (2004) Which the sample gives importance to a high level. But different from the study of Siriwit Boriphanakul (2005) and Attanon Kamno (2010) that the sample gives moderate importance. As for the marketing promotion factors is a factor that gives a moderate level of opinion which is consistent with the results of Siriwit Boriphanakul (2005) and Piyapan Refreshing Scent (1999) that found that the sample group gives importance to the marketing factors at a moderate level.

Analysis of service quality was found that the service quality factor is reliability, understanding and sympathy in the service recipients and the fairness of service affecting the decision making to use Samchuk Hospital in Suphanburi Province. According to the research results of Somruedee Thumsurat (2011), the researcher studied the quality service factors that affect the decision to choose to use the private hospital In Bangkok. This study aims to study the relationship between Service quality factors in 5 aspects, including the tangible aspects of the reliability of the service, responding to service requirements (Responsiveness), In ensuring confidence and assurance of empathy and choosing to use the service and brand loyalty of private hospitals in Bangkok. It is found that service quality factors affecting the decision to choose to use private hospitals In Bangkok, including reliability in providing compassionate services. While service quality factors in terms of creating confidence for those who use the service in response to service needs with statistically significant at 0.05. The decision is to choose to use private hospitals in Bangkok. The objective to study marketing mixed factors service quality and health insurance of users Private Hospitals in Bangkok. The initial variable is mixed marketing, service quality and variable health insurance based on the selection of private hospitals in Bangkok. The sample

group is 400 clients of private hospitals in Bangkok. It was found that service quality factors and health insurance Influence the decision of choosing private hospitals in Bangkok. The statistical significance at 0.05.

Conclusion

This research is aimed to study the marketing factors and to analyze the quality of services that affect the decision making to use service of Samchuk Hospital in Suphanburi Province. The results of the data analysis showed that users of Samchuk Hospital in Suphanburi Province. Most of them are female, aged 41 years and over. They are married. Their education is Bachelor's degree and career is merchant.

The results of the marketing factors that affect the decision making to use Samchuk Hospital in Suphanburi Province found that in overall, the marketing factors had an effect on the selection of services in hospitals at a high level. Considering each aspect, it was found that marketing factor that affects the decision to choose the most of Samchuk Hospital hospital is physical evidence. There is a high level of opinion. And the last one is the promotion of marketing with moderate opinions

As for the results of service quality analysis that affect the decision making to use Samchuk Hospital in Suphanburi Province. It was found that the overall service quality had an effect on the selection of services in hospitals at a high level. Considering each aspect found that the quality of service that affects the selection of services in most public hospitals is reliability, followed by understanding and sympathy for service recipients and the fairness of service.

The results of service quality hypothesis testing are Reliability, Understanding and Sympathy in the service recipients and the fairness of service affecting the decision making to use the services of Samchuk Hospital in Suphanburi Province. By which the independent variable together predicted the variable according to 17.10%. By considering the Adjusted R Square value equal to 0.170, indicating that the service quality factor has at least 1 variable that can predict the decision to use the service with statistical significance level 0.05, therefore the hypothesis is accepted.

Suggestion

1. Reliability, the administrators should have training to develop staff to understand the management process and service standards. To increase skills and be an expertise.
2. Understanding and empathy in the service recipients, the administrators of Samchuk Hospital should create a corporate culture through the preparation of visions, missions, values, definitions, so that visitors use the service to feel an important part of the organization.
3. Confidence in customer value, the administrators should have more doctors or nurses who can give advice on diseases and treatments to patients.

Biography

1. Kanokkarn Klomklaw

Position: Lecturer of Department of Finance and Economics

Faculty of Business Administration and Information Technology, Rajamangala University of Technology Suvarnabhumi, Thailand

Degree: M.Econ

E-mail address: chomphu.econ@gmail.com

2. Laddawan someran

Position: Assistant Professor of Department of Management

Faculty of Business Administration and Information Technology, Rajamangala University of Technology Suvarnabhumi, Thailand

Degree: Ph.D. in management

E-mail address: noi5202@gmail.com

3. Nopmallee Taechawatchananont

Position: Lecturer of Department of Finance and Economics

Faculty of Business Administration and Information Technology, Rajamangala University of Technology Suvarnabhumi, Thailand

Degree: M.Econ

E-mail address: nopmallee@gmail.com

4. Kanokporn Pakeechai

Position: Assistant Professor of Department of Finance and Economics

Faculty of Business Administration and Information Technology, Rajamangala University of Technology Suvarnabhumi, Thailand

Degree: M.S.(Agricultural Economics)

E-mail address: kartoonake@gmail.com

Acknowledgement

The research team would like to thank Rajamangala University of Technology Suvarnabhumi. Faculty of Business Administration and Information Technology that has facilitated the use of space and tools for research studies. Thank you to Rajamangala University of Technology Suvarnabhumi Suphanburi Campus that provides cooperation in data collection. And finally, I would like to thank the executives, hospital staff and medical service users of the government hospital in Suphanburi Province that provides cooperation in data collection until this research was accomplished

Reference

Attanon Kamno. (2010). Marketing factors related to service behavior of Doi Tao Hospital. Independent research, Master of Business Administration degree Sukhothai Thammathirat Open University.

- Arunee Nettakun. (2004). Service marketing mix influencing people in choosing a private hospital In the district Chiang Rai province. Master of Business Administration Thesis Mae Fah Luang University.
- Chantana Raknak. (2011). Marketing factors affecting the decision to use hospital services in Bangkok. Independent research, Master's degree, Panyapiwat Institute of Management.
- Kalaya Wanichbancha. (2007). Statistical analysis: statistics for administration and research. Type 10. Bangkok: Chulalongkorn University Printing Press.
- Piyapan Refined Scent. (1999). Marketing mix factors affecting consumers in choosing to use private hospitals In the district Chiangmai Province. Independent research, Master of Business Administration degree Faculty of Business Administration Chiang Mai University.
- Somruedee Thammasurat. (2011). Service quality factors affecting service decision-making and brand loyalty of Private hospitals in Bangkok. Master of Business Administration Thesis. Bangkok University.
- Sirikan Kamolpiyapat. (2013). The decision to choose to use a private hospital in Bangkok. Master of Business Administration Thesis. Bangkok University.
- Siriwit Boriphanakul. (2005). Services marketing mix factors affecting foreigners in choosing to use services in Dentistry in Mueang District Chiangmai Province. Independent research, Master of Business Administration Degree Faculty of Business Administration Chiang Mai University
- W.G. Cochran. (1953). Sampling Techniques. New York: John Wiley & Sons. Inc.

JOB SATISFACTION FACTORS AND QUALITY OF WORK LIFE FACTORS AFFECTING WORK EFFICIENCY OF EMPLOYEE AT METROPOLITAN ELECTRICITY AUTHORITY, NONTBABURI

Laddawan Someran, Chonthicha Kanpakdee

noinoi5202@gmail.com, pompam122539@gmail.com

Rajamangala University of Technology Suvarnabumi,
Faculty of Business Administration and Information Technology

ABSTRACT

Human resource is thought to be the most concerned of today's competitive business. The human resources need well management, the function of human resource management in the organization. The HR functions cover recruiting, developing, and maintaining the organization human resource. Maintaining the organization human resource function receives more attention at the present time. The purpose of this research was to study the aspect relating to maintaining the organizational human resource, the specific objectives were: 1) investigate the related HR aspects concerning job satisfaction, the quality of work life, and the efficiency of work of the employees at a selected state enterprise in Thailand, and 2) investigate the factors those affected the work efficiency of the employees. The sample consisted of 83 staff members of Metropolitan Electricity Authority, Nonthaburi Province, Thailand. A questionnaire was used as an instrument in this study. The statistics used for data analysis were frequency, percentage, mean, standard deviation and stepwise multiple regression analysis. The significance level was set at 0.05. The results were that the employees expressed high levels of opinion toward the job satisfaction, quality of work life situation, and work efficiency. The hypothesis testing showed that job satisfaction factor consisted of employee engagement aspect influenced work efficiency. It can predict the work efficiency of employees up to 16 percent. The quality of work life factors consisted of opportunity for growth and developing ability aspect influenced work efficiency. It can predict the work efficiency of employees up to 69 percent.

Keywords: Job satisfaction, Quality of work life, Work efficiency

INTRODUCTION

Human resource is the primary requirement of any organization, it is the valuable assess of the organization. Good human resource will yield the most benefit and success to the organization. The management needs to pay close attention to human resource management, specifically maintaining the human resources. Maintaining the human resource covers different activities such as taking care of the good working process, facilities and work environment that that affect the life quality of the employees. Apart from the salary, stipends benefits, human right of the employees is also the concern of maintaining the employees as well. When the employees are not happy it could cause waves of dissatisfaction and later become ineffective production. Good environment, right attitude toward employees, good hygiene at work these could reduce absentee taking time off or event resign. The management needs to understand and be aware of the needs and expectations of the employees, balancing the gap between the organization needs and expectations and the employees need. The efficiency of an organization depends on the cooperation collaboration in work of the employees to work toward the set goal, having sense of belonging being proud of the fame of the organization. The efficiency of work can be achieved depends on the quality of the employees, while the quality of the employees depends on the quality of life of the employees. It is the facts that today work employment has continued changing, the high performed employees always have opportunity for getting better pay. It is the duty of the HR manager and the organization management to maintain the employees as well as possible.

In any organization, it is the ultimate goal that the organization performs at the highest efficiency. To achieve the goal, the

human resource – the employees is the key to the success. It is believed that taking care of them well, they will take care of the organization. With this believe the researcher wanted to examine the employees' job satisfaction, the quality of work life and the work efficiency.

RESEARCH OBJECTIVES

1. To investigate the related HR aspects concerning job satisfaction, the quality of work life, and the efficiency of work of the employees at a selected state enterprise in Thailand
2. To investigate the factors those affected the work efficiency of the employees.

RESEARCH HYPOTHESES

The researchers have hypothesized that:

1. There is at least one factor of work satisfaction that can predict the work efficiency of the employees.
2. There is at least one factor of work life quality that can predict the work efficiency of the employees.

RESEARCH METHOD

The researcher has employed a quantitative survey method for studying with the following details:

Population and sample

The population was 111 employees at Metropolitan Electricity Authority, Nonthaburi, a state enterprise of Thailand. The sample consisted of 83 employees from the above population; the sample size was determined by Krejcie and Morgan table (Krejcie & Morgan, 1970). They were selected through stratified random sampling according to their work position.

Research tool

The researchers have used questionnaires for data collection. The questionnaire consisted of 4 sections: The first section was about the demographic data of the respondents, the second section concerning job satisfaction, the third section was about the quality of the work life and the fourth section was on the efficiency of work. The questionnaire was a five scales rating question where 5 in the scale represented most agree, 4 in the scale represented agree, 3 in the scale represented neutral, while 2 in the scale represented disagree, and 1 in the scale represented totally disagree. 4. The researchers have set the score ranges for the interpreting the result of the data analysis as follows: 4.50-5.00 = Most agree, 3.50-4.59 = Agree, 2.50-3.49 = Neutral, 1.50-2.49 = Not agree, and 1.00-1.49= totally not agree. The researchers have validated the quality of the question items concerning the construct validity through the IOC (Objective Congruency Index). The index showed that all question items possessed the index scores higher than .50 which meant the question items have high construct validity. Concerning the reliability of the question items, the Cronbach's Alpha Coefficient was used to determine the reliability; the reliability of the whole questionnaire was at .86 which confirmed that the questionnaire was valid and reliable.

Data analysis

The collected data were analyzed by:

1. Descriptive statistics: frequency, percentage, mean and standard deviation.
2. Inferential statistics for testing the hypotheses: the multiple regression analysis

THE RESEARCH RESULTS

The researchers have reported the results accordingly to the research objectives and research hypotheses as follows:

1) The demographic data of the respondents

The questionnaire respondents were mostly females, 56 persons, accounted for 65.11 percent. Most of the respondents were 41-50 years old accounted for 50 percent of the respondents. Seventy of them, 83.70 percent possessed bachelor's degree of education. Forty persons or 50 percent of them earned more than 1,300 USD a month. Twenty- three of them, 33.07 percent have worked more than 20 years.

1.1) Work Satisfaction

The work satisfaction in overall was at a high level, $\bar{x}=4.39$, $SD=0.41$. When considered each individual factor it was found that the pride of the employees toward the organization was ranked first at a high level, $\bar{x}=4.53$, $SD=0.93$, the second was the organization commitment, $\bar{x}=4.42$, $SD=0.92$, the last was the organization participation, $\bar{x}=4.23$, $SD=0.98$.

1.2) Work-Life Quality

The work life quality in overall was rated at high level, $\bar{x}=4.13$, $SD=0.43$. When considered each individual aspect it was found that working in a safe environment was ranked first, $\bar{x}=4.31$, $SD=0.50$, followed by the balancing of life and family, $\bar{x}=4.19$, $SD=0.62$, the opportunity for growth and self-development was ranked third, $\bar{x}=4.06$, $SD=0.55$, while the last one was getting the fair and justice reward, $\bar{x}=4.00$, $SD=0.71$.

1.3) Work Efficiency

The work efficiency in overall was rated at the high level, $\bar{x}=4.28$, $SD=0.54$. When considered each individual aspect it was found that the amount of workload was ranked first, $\bar{x}=4.30$, $SD=0.61$, the speed of work was the second, $\bar{x}=4.25$, $SD=0.61$. The work quality was ranked the last, $\bar{x}=4.24$, $SD=0.65$.

1.4) The Hypotheses Testing Results

The researchers have validated the assumption for the linear multiple regression analysis as follows:

1. The average of errors was at zero.
2. The validating of linearity, it was found that all the independent variables had no interrelationship, with the tolerance value between 0.553-0.662 which is higher than 0.10, while the Variance Inflation Factor (VIF) was between 1.510-1.808 which is lower than 10, meaning that there was no effect of the multicollinearity or no interrelationship among the independent variables.
3. The validating of the independence of the errors, the correlation among the independent variables was between 0.48-0.59 (r was less than 0.80), it was found that all the pairs had no correlation exceed 0.80, meaning that the independent variables did not have the problem of multicollinearity.
4. The errors were independent, considered from the Durbin-Watson value of 2.273 which was between 1.50- 2.50, meaning that the errors among the variables were independent.
5. It was concluded that the data fit the assumption criteria then the researcher continue to analyze the collected data.

Table 1: The analysis results on the factor of job satisfaction those affected the work efficiency

Factors of job satisfaction	Work efficiency			t	p
	B	SE	β		
Constant (a)	2.24	0.48	-	4.60**	0.00
Employee's royalty toward the organization	0.41	0.10	0.45	4.19**	0.00
Adjust R Square = 0.163 R = 0.416 R Square = 0.173 Durbin-Watson = 2.273					

*p < .05, **p < .01

From table1, it was found that job satisfaction factor on the royalty towards the organization of the employees had effect on the efficiency of working of the employees at Metropolitan Electricity Authority, Nonthaburi. The job satisfaction factor can predict the work efficiency up to 17.30 percent. Considered from the R square value of 0.173 which meant there is at least one variable of the job satisfaction that can predict the work efficiency at the significance level of 0.05. The hypothesis is therefore accepted.

Table 2: The analysis results on the factor of the work-life quality those affected the work efficiency

Factors of work-life quality	Work efficiency			t	p
	B	SE	β		
Constant(a)	3.17	0.42	-	7.51*	0.00
Opportunity for growth and self-development	0.27	0.10	0.27	2.61**	0.01
Adjust R Square = 0.064 R = 0.274 R Square = 0.075 Durbin-Watson = 2.245					

*p < .05, **p < .01

From table2, it was found that the work-life quality factor on opportunity for growth and self-development had effect on work efficiency of the employees at the Metropolitan Electricity Authority, Nonthaburi Thailand. The factor on opportunity for growth and self-development can predict the work efficiency up to 7.50. Considered from the R square value of 0.075. This meant that there is at least one variable of the work-life factor that can predict the work quality at the significance value of 0.05, accepting the set hypothesis.

DISCUSSIONS

1. In this study, the work efficiency can be predicted by different factors. One factor is the work satisfaction concerning the employees' royalty. The result of the study was supported by the study of Jitthiang (2010) indicating that work

satisfaction such as type of work, work recognition, work progress and the stability of job can predict the work efficiency up to 27.20 with the significance level of 0.05. The result was also confirmed by the study of Kongphikul (1994) that the work satisfaction has high positive correlation with organization royalty with the statistical significant level at 0.01. These could be from the fact that the Metropolitan Electricity Authority, Nonthaburi, Thailand is the semi-state own organization that is considered the lucrative business organization that everyone in Thailand is willing to work for. It provides well welfares, bonuses this could cause the sense of royalty in the employees. At the same time the healthy wealth may cause the employees feel satisfied of their job causing the efficiency in working.

2. The factors in work-life quality. This finding was supported by the study of Methathammasan (2006) that indicated that the work-life quality consisted of 6 aspects, they were; fair rewarding, safety of work, opportunity for progress and development, social acceptance, freedom at work, and balance between work life and family life.

RECOMMENDATIONS

1. The results from the study suggested that job satisfaction affected the work efficiency as the human resource perspective providing the employees satisfaction, specifically in working condition may help maintaining the employee at the same time it helps raising the organization effectiveness as well as the organization efficiency.
2. The employees' royalty can raise the work efficiency; it is recommended that making the employees royal to the organization is one of the approaches to raise the organization efficiency; in turn it will promote the organization competitive advantage.
3. The work-life quality is also the factor that helps promoting the organization efficiency through the employee's work efficiency. The management of any organization should pay more attention to this aspect, specifically the country that develop its economy from the agricultural economy like Thailand that the old generations of the employees were used to work by their own condition while the new generation have different experience and different expectation. The managing of the employees under the human resource management has to comply with this fact.

BIOGRAPHY

1. Mrs. Laddawan Someran (PhD.), Assistant Professor in Management, She was born on April 14, 1977 in Chiangmai province, Thailand. She received her Doctoral Degree in Human Resource Development from Burapha University in 2012. She served in position of lecturer at Faculty of Business Administration and Information Technology, Rajamangala University of Technology Suvarnabumi, in 2000.
2. Chonthicha Kanpakdee. She was born on December 12, 1996 in Suphanburi province, Thailand. She is studying in Management Department at Faculty of Business Administration and Information Technology, Rajamangala University of Technology Suvarnabumi, in 2015.

REFERENCES

- Vanichbancha, Kallaya (2007) Statistical Analysis: Statistics for Management and Research, 10 Ed, Chulalongkorn Publishing, Bangkok, Thailand.
- Methathammasan, Phusanisa (2006) The Work-Life Quality of the Pilots at Thai Air Asia, thesis, Kasessart University, Thailand.
- Sena,Wannapa(2001) The Life quality Development of the Manufacturing Line Employees of Beavigem Factory LTD, thesis, Ramkamheang University, Thailand.
- Jitthiang, Sureeporn (2010) Job Satisfaction and Organization Royalty of the employees of the CAT Telecom Public Company Limited), thesis, Krirk University, Thailand.
- Kongphikul (1994) The Relationship between Job Satisfaction and Organizational Royalty of Mathayomsuksa School Teachers at Petchaboon Province, thesis, Srinakarintarawirod Prasarnmitr, Thailand.
- Tirakanoon, Suwimon (2011) Research Methods for Social Sciences: Guide for Practice, 8 Ed. Chulalongkorn Publishing, Bangkok, Thailand.

Cost strategies possible to implement in insurance company

Magdalena Chmielowiec-Lewczuk

Wroclaw University of Economics

Department of Insurance

magdalena.chmielowiec-lewczuk@ue.wroc.pl

The purpose of the present paper is to present various kinds of cost strategies implementable in the insurance company in changing market conditions. In order to attain the main goal such research methods as literature analysis, cause and effect analysis and deduction method have been used. The determinants of the latter-day insurance market having the greatest influence on the insurance company costs are: a new system of insurance supervision, functioning of financial groups, new type of insurance risks, new distribution channels, financial markets and new financial instruments and the rest (services of indemnity chancellery, changes to social awareness and client requirements, increased competitiveness resulting in paying more attention to service quality on the part of the insurer).

Cost management process in the insurance company can be designed in various ways in accordance with the chief objective the process is to serve. Here are three most common situations: cost management is subordinated to finance management, cost management is correlated with implementation of kaizen (continuous improvement process) based on activity management, cost management is part of value-based management process. The choice of a strategy enables a precise definition what is objective achievement index of cost management whether a defined cost level, profitability or some other parameter whose achievement should guarantee achievement of the aims set by the insurer.

In the case of insurance companies it is easy to distinguish basic cost strategies depending on: cost reduction/cost optimization, profitability, pricing policy, insurance risk, financial liquidity and capital cost minimization.

Characterization of the aforementioned cost strategies is presented by way of indicating purposes their implementation is to serve. As a result instruments are obtained, which are used to achieve these goals. Issues to do with cost management have been very popular for years. However, the presence of these questions in business activity of insurance companies is caused by the specific way in which they operate.

Key words: insurance company, cost management, cost strategy

JEL codes: G22, M41

The factor affecting on decision making to rent dormitories of students Case study: Rajamangala University of Technology Suvarnabhumi, Suphanburi Campus

Nopmallee Taechawatchananont, Laddawan someran, Kanokporn Pakeechai

Faculty of Business Administration and Information Technology, Rajamangala University of Technology Suvarnabhumi, 19 U-Thong Rd. Phranakhon Si Ayutthaya, 13000, Thailand.

nopmallee@gmail.com , noinoi5202@gmail.com, kartoonake@gmail.com

Abstract

The study has the following objectives. For Study, the Factor affecting on decision making to rent dormitories of students, Case study: Rajamangala University of Technology Suvarnabhumi, Suphanburi Campus. It obtained the used sample size to collect all 356 people. There are students of Rajamangala University of Technology Suvarnabhumi, Suphanburi Campus by using accidental random methods. The researcher used the statistical software program as follows: Frequency, Percentage, Mean, Standard Deviation and Stepwise multiple regression analysis.

From the results of the study found that most respondents are female. Their ages are between 21-22 years old. They are the second-year students at Faculty of Business Administration and Information Technology. Their Parents' income is between 10,001 - 20,000 baht and most of the students have rented dormitories.

The hypothesis test of Internal factor found that Dormitory design Maintenance and the surrounding environment can predicted the decision to rent dormitory of students was at 24.30 percent and Adjust R square equal .493.

The hypothesis test of External factor found that Neighborhood and Residential preference in the accommodation can predict the decision to rent dormitory of students was at 26.60 percent and Adjust R square equal .515.

Key words: Decision Making, External Environment, Internal Environment

Introduction

At present, the dormitory is a real estate business that is receiving a lot of attention for investors. Particularly, the student dormitory business is being interested because it is simple if the owners manage to have a good service, so customers are impressed and feel satisfied with their living. Thus, it

will be successful. Therefore many people are interested in creating a student dormitory to make it easier for students to travel and save travel time for some students who live far from the place. Investors look for ways to do business that generates long-term profits.

At present, most students have to rent the dormitories which are located around the university. Dormitories at Rajamangala University of Technology Suvarnabhumi, Suphanburi campus are initially held by villagers near the university only. In addition, the dormitory business is likely to create other new dormitories because of increasing demand. Now, there are many players in the market and it creates competitiveness in this business.

In order to know the factors that affecting on decision making to rent dormitories of students of Rajamangala University of Technology Suvarnabhumi, Suphanburi Campus will definitely help us to know various factors which affect the decision to choose to use dormitory services for students' needs. The results from the research can be used as a guideline for the improvement and development of the building as well as the environment in the dormitory in order to stimulate students and parents' satisfaction. Additionally, the results can be used as a component in deciding to rent a dormitory to students who are likely to rent dormitories.

Research objectives

For study the Factor affecting on decision making to rent dormitories of students Case study: Rajamangala University of Technology Suvarnabhumi, Suphanburi Campus

Research hypothesis

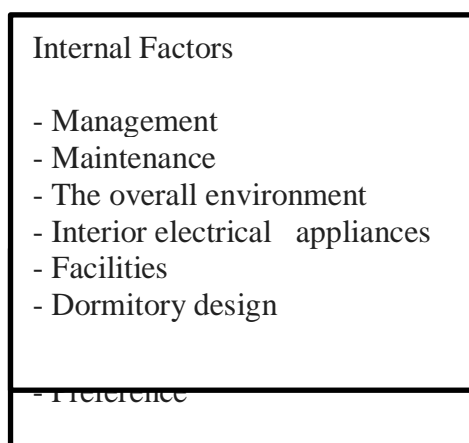
1. At least one internal factor affecting on decision making to rent dormitories of students Case study: Rajamangala University of Technology Suvarnabhumi, Suphanburi Campus.

2. At least one external factor affecting on decision making to rent dormitories of students Case study: Rajamangala University of Technology Suvarnabhumi, Suphanburi Campus.

Conceptual Framework

Independent Variables

Variable



Methodology

Population and Sample

The population; the students who do not rent dormitories and the students who rent dormitories, near Rajamangala University of Technology Suvarnabhumi, Suphanburi Campus, a total of 3,200 people (Registration Office Rajamangala University of Technology Suvarnabhumi, Suphanburi Campus, 20 February 2018)

The used samples in random sampling; the students who do not rent a dormitory and the students who rent a dormitory, near Rajamangala University of Technology Suvarnabhumi, Suphanburi

Campus by using accidental random methods with the formula to determine the sample group of Taro Yamane. It obtained the used sample size to collect all 356 people.

Instrument

The tool used to collect this information is the questionnaire divided into 4 parts as follows;

Part 1 Questionnaire about personal factors.

Part 2 Questionnaire about internal factors.

Part 3 Questionnaire about external factors.

Part 4 Questionnaire about the decision to rent a student dormitory.

Data collection

The researcher collected data from 2 types of data sources as follows;

1. Primary data is the collected data from the questionnaire

2. Secondary data is information that collects information from books, texts, research articles and related internet information.

Data analysis

The researcher used the questionnaire from the sample group to collect and process using statistical software program as follows;

1. Descriptive Statistic: Frequency, Percentage, Mean and Standard Deviation

2. Inference Statistics: Stepwise Multiple Regression Analysis.

General information of respondents

Most respondents were female, 213 people who represent for 59.83 percent. Age between 21-22 years, they are 228 people representing 64.04 percent. They are the second-year students, 106 people representing 29.78 percent in the Faculty of Business Administration and Information Technology equal 208 people, representing a percentage 58.43. Parent's income between 10,001-20,000 baht, 123 persons which are representing 34.55 percent.

The analysis of opinion level

The level of opinions about the internal factors as a whole is at a high level ($\bar{x} = 3.91$, $SD = 0.34$). The highest opinion level is the surrounding environment ($\bar{x} = 4.03$, $SD = 0.55$), followed by the electrical appliances in the room ($\bar{x} = 3.93$, $SD = 0.52$) and the lowest level of opinion is the management ($\bar{x} = 3.80$, $SD = 0.57$)

The level of opinion about external factors, overall, it was at a high level ($\bar{x} = 4.07$, $SD = 0.47$). The highest level of opinion was in the neighborhood ($\bar{x} = 4.08$, $SD = 0.58$) and the lowest level of opinion was the aspect of Living preferences ($\bar{x} = 4.07$, $SD = 0.56$)

The overall level of opinion on the decision to rent a dormitory was at a high level ($\bar{x} = 4.00$, $SD = 0.62$) when it is considered individually. It was found that the most opinion level was "I am willing to rent a dormitory" ($\bar{x} = 4.08$, $SD = 0.77$) Next is "if I am satisfied with the dormitory rental" ($\bar{x} = 4.04$, $SD = 0.81$). The least opinion level is that "I think renting an apartment is suitable for me" ($\bar{x} = 3.88$, $SD = 0.82$)

Hypothesis Test Results

In testing hypotheses: The researcher examined the properties of variables that were suitable for multiple regression analysis using Pearson's Correlation Coefficient to avoid the relationship between the independent variable is too high. It may cause a Multicollinearity problem.

And from testing the correlation coefficients between internal factors such as management Maintenance, The surrounding environment, Electrical appliances in the room and Facilities Dormitory and design. There is a value between 0.03 - 0.43 which is not greater than 0.8. The indicating that the relationship of independent variables does not cause Multicollinearity problems. Therefore, it can be used to test the hypothesis by multiple regression analysis (Multiple Regression Analysis).

Table 1: Analysis of internal factors affecting the decision of student to rent a dormitory

Internal factors	DECISION OF STUDENT TO RENT A DORMITORY			t	p - value
	Regression coefficient				
	(b)	(B β)	Standard error		
Constant (a)	1.23		0.27	4.60	0.00
1. Dormitory design	0.31	0.31	0.05	6.34*	0.00
2. Maintenance	0.23	0.21	0.06	4.04*	0.00
3. The surrounding environment	0.16	0.14	0.06	2.63*	0.01
R = .493	R2 = .243		SE. est. = .5410		

*p < .05, **p < .01

From Table 1, it was found that the multiple correlation coefficients (R) of the two independent variables and the dependent variable were 493, predictive error value, SE. Est., Equal to .5410 and found that the coefficient Multiple regression (b) of independent variables including constants with statistically significant at 0.05. When applying various statistics to create predictive equations, The best predictors of factors affecting the decision to rent dormitory of Rajamangala University of Technology Suvarnabhumi are as follows:

$$\hat{Y} = 1.23 + 0.31(A_6) + 0.23(A_2) + 0.16(A_3) + 0.5410$$

Or write in the standard score

$$ZY = 0.31ZA_6 + 0.23ZA_2 + 0.16ZA_3$$

According to the analysis of data and the use of various statistical values to create predictive equations Dormitory design Maintenance and the surrounding environment can predicted the decision to rent dormitory of Rajamangala University of Technology Suvarnabhumi students at 24.30 percent.

Moreover, the results showed that the design of Dormitory can predict the decision to rent dormitory of Rajamangala University of Technology Suvarnabhumi is 31 percent of students. The maintenance can predict the decision to rent dormitory of students of Rajamangala University of Technology Suvarnabhumi at 21.00 percent. The surrounding environment can predict the decision to rent dormitory of Rajamangala University of Technology Suvarnabhumi of students at 14.00%

From the test of the correlation coefficient between the external variable factors consisting of neighborhoods, the preference of living in the accommodation is 0.32, which is not greater than 0.8. It means the indicating relationship of independent variables does not cause Multicollinearity problems. Therefore, it can be used to test hypotheses with multiple regression analysis (as shown in Table 2).

Table 2: Analysis of external factors affecting the decision to rent a student dormitory

External factors	DECISION OF STUDENT TO RENT A DORMITORY		t	p - value
	Coefficient Regression	Standard Error		

	(b)	(β)			
	1.20		0.25	4.82	0.00
constant (a)					
1. Neighborhood (B1)	0.36	0.33	0.05	6.82*	0.00
2. Residential preference in the accommodation (B2)	0.33	0.31	0.05	6.36*	0.00
R= .515	R2 = .266	SE. est. = .5323			

*p < .05, **p < .01

From Table 2, it was found that the multiple correlation coefficients (R) of the two independent variables and the dependent variables were .515, predictive error values, SE. Est. Multiple regression (b) of independent variables, including statistically significant constants 0.05 when applying various statistical values to create predictive equations. The best predictors of factors affecting the decision to rent dormitory of Rajamangala University of Technology Suvarnabhumi are as follows:

$$\hat{Y} = 1.20 + 0.36(B1) + 0.36(B2) + 0.5323$$

Or write in the standard score

$$ZY = 0.33ZB1 + 0.31ZB2$$

According to the analysis of data and the use of various statistical values to create predictive equations. Neighborhood and Residential preference in the accommodation can predict the decision to rent dormitory of Rajamangala University of Technology Suvarnabhumi of students was at 26.60 percent. Additionally, the results showed that Neighborhood can predict the decision to rent dormitory of Rajamangala University of Technology Suvarnabhumi of students was at a percentage of 33.00. Residential preference in the accommodation can predict the decision to rent dormitory of Rajamangala University of Technology Suvarnabhumi of students was at 31.00 percent.

Discussion

Hypothesis 1: At least one internal factor affecting the decision to rent a student dormitory. Case study of Rajamangala University of Technology Suvarnabhumi Suphanburi Campus, the results showed that internal factors were Environmental aspects, Maintenance and The design of dormitory. They affect the decision to rent a student dormitory. Case study of Rajamangala University of Technology Suvarnabhumi Suphanburi Campus Which can be described as follows.

In the surrounding environment side, it influences the decision to rent a student dormitory. Case study of Rajamangala University of Technology Suvarnabhumi, Suphanburi Campus corresponds to the study of Pawin Piromthong (2015) who studied the factors that have a positive influence on the decision to rent an apartment in Bangkok. It was found that the surrounding environment had a positive influence on the decision to rent an apartment for consumers in Bangkok, including facilities that are located within the dormitory, allowing respondents to decide to rent a dormitory.

Maintenance aspect influences the decision to rent a student dormitory. Case study of Rajamangala University of Technology Suvarnabhumi Suphanburi Center corresponds to the study of Pawin Piromthong (2015) who studied the factors that have a positive influence on the decision to rent an apartment in Bangkok. It was found that maintenance had a positive influence on the decision to rent an apartment for consumers in Bangkok in case to prevent frequent damages is something that the tenant needs in renting a dormitory.

The design of dormitory influenced the decision to rent a student dormitory. Case study of Rajamangala University of Technology Suvarnabhumi Suphanburi Campus corresponds to the study of Pawin Piromthong (2015) who studied the factors that have a positive influence on the decision to rent

an apartment in Bangkok. It was found that the dormitory design had a positive influence on the decision to rent an apartment for consumers in Bangkok. The location of the dormitory makes it easier for the tenant to make up one mind. The enough of ventilation is an important point of choosing to rent a dormitory. Most of dormitory tenants will look at the beauty and comfort as the beginning.

Hypothesis 2: At least 1 external factor affecting the decision to rent a student dormitory, Case study of Rajamangala University of Technology Suvarnabhumi Suphanburi Campus. The study indicated that External factors include Neighborhood and the residential preferences for the decision to rent a student dormitory. Case study of Rajamangala University of Technology Suvarnabhumi Suphanburi Center Which can be described as follows:

The neighborhoods influence the decision to rent a student dormitory. Case study of Rajamangala University of Technology Suvarnabhumi, Suphanburi Campus corresponds to the study of Pawin Piromthong (2015) who studied the factors that have a positive influence on the decision to rent an apartment in Bangkok. It was found that the dormitory design had a positive influence on the decision to rent an apartment in Bangkok. The neighborhood has an influence on the student dormitory business plan near Mae Fah Luang University, Chiang Rai province. This is because the respondents agreed that choosing to rent a dormitory must consider safety as an important issue. The tenant therefore places importance on the neighborhood as the first issue. If the dormitory does not have a crime, plenty of convenience stores, not too noisy. The tenant will be satisfied and decide to rent the dormitory more easily.

Regarding to the living preferences of the decision to rent a student dormitory on case study of Rajamangala University of Technology Suvarnabhumi, Suphanburi Campus corresponds to the study of Pawin Piromthong (2015) who studied the factors that have a positive influence on the decision to rent an apartment in Bangkok. It was found that the preference of living had a positive influence on the decision to rent an apartment in Bangkok. The rooms are entirely in the area that the tenant wants, including viewing the surrounding elements as well such as the surrounding environment, safety together, allowing the tenant to choose and decide to rent a dormitory. Therefore is an important point in choosing to rent a dormitory. Most dormitory tenants will look at the beauty and comfort as the beginning.

Conclusion

The study has the following objectives. For Study, the Factor affecting on decision making to rent dormitories of students, Case study: Rajamangala University of Technology Suvarnabhumi, Suphanburi Campus.

The hypothesis test of Internal factor found that Dormitory design Maintenance and the surrounding environment can predicted the decision to rent dormitory of students was at 24.30 percent and Adjust R square equal .493.

The hypothesis test of External factor found that Neighborhood and Residential preference in the accommodation can predict the decision to rent dormitory of students was at 26.60 percent and Adjust R square equal .515.

Recommendations

1. Maintenance of dormitory business owners should be supervised continuously. Equipment should be repaired to prevent damage in order to facilitate dormitory tenants
2. Facilities for dormitory owners should have space for dormitory tenants to have a place to relax or public areas, using other benefits such as seating for work, etc.
3. The design of the dormitory should be in the design of the dormitory to have a well-ventilated layout and adequate lighting
4. The neighborhood should build a dormitory in the community area, suitable for travel and daily life, with safety and no criminal record

5. The inclination to rent dormitory should allow the room to be airy and have enough space to relax, including the appearance of the room

Biography

5. Nopmallee Taechawatchananont

Position: Lecturer of Department of Finance and Economics

Faculty of Business Administration and Information Technology, Rajamangala University of Technology Suvarnabhumi, Thailand

Degree: M.Econ

E-mail address: nopmallee@gmail.com

6. Laddawan someran

Position: Assistant Professor of Department of Management

Faculty of Business Administration and Information Technology, Rajamangala University of Technology Suvarnabhumi, Thailand

Degree: Ph.D. in management

E-mail address: noinoi5202@gmail.com

7. Kanokporn Pakeechai

Position: Assistant Professor of Department of Finance and Economics

Faculty of Business Administration and Information Technology, Rajamangala University of Technology Suvarnabhumi, Thailand

Degree: M.S.(Agricultural Economics)

E-mail address: kartoonake@gmail.com

Acknowledgement

The research team would like to thank Rajamangala University of Technology Suvarnabhumi. Faculty of Business Administration and Information Technology that has facilitated the use of space and tools for research studies. Thank you to Rajamangala University of Technology Suvarnabhumi Suphanburi Campus that provides cooperation in data collection. And finally, thank you to everyone and all agencies that have made this research a success.

Reference

Chusriwong Ratana (1998) Techniques in statistics for research. 7th edition,

Bangkok: Chulalongkorn University Book Center, Bangkok, Thailand.

Fontip Wongsuphachartkun (2015) Factor Effecting Decision on Room Rental in Bangkok

Metropolitan Region, thesis, Thammasat University, Thailand

Pavin Piromthong (2015) Factor Positively Impacting Decision to

Rent Apartments of Consumers in Bangkok, thesis, Bangkok University, Thailand.

Registration Office Rajamangala University of Technology Suvarnabhumi,

Suphanburi. Campus, 20 February 2018

Tirakanon, Suwimon (2011) Research Methods for Social Sciences: Guide for

Practice, 8 Ed. Chulalongkorn Publishing, Bangkok, Thailand.

Vanichbancha, Kallaya (2007) Statistical Analysis: Statistics for Management

and Research, 10 Ed, Chulalongkorn Publishing, Bangkok, Thailand.

Influencing factors affect the loyalty of using services of Agriculture cooperative customers at Don Chedi branch Suphanburi Province

Sasinan Sastsara, Laddawan someran ,Nopmallee Taechawatchananont,Kanokwan Opartphinit

Faculty of Business Administration and Information Technology, Rajamangala University of
Technology Suvarnabhumi, 19 U-Thong Rd. Phranakhon Si Ayutthaya, 13000,Thailand.

sasinan.ann@gmail.com,noinoi5202@gmail.com,nopmallee@gmail.com,
Kanokwan.Opasphi@gmail.com

ABSTRACT

The objective of this research is to study Influencing factors affect the loyalty of using services of Agriculture cooperative customers at Don Chedi branch Suphanburi Province. The sample group is agricultural cooperative members of 359 from Don Chedi Branches using questionnaires as a research

tool. The statistics are used in data analysis were frequency, percentage, mean, standard deviation and stepwise multiple regression coefficients with significance at level 0.05. The results of the data analysis showed that the respondents had opinions about the organizational image factors. Service quality factors and loyalty to agricultural cooperatives at a high level of the hypothesis testing found that the organizational image factor was the access to the service. Personal and reputation services had an influence in forecasting loyalty to agricultural cooperatives by 57.50 percent. The service quality factor is the concrete aspect of the service and knowing and approaching 50.60 percent of the influence in forecasting loyalty to agricultural cooperatives.

Keywords: Organizational image, Service quality, Service quality

INTRODUCTION

Loyalty can be regarded as a deep commitment of customers that will provide constant support for products or services. In addition, being involved with customer buying behavior also relates to the customer's attitude towards products and services. If customers have a good attitude towards products and services and have a long-term good relationship between customers and organizations. It will be a result in repeated buying behavior. (Natthanon Chokrasiri Siri, 2015)

Brand loyalty and customer loyalty are a contract or obligation to return to buy or support products or services in the future. Aaker (2009) It is said that most research found that loyalty is an important aspect of business marketing activities. And the study of Bowen and Shoemaker (2003) shows that customer loyalty can make customers return to buy products in the service business. If the business is able to maintain the customer base by 5%, the business will receive 25-100% more profit. Therefore, loyalty is considered that is important to the make marketing activities of every organization. Both public and private sectors, including other organizations established such as cooperatives

Agricultural cooperatives are business organizations established by the integration of farmers with the objective to solve the problems in the capital of production Sales and Helping to improve the status of farmers who are members better than before. Therefore, agricultural cooperatives have a duty to promote production in order to increase income, including farmers who are members and to follow the said duties. Agricultural cooperatives therefore operate Various aspects are agricultural credit, depository, procurement of products, tools and agricultural equipment for sale to members, including the collection of members' products, selling or processing, agricultural promotion and other services that are beneficial to the cultivation of members.

Today, the cooperative movement is considered as a part of the economic structure of Thailand, especially in the rural economy and is generally accepted that the cooperative system is a good and appropriate system to help solve the economic and social problems of farmers. But the operation of the cooperative will achieve its objectives. There are various factors, which are several factors. The important factor is that the cooperative must have money. Theme sufficient funds are efficiently coupled with good management.

The capital of the cooperative is mostly derived from the capital, shares of the members, borrowing from various sources, and the return from the cooperative operations. But due to the competition in selling consumer products is highly competitive in Agricultural cooperative Don Chedi Branch Suphanburi Province. Having problems with the resignation of many agricultural cooperative members Statistics of resignation during August - November 2018, an average of about 250 people per month)Suphan Buri Cooperative Auditing Office, 2018(

For the above reasons, the researcher considers that the study of Factors influencing loyalty in using services of agricultural cooperative customers Don Chedi Branch Suphanburi Province will be beneficial to the organization in creating loyalty of customers using agricultural cooperative services

Research objectives

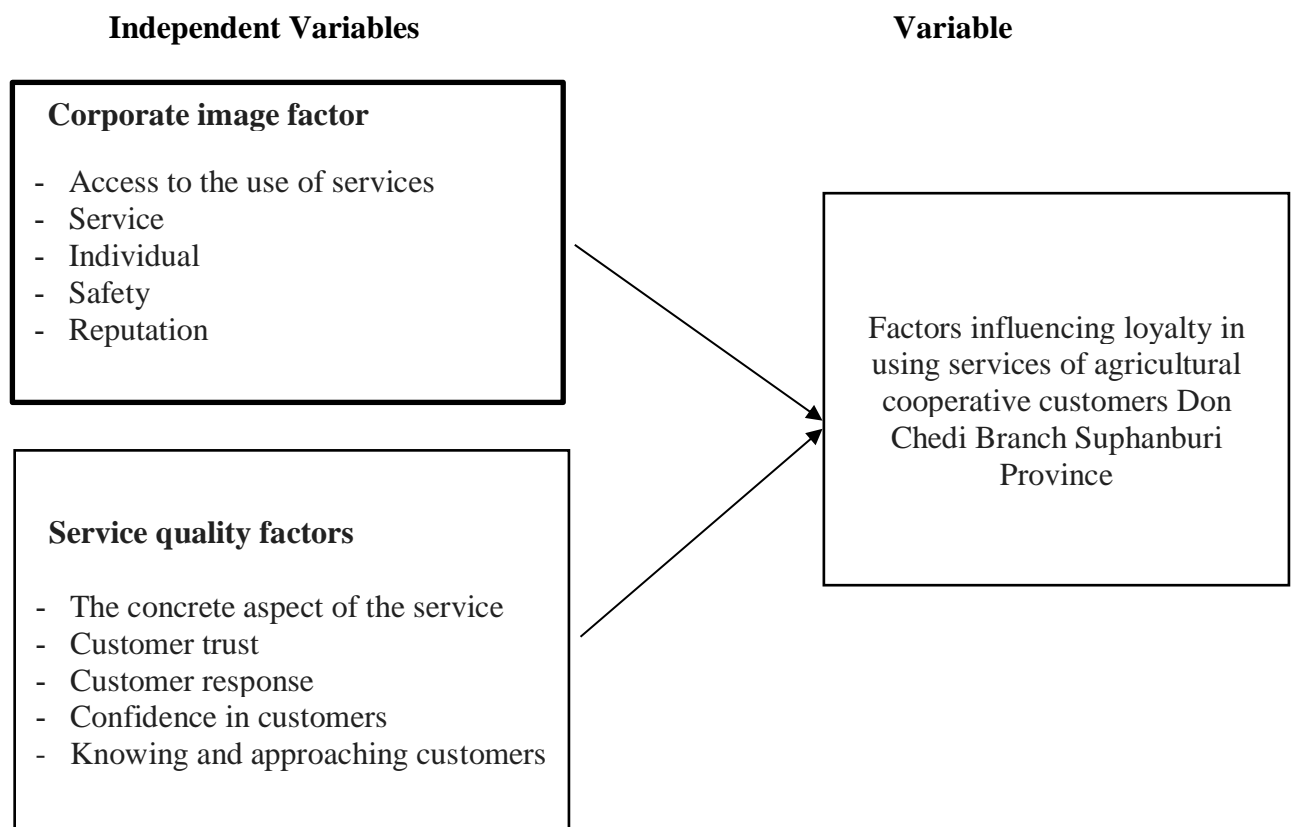
1. To study the level of opinion of corporate image factors Quality factor And loyalty in using the services of agricultural cooperative customers Don Chedi Branch Suphanburi Province
2. To study the factors that influence loyalty in using the services of agricultural cooperative customers Don Chedi Branch Suphanburi Province

Research hypothesis

Hypothesis 1 Factors of the organization's image Influence the loyalty of agricultural cooperative customers Don Chedi Branch Suphanburi Province

Hypothesis 2, service quality factors Influence the loyalty of agricultural cooperative customers Don Chedi Branch Suphanburi Province

CONCEPTUAL FRAMEWORK



Picture 1 Conceptual framework

RESEARCH METHOD

The researcher has employed a quantitative survey method for studying with the following details:

Population and sample

Population used in this research Namely those who are members of agricultural cooperatives The number of 3,123 people in Don Chedi branch was calculated and the sample size was calculated by using the formula to find the sample size of Yamane at the level of error of 5 percent. It obtained the used sample size to collect all 356 people.

Research tool

This study uses questionnaires. (Questionnaires) is a tool for data collection which the researcher has created according to the guidelines of the research objectives to inquire the sample used in the study The details of the questionnaire are divided into 2 parts as follows.

Part 1 Questionnaire about general information of members of agricultural cooperatives Don Chedi Branch The questionnaire is a Check-List consisting of sex, age, education, income and frequency of using agricultural cooperatives in 5 items.

Part 2 Questionnaire is about factors influencing loyalty of agricultural cooperative members Don Chedi Branch is the image of the organization Service quality In the consumer's perspective, it is divided into 2 parts as follows:

2.1 The image of the organization of agricultural cooperative users influencing loyalty to members of agricultural cooperatives

2.2 The quality of service of agricultural cooperative users influencing loyalty to members of agricultural cooperatives

Data collection

1. Primary data sources can be obtained from distributing the questionnaires to the sample group by specifying 359 samples. Complete the validation of the questionnaire to analyze the data according to the next step.

2. Secondary data sources)secondary data(obtained from the study and research from publications, theses, research papers in Thailand and abroad, textbooks and related electronic media.

Data analysis

The collected data were analyzed by:

1. Descriptive statistics: frequency, percentage, mean and standard deviation.
2. Inferential statistics for testing the hypotheses: the multiple regression analysis

THE RESEARCH RESULTS

The researchers have reported the results accordingly to the research objectives and research hypotheses as follows:

1. The demographic data of the respondents

Most of the respondents were female, 192 people, representing 53.50 percent, with the age range between 41-50 years, the highest number of 111 people, accounting for 30.90 percent. Most of them had a lower education level than the bachelor's degree, 303 people thought. To 84.40 percent, most have monthly income, income is equal to or less than 20,000 baht, 240 people, accounting for 66.90 percent, the frequency of using cooperative services 2-3 months, the most times, 119 people, accounted for hundreds 33.10

2. Corporate image factor

Corporate image factors, the respondents had an overall opinion. At a high level) $\bar{X} = 4.06$, S.D. = 0.48(, when considering each aspect, it was found that the highest mean value was

service access at a high level) $\bar{X} = 4.13$, S.D. = 0.56(. At a high level) $\bar{X} = 4.12$, S.D. = 0.88(, third is personal contact At a high level) $\bar{X} = 4.11$, S.D. = 0.56(, fourth is service In the high level) $\bar{X} = 4.01$, S.D. = 0.55(and the last rank is safety at a high level) $\bar{X} = 3.93$, S.D. = 0.55(

3. Service quality factors

Service quality factors Respondents had an overall opinion. At a high level ($\bar{X} = 4.09$, S.D. = 0.57) The highest average value is customer trust. In the high level ($\bar{X} = 4.11$, S.D. = 0.92), the second is the response to customer needs at a high level ($\bar{X} = 4.10$, S.D. = 1.09). In the high level ($\bar{X} = 4.10$, S.D. = 0.89), fourth is the concreteness of the service At a high level ($\bar{X} = 4.07$, S.D. = 0.54) And the last aspect is knowledge, arrangement and approaching at a high level ($\bar{X} = 4.10$, S.D. = 0.89)

4. Factors of loyalty to agricultural cooperatives

Factors of loyalty to agricultural cooperatives respondents had an overall opinion. At a high level) $\bar{X} = 4.00$, S.D. = 0.54(The highest average value is the word of saying At a high level) $\bar{X} = 4.01$, S.D. = 0.58(, second is price sensitivity At a high level) $\bar{X} = 4.00$, S.D. = 0.91(, third is the purchase intention In the high level) $\bar{X} = 4.00$, S.D. = 0.59(and the last rank is the purchase intention at a high level) $\bar{X} = 3.98$, S.D. = 0.60(

5. The Hypotheses Testing Results

The researchers have validated the assumption for the linear multiple regression analysis as follows:

6. The average of error was at zero.
2. The validating of linearity, it was found that all the independent variables had no interrelationship, with the tolerance value between 0.329 – 0.800 which is higher than 0.10, while the Variance Inflation Factor)VIF(was between 1.251 – 3.039 which is lower than 10, meaning that there was no effect of the multicollinearity or no interrelationship among the independent variables.
3. The validating of the independence of the errors, the correlation among the independent variables was between 0.299 - 0.777)r was less than 0.80(, it was found that all the pairs had no correlation exceed 0.80, meaning that the independent variables did not have the problem of multicollinearity.
4. The errors were independent, considered from the Durbin-Watson value of 1.844 which was between 1.50- 2.50, meaning that the errors among the variables were independent.
5. It was concluded that the data fit the assumption criteria then the researcher continue to analyze the collected data.

Table 1: The analysis results on the factor of organization image those affected the service quality

Factors of organizational image	Service quality			t	p
	B	SE	β		
Constant)a(	0.833	0.181		4.604	0.000
Access to the service	0.254	0.064	0.262	3.980**	0.000
Service	0.190	0.066	0.192	2.868**	0.004

Personal	0.196	0.052	0.201	3.780**	0.000
Safety	0.052	0.053	0.053	0.977	0.329
Reputation	0.085	0.027	0.137	3.176**	0.002
Adjust R Square = 0.470 R = 0.691 ^a R Square = 0.478 Durbin–Watson = 1.844					

*p < .05, **p < .01

From Table 1, the researcher adopted independent variables. Or all predictive variables to see that these variables have variables that can co-predict variables accordingly by using Multiple Regression Analysis (Enter Multiple Regression Analysis). All predictive variables are access to services. Personal and reputation services which are an independent variable Influencing factors affect the loyalty of using services of Agriculture cooperative customers at Don Chedi branch Suphanburi Province. With the above 4 independent variables able to predict the loyalty of the agricultural cooperative customers Don Chedi Branch Suphanburi Province, with statistical significance at the level of 0.05 and 4 independent variables having predictive power of approximately 47.00 percent)Adjust R Square = 0.470(

The researchers have validated the assumption for the linear multiple regression analysis as follows:

1. The average of error was at zero.
2. The validating of linearity, it was found that all the independent variables had no interrelationship, with the tolerance value between 0.505 – 0.815 which is higher than 0.10, while the Variance Inflation Factor)VIF(was between 1.227 – 1.981 which is lower than 10, meaning that there was no effect of the multicollinearity or no interrelationship among the independent variables.
3. The validating of the independence of the errors, the correlation among the independent variables was between 0.222 - 0.648)r was less than 0.80(, it was found that all the pairs had no correlation exceed 0.80, meaning that the independent variables did not have the problem of multicollinearity.
4. The errors were independent, considered from the Durbin-Watson value of 1.731 which was between 1.50- 2.50, meaning that the errors among the variables were independent.
5. It was concluded that the data fit the assumption criteria then the researcher continue to analyze the collected data.

Table 2: The analysis results on the factor of the service quality those affected the service quality

Factors of service quality	Service quality			t	p
	B	SE	β		
Constant)a(	3.17	0.42	-	7.51*	0.00
Concrete aspects of the service	0.336	0.051	0.335	6.654*	0.000
Customer Trust	0.046	0.025	0.079	1.869	0.063
Respond to customer needs	0.028	0.021	0.056	1.365	0.173
Confidence	0.028	0.027	0.042	0.972	0.332
Knowing and approaching	0.333	0.048	0.360	6.893*	0.000
Adjust R Square = 0.506 R = 0.716 ^a R Square = 0.513 Durbin–Watson = 1.731					

*p < 0.05, **p < 0.01

From Table 2, the researcher adopted independent variables. Or all predictive variables to see if these variables have variables that can co-predict variables accordingly by using Multiple Regression Analysis (Enter Multiple Regression Analysis). All predictive variables are the concrete aspects of the service. Knowing and approaching which is an independent variable Influencing factors affect the loyalty of using services of Agriculture cooperative customers at Don Chedi branch Suphanburi Province. By both independent variables, these variables can predict the loyalty of the agricultural

cooperative customers. Don Chedi Branch Suphanburi province with statistical significance at the level of 0.05 and 2 independent variables have a predictive power of 50.60 percent (Adjust R Square = 0.506)

DISCUSSIONS

From the analysis of factors that variable Influencing factors affect the loyalty of using services of Agriculture cooperative customers at Don Chedi branch Suphanburi Province can be discussed the following research results Based on the hypothesis testing found that Corporate image factor And service quality factors Influence the loyalty of agricultural cooperative customers Don Chedi Branch Suphanburi Province With statistically significant 0.05, respectively, with the following details:

The organizational image factors influence the loyalty in using the services of agricultural cooperative customers. Don Chedi Branch Suphanburi Province in 5 areas, including access to services For personal safety services And reputation Influence the loyalty of agricultural cooperative customers Don Chedi Branch Suphanburi Province Statistically significant Which is consistent with the research of Consistent with the research of Yaranrat Monteerarat,Viroj Jadesadalug (2015) It was found that the image of Bank of Ayudhya had a positive influence on the perception of service quality Quality awareness Service has a positive influence on loyalty to customer service. And the image of Krungsri Bank Ayutthaya has a positive influence on loyalty to customer service. And in accordance with the research of Papawee Boonklang (2017) It was found that the level of opinion of corporate image and customer loyalty of Bank for Agriculture and Agricultural Cooperatives at a high level. The Hypothesis test results corporate image is the corporate identity. Reputation Physical environment Service And interpersonal contact Affecting customer loyalty Bank for Agriculture and Agricultural Cooperatives With statistical significance at the level of 0.05 with efficiency Forecasting results can be 75.90 percent.

Service quality factors Influence the loyalty of agricultural cooperative customers Don Chedi Branch Suphanburi Province in 5 areas, namely the concrete aspects of the service Customer trust In response to customer needs In terms of giving confidence and knowing and approaching Influence the loyalty of agricultural cooperative customers Don Chedi Branch Suphanburi Province Statistically significant Which is consistent with the research of

Arunkamon Praibongkotch,Yupawam Vannavanit (2017) Found that service quality has an effect on customer loyalty With statistical significance at the level of 0.05 and consistent with the research results of Aunwat Songsom (2018) Found that customer trust and service quality awareness Have direct influence on electronic loyalty Case studies of product purchases From online stores of Generation C consumers With statistical significance at the level of 0.05 and consistent with the research of Hattaya Kongprepan (2014) It was found that the quality of service The concrete aspect of the service In response to customers In terms of customer confidence and caring, there is a positive relationship with loyalty that has customers towards the services of both banks. With statistical significance at the level of 0.05 and consistent with the research of Yaranrat Monteerarat,Viroj Jadesadalug (2015) It was found that service quality awareness Quality awareness Service has a positive influence on loyalty to customer service. And the image of Krungsri Bank Ayutthaya has a positive influence on loyalty to customer service. In addition, it was found that Recognition of quality Serving as a central variable between the image of Bank of Ayudhya and loyalty to the use of the customer service

RECOMMENDATIONS

1. This research is the only quantitative research. Therefore, for those interested to Conduct research studies on topics related to this subject. Should have a qualitative research study by interviewing Users in the view of additional customers In order to provide a more comprehensive and complete education as well as to discover new factors that influence loyalty in using the services of customers.
2. Continuing research on business loyalty Due to the current customer loyalty towards the use of the service may change as the environment and circumstances change.

BIOGRAPHY

1. Sasinan Sastsara

Position: Lecturer of Department of Finance and Economics

Faculty of Business Administration and Information Technology, Rajamangala University of Technology Suvarnabhumi, Thailand

Degree: M.Finance

E-mail address: sasinan.ann@gmail.com

2. Laddawan someran

Position: Assistant Professor of Department of Management

Faculty of Business Administration and Information Technology, Rajamangala University of Technology Suvarnabhumi, Thailand

Degree: Ph.D. in management

E-mail address: noinoi5202@gmail.com

3. Nopmallee Taechawatchananont

Position: Lecturer of Department of Finance and Economics

Faculty of Business Administration and Information Technology, Rajamangala University of Technology Suvarnabhumi, Thailand

Degree: M.Econ

E-mail address: nopmallee@gmail.com

4. Kanokwan Opartphinit

Position: Student)She is studying in Management Department(

Faculty of Business Administration and Information Technology, Rajamangala University of Technology Suvarnabhumi, Thailand

E-mail address: Kanokwan.Opasphi@gmail.com

REFERENCES

- Boonklang,Papawee (2017) The Effect of Corporate Image on Customer Loyalty : Case of Bank For Agriculture and Agricultural Co- operative in Dankhunthot District, Nakhonratchasima Province, thesis, Rajamangala University of Technology ISAN,Thailand.
- Jitthiang, Sureeporn)2010(Job Satisfaction and Organization Royalty of the employees of the CAT Telecom Public Company Limited(, thesis, Krirk University, Thailand.
- Kongphikul) 1994(The Relationship between Job Satisfaction and Organizational Royalty of Mathayomsuksa School Teachers at Petchaboon Province, thesis, Srinakarintarawit Prasarnmitr, Thailand.
- Kongprepan, Hattaya (2014) Effects of Service Quality on Customer Loyalty: A Comparisom Between Krung Thai Bank)PCL(And Bangkok Bank)PCL(In Amphoe Muang, Pathimthani Province ,thesis, Rajamangala University of Technology Thanyaburi,Thailand.
- Methathammasan, Phusanisa)2006(The Work-Life Quality of the Pilots at Thai Air Asia, thesis, Kasessart University, Thailand.
- Monteerarat, Yaranrat (2015) Perception Affects To Loyalty Through Service Quality From The Customers Band Of Ayudhya, Veridian E-Journal, Slipakorn University ISSN 1906 – 3431 Year 8, Issue 2, May-June 2015
- Praitbongkotch,Arunkamon (2017) Factors Influencing Consumer Loyalty To Drug Store In Bangkok Metropolis, Srinakharinwirot Business Administration Journal, Year 8, Issue 2 July - December 2017
- Sena,Wannapa)2001(The Life quality Development of the Manufacturing Line Employees of Beavigem Factory LTD, thesis, Ramkamheang University, Thailand.
- Songsom, Aunwat (2018) Causal Factors of Electronic Loyalty: A Case Study of Online Purchasing of the Generation C Consumers, Veridian E-Journal, Slipakorn University ISSN 1906 – 3431 Year 11, Issue 1, January-April 2018

- Vanichbancha, Kallaya)2007(Statistical Analysis: Statistics for Management and Research, 10 Ed, Chulalongkorn Publishing, Bangkok, Thailand.
- Tirakanon, Suwimon)2011(Research Methods for Social Sciences: Guide for Practice, 8 Ed. Chulalongkorn Publishing, Bangkok, Thailand.

Environmental Factors and Service Quality Factors that Affect the Satisfaction of users of One Stop Service Case Study Suphan Buri Post Office

Soraya Supaphol¹ Nopmallee Taechawatchananont² Kitisak Tabtimdee³

Abstract

This research aimed to study the environmental factors that affect the satisfaction of users of One Stop Service and study of service quality factors that affect the satisfaction of users of One Stop Service, case studies of Suphan Buri Post Office. The sample group used of 400 customers who regularly use Suphanburi postal service. The used tool in the research was questionnaires. The statistics used to analyze data are frequency, percentage, mean, standard deviation, and multiple regression. The research found that: Comments about the overall environmental factors are at a very agreeable level. The opinions about the overall quality factor are at the most agreeable level. And the level of opinions about the satisfaction of users Overall, the

opinions are at the very agreed level. The hypothesis testing found that: 3 environmental factors, including the service system Service process And the service provider staff sent the satisfaction of the users of One Stop Service, case study of Suphan Buri Post Office with statistically significant at the level of .05, with predictive power of 19.20 percent. And 4 service quality factors such as physical characteristics Reliability Care Submitting the satisfaction of users of One Stop Service in case of Suphanburi Post with statistical significance at the level of .05 with predictive power of 29.20 percent.

Keywords: Environmental, Service Quality, Satisfaction

Introduction

At present, land transportation is divided into railways and cars. Traveling by train is convenient, but cannot stop on the way or go out of the way. But traveling by private car can stop by the desired route. Nowadays, there are many types of cars, transport services such as buses, taxis, rental cars. Having transportation of various kinds makes traveling more convenient and meets customers' needs. Later on, Thailand Post Co., Ltd. has modified the system and added new services to meet the needs of the market and pursue the changing of consumer behavior. Thailand Post Co., Ltd. has also used a new format of IT information transformation to manage a work process in order to encourage users to experience it. As the result, the users can trust the modernity, speed, reliability and confidence. Moreover, the post office is able to distribute public information to the target group punctually. And it also achieves the maximum level of efficiency for development and an improvement of the service flow. There is an exchange of roles and responsibilities between senders and receivers to participate in communication as well as changing consumer behavior more.

At present, Thailand Post Co., Ltd. has implemented the One Stop Service concept by using information technology (IT) systems, postal services, and one stop service of the Thailand Post Service. It means that providing a full range of services of Thailand Post Company Limited has provided the following services: 1. Delivery service Domestic and international mail. 2. Delivery service. Domestic and international parcels 3. Money order online 4. Money-delivery service in the country and abroad 5. International money transfer service 6. Payment service via postal service 7. Post bill service 8. Money postage (Send mail and parcels by charging money from the recipient) 9. Reservation service for travel tickets and show tickets 10. Online top-up service U Top Up (mobile top-up service) Which is a service in one service channel, ending every step (Jiranan Phutthachat, 2010) At present, the transportation of goods or Thailand Post Company Limited has adopted the One Stop Service by using information technology systems to put all the internal management systems.

Thailand Post Co., Ltd., has chosen to study in Suphan Buri Province because it is a place where many customers use the service. It is located in the heart of Suphanburi where is convenient to travel. The researchers conducted a survey of the satisfaction of people who use the service and study from environmental factors, including service quality factors that affect the satisfaction of the users of One Stop Service in the case of Thailand Post Office, Suphan Buri Province. The researchers aimed to study how much people satisfied are. To be a guideline for Thailand Post Co., Ltd. and any parties who are interested to improve or develop the services of the company efficiently.

Research objectives

1. To study the environmental factors that affect the satisfaction of users of One Stop Service, case studies of Suphan Buri Post Office.
2. To study the quality of service factors that affect the satisfaction of users of One Stop Service, case studies of Suphan Buri Post Office.

Research Hypothesis

1. There is at least 1 of variable environmental factors that affects the satisfaction of users of One Stop Service, case studies of Suphan Buri Post Office.
2. There is at least 1 of variable quality of service factors affecting satisfaction of users of One Stop Service, case studies of Suphan Buri Post Office.

Study Method

Population used in research and sample groups

The population that used in this research is customers who use postal services in Suphan Buri Post Office which unknown number. And used samples in this research are customers who use the service of Suphan Buri Post Office. Therefore, the sample of calculation method by using the finished table of Yamane's by determining the confidence value at 95% at the $\pm 5\%$ error, the number of samples of 400 people and using accidental sampling.

Research Tool

This study Use questionnaires as a tool to collect data. Consisting of closed-ended question types divided into 4 parts with scoring criteria for each opinions level are; the highest (5), very (4) moderate (3) less (2) and minimal (1) and interpretation Average score The opinions of each side are as follows: 4.21 - 5.00 (most agreeable) 3.41 - 4.20 (highly agreeable) 2.61 - 3.40 (agree medium) 1.81 - 2.60 (agree less) and 1.00 - 1.80 (least agree)

The questionnaire has content validity by considering the consistency index between questions and Object Objective Congruence Index (IOC) . It was found that all questions are greater than 0.50 and the questionnaire has a confidence by considering the Alpha Coefficient according to Cronbach's method. All aspects have more than 0.70 confidence values (Kalyanan Banacha, 2007) and the belief value of the whole questionnaire is 0.928. Therefore, it can be considered that the questionnaire is reliable and can be used in the study appropriately.

Data Analysis

The researchers collected data from the sample group to check the integrity and analyze statistical data and also use a statistics to analyze data as follows;

1. Descriptive statistics: frequency, percentage, mean and standard deviation
2. Inference statistics: The researcher used multiple regression analysis

Result

1. This research studied personal data of the respondents. It was found that most users were female 259 people, 64.75 percent, aged between 20-30 years, 213 people, accounting for 53.25 percent. Education was at the bachelor degree level. 148 people, accounting for 37.00 percent, 153 students / students, representing 38.25 percent, earning 10,000-20,000 baht, 223 people, accounting for 55.75 percent, using the pick-up service Domestic and international supplies 331 persons, accounting for 82.75 percent, followed by postal services (Deposit, send mail and parcels by charging from the recipient) 82 people, representing 20.50 percent.

2. The level of opinions about environmental factors, Service quality factors and user satisfaction of One Stop Service, case studies of Suphan Buri Post Office.

The results of the analysis of the opinions towards to the environmental factors affect the satisfaction of the users of One Stop, case studies of Suphan Buri Post Office. The overall picture at the agreed level ($\bar{x} = 4.20$, $SD = 0.30$). The average from the highest to the lowest, it was found that the

highest value is the service system. In the most agreeable level ($\bar{x} = 4.22$, S.D. = 0.44), followed by the service personnel In the most agreeable level ($\bar{x} = 4.18$, S.D. = 0.40) and the service process In a very agreeable level ($\bar{x} = 4.20$, S.D. = 0.37)

The results of the analysis of opinions about the quality of service factors affect the satisfaction of users of One Stop Service, a case study of Suphan Buri Post Office. Overall, the opinions were at the most agreed level ($\bar{x} = 4.21$, S.D. = 0.26). When considered individually, the average order from descending to highest was found that the highest value was care at the most agreed level ($\bar{x} = 4.24$, S.D. = 0.40) Followed by confidence building in the most agreeable level ($\bar{x} = 4.23$, S.D. = 0.40) in terms of physical appearance At the most agreed level ($\bar{x} = 4.22$, SD = 0.36). Reliability In the agreed level ($\bar{x} = 4.18$, S.D. = 0.34) and the response at the very agreed level ($\bar{x} = 4.18$, S.D. = 0.43)

The analysis of opinions about the satisfaction of users of One Stop Service, a case study of Suphan Buri Post Office. Overall, the opinions were at the agreed level ($\bar{x} = 4.17$, SD = 0.34). When considering each item by sorting the average from descending to highest, it was found that the highest value was Suphanburi Post Office. There was a full service able to meet your needs at the most agreed level ($\bar{x} = 4.44$, S.D. = 0.66) Followed by a quick contact meet the needs of users in the most agreeable level. And the last one is the service from Suphanburi post office that is modern in a very agreeable level ($\bar{x} = 4.04$, S.D. = 0.67)

The Hypothesis Test Results

3.1 Environmental factors that affect the satisfaction of users of One Stop Service

In analyzing the environmental factors that affect the satisfaction of users of One Stop Service, a case study of Suphan Buri Post Office. By using multiple regression analysis with the following conditions

1. The average value of Error is equal to 0 by the least squares method. It will always have an average of 0
2. Examination of Multicollinearity problems, that is, all independent variables must not have a relationship by using statistics to examine the relationship between several independent variables with the Collinearity Statistics. The result is 2 values; Tolerance between 0.814 - 0.882 which is greater than 0.10 and Variance Inflation Factor (VIF) is between 1.134 - 1.229. Which is less than 10 indicates that there is no Multicollinearity problems. Or do not create interrelated relationships between independent variables.
3. Checking the independence of errors, the correlation coefficient between the independent variables is between 0.273 - 0.383 (r less than 0.80) (Kalyanan Bancha, 2007). Which appears that every pair has a relationship not more than 0.80, representing all independent variables without Multicollinearity problems.
4. The error is independent. By considering the value Durbin-Watson has a value of 1.708 which is in the range between 1.50 - 2.50 (Kalyanan Bancha, 2007) indicating that the error values between variables are independent of each other.

When testing the above conditions, it can be concluded that the data set meets the specified conditions. Therefore analyze the environmental factors that affect the satisfaction of users of One Stop Service, case studies of Suphan Buri Post Office.

Table 1: Analysis of Environmental Factors That Affects Satisfaction of Users

Environmental Factors	Satisfaction of Users			t	p
	B	SE	β		
Constant)a(	2.121	0.219		9.693	0.000
Service System	0.233	0.037	0.300	6.262	0.000*
Service Process	0.117	0.045	0.128	2.592	0.010*
Service Staff	0.139	0.043	0.161	3.236	0.001*
Adjust R Square = 0.192 R = 0.445 R Square = 0.198 Durbin-Watson = 1.708					

* Statistical significance at 0.05

From Table 1, the researcher adopted independent variables or all predictive variables to see if these variables have variables that can co-predict variables accordingly by using Enter Multiple Regression Analysis. All predictive variables are the service system, service process and service staff which is an independent variable affecting the satisfaction of users of One Stop Service, case studies of Suphan Buri Post Office. The three independent variables can predict the satisfaction of users of One Stop Service in the case of Suphan Buri post office. With statistical significance at the level of .05 and 3 independent variables having predictive power of approximately 19.20 percent.

3.2 Analysis of Quality of service factors affecting satisfaction of users

In Analysis of Quality of service factors affecting satisfaction of users affecting the satisfaction of users of One Stop Service, case studies of Suphan Buri Post Office by using multiple regression analysis with the following conditions.

1. The average value of Error is equal to 0 by the least squares method. Will always have an average of 0

2. Examination of Multicollinearity problems, that is, all independent variables must not have a relationship by using statistics to examine the relationship between multiple independent variables with the Collinearity Statistics. The result has 2 values; Tolerance is between 0.748 - 0.790 which is greater than 0.10 and Variance Inflation Factor (VIF) is between 1.265 - 1.338. Which is less than 10 indicates that there is no problem. Multicollinearity or do not create interrelated relationships between independent variables.

3. Checking the independence of errors The correlation coefficients between independent variables were between 0.274 - 0.448 (r less than 0.80) (Kalyanan Bancha, 2007). Which appears that every pair has a relationship not more than 0.80, representing all independent variables without Multicollinearity problems.

4. The error is independent by considering the value Durbin-Watson has a value of 1.821, which is in the range between 1.50 - 2.50 (Kalyanarn Bancha, 2007) indicating that the error values between variables are independent.

When testing the above conditions, it can be concluded that the data set meets the specified conditions. Therefore, analysis of the Quality of service factors that affect the satisfaction of users of One Stop Service, case studies of Suphan Buri Post Office.

Table 2 Analysis of Quality of service factors affecting satisfaction of users

Quality of service factors	satisfaction of users
----------------------------	-----------------------

	B	SE	β	t	p
constant)a(	1.372	0.233		5.895	0.000
Physical appearance	0.125	0.045	0.133	2.775	0.006*
Reliability	0.110	0.049	0.111	2.255	0.025*
Responsiveness	0.023	0.039	0.029	0.599	0.550
Confidence	0.249	0.040	0.294	6.172	0.000*
Empathy	0.158	0.041	0.188	3.886	0.000*
Adjust R Square = 0.292 R = 0.540 R Square = 0.283 Durbin-Watson = 1.821					

* Statistical significance at 0.05

From Table 2, the researchers adopted independent variables or all predictive variables to see, so these variables have variables that can co-predict variables accordingly by using Enter Multiple Regression Analysis. There are 4 predictive variables; Physical appearance, Reliability, Confidence and Empathy which are independent variables affecting the satisfaction of users of One Stop Service, a case study of Suphan Buri post office. All 4 independent variables can predict the satisfaction of users of One Stop Service in case of post office in Suphan Buri Province can be statistically signified at the level of .05 and 4 independent variables have predictive power of approximately 29.20 percent (Adjust R Square = 0.292)

Discussions

Hypothesis 1, environmental factors have at least 1 variable affecting satisfaction of users of One Stop Service, a case study of Suphan Buri post office. The results of the research were found that all 3 aspects, namely the service system, service process and service staff which accepts the hypothesis can discuss the results as follows;

Environmental factors such as the service system, service process and service staff affect the satisfaction of users of One Stop Service, a case study of Suphan Buri post office. Since Suphanburi Post Office has service channels and equipment that are ready to use and sufficient for users. A modern technology to use such as press machines or queue cards with continuous service according to the customer needs.

Including procedures for providing services that are appropriate, fast and not complicated. In addition, Staff who provide services have smiley faces, speak politely and be adequate for service not discriminate. According to the research of Watchara Tasorn(2005) Expectations and satisfaction of people who use the service towards full service of Thailand Post Company Limited, a case study of Nonthaburi Post Office, it was found that the service system and the performance of officers affecting the satisfaction of users who use the service at Nonthaburi Post Office. In accordance with the research of Suchanya Charoensuk (2009) satisfaction of Thai postal service users in Udon Thani Municipality, Udon Thani province, it was found that the service process and staff aspects affecting the satisfaction of Thai postal service users in Udon Thani Municipality Udon Thani Province. There is agreeable with the research of Pramote Lao Ngam (2005) Customer satisfaction towards service the transaction of the Government Savings Bank, Credit Department, Sri Yan Branch. Was founded the service process affected customer satisfaction towards the service of the transaction of the Government Savings Bank, Sri Yan Branch

Hypothesis 2, There is at least 1 variable of quality of service factors affecting satisfaction Of users of One Stop Service, a case study of Suphan Buri post office. The results of the research showed that there were 4 aspects, namely, Physical appearance, Reliability, Confidence and Empathy which accepts the hypothesis Can discuss the results as follows

Quality of service factors including Physical appearance, Reliability, Confidence and Empathy affecting the satisfaction of users of One Stop Service in case of Suphan Buri post office. Since Suphanburi post office is appropriate and convenient in location. There are CCTVs inside the post office

due to a safety reason. Staff can solve the problem professionally when there is a mistake according to the needs of the customer. Additionally, staff who provide services dress appropriately, follow rules and regulations strictly. They have an expertise in service and also care for people in every service. Staff also have no hesitate to complete work until it is accomplished. In addition, there are also facilities to install such as glue, desk to users, so the users eventually feel impressed.

According to the research of Samroeng Ngamsom, Chantana Saensuk (2017), perception of the quality of medical services affects the satisfaction and loyalty of insurers in hospitals in the Ayutthaya province. That was found that the physical appearance and reliability in the service affect the satisfaction of the insurer.

And also according to the research of Benyapa Chaengwetchai (2016) Service quality that affects the satisfaction of BTS passengers in Bangkok, Which was found that the credibility affects the satisfaction of the BTS passengers in Bangkok.

In addition, it is consistent that the research of Hansa Chanrassamee (2016) The quality of service that affects the satisfaction of Thai AirAsia customers in the country, it was found that knowing and understanding customers affects the satisfaction of Thai AirAsia customers in the country.

Suggestion

1. Environmental factors

Suphan Buri post office should consider bringing more modern technology into service for an accuracy and continuity of service and should arrange for personnel training on the procedures. The post office also should be continuous and publicize the procedures for service to customers thoroughly. In addition, employees should be trained to be ready to provide services and to impress customers.

2. Quality of Service factor

Suphan Buri Post Office should have more locations to utilize to customer testimonials since there are a lot of customers in a day to use the service. Also it can increase credibility, such as creating a safety service, training employees in the field of operations to become more proficient in order to meet customers' needs accurately. In addition, Staff should be regularly prepare various facilities for customers, and do not hesitate to take good care of customers.

Biography

1. Soraya Supaphol

Position: Lecturer of Department of Management

Faculty of Business Administration and Information Technology, Rajamangala University of Technology Suvarnabhumi, Thailand

Degree: Master of management program in human resources management

E-mail address: soraya_784@hotmail.com

2. Nopmallee Taechawatchananont

Position: Lecturer of Department of Finance and Economics

Faculty of Business Administration and Information Technology, Rajamangala University of Technology Suvarnabhumi, Thailand

Degree: Mater of Economics

E-mail address: nopmallee@gmail.com

3. Kitisak Tubtimdee

Studying Management Degree

Faculty of Business Administration and Information Technology, Rajamangala University of

Technology Suvarnabhumi, Thailand
E-mail address: kitisak5678@gmail.com

Reference

- Kalaya Vanichbancha. (2007). Statistical analysis: statistics for administration and research (10th edition). Bangkok: Chulalongkorn University Printing House.
- Jiranan Phutthachat. (2010). "Comparison of expectations and satisfaction of users towards One Stop Service for postal services in Thailand, Bangkhuntien district case study. " Thesis, Bangkok University.
- Pramote Lao Ngam. (2007). "Customer Satisfaction with Transaction Services of the Government Savings Bank, Sri Yan Branch. Thesis, Suan Dusit Rajabhat University."
- Watchara Tasorn. (2005). "The full service of Thai Post Company Limited. Study the expectations and satisfaction of People who use the service ". thesis, Kasetsart University.
- Samroeng Ngamsom and Chantana Saensuk. (2560). "Perception of medical service quality affects the satisfaction and loyalty of Insured person in a hospital within the province Ayutthaya". Veridian Journal Silpakorn University. Year 10 (Issue 3, September-December 2017): 1393-1408
- Suchanya Charoensuk. (2009). "Satisfaction of users with services Thai Post Company Limited ".Thesis, Khon Kaen University.
- Hansa Chanrassamee (2016). "Quality of service that affects the satisfaction of Thai AirAsia customers in the country" Thesis, Rangsit University.

The Impact of Accounting Conservatism on the Valuation Properties of Earnings of Listed Companies on The Stock Exchange of Thailand

Surachai Am-ugsorn, Jintana Somsoda, Sukanya Wonglakorn

sudlo2000@hotmail.com, jintana_nong@hotmail.com, sukanya_su@hotmail.com

ABSTRACT

The objective of this research is to study the impact of accounting conservatism on the valuation properties of earnings of listed companies on The Stock Exchange of Thailand from the first 50 companies with accounting conservatism during the year 2016 – 2017. There are 200 samples firm-year observations by measuring accounting conservatism from the Rolling Regression Model according to Basu (1997). This model was developed from the theory of the relationship between earning and stock return from changed of market price. About Statistics that used in the test are Multiple Regression Analysis. The results of the study showed that the accounting conservatism positively affects the properties of earning in predicting the stock price.

INTRODUCTION

The Stock Exchange of Thailand is a capital market of a developing country in the ASEAN region. In 2018, the market capitalization was the second highest after Singapore, about 526 billion US dollars (Tungsomworapong, 2017). The decision to buy and sell securities of investors requires important accounting information and is widely known that is accounting earnings. Accounting earnings from the information perspective are related to securities prices, that is, the current securities prices relate to future dividends. The future dividends relate to accounting profit in the future and future accounting earnings in relation to current accounting earnings. In situations where the economic conditions are uncertain in the future occur all the time. Since the Tom Yum Kung Crisis in 1997, the collapse of Enron (a large energy business company) and WorldCom (the number one telecom business in the United States in 2001 and 2002), after that followed by the Subprime crisis in the United States in 2007. The crisis has the cause of the management's intention to show higher earnings than in order to increase stock value. Because the management's return is related to the value of the stock. Moreover, there is causing a lack of investor confidence from presenting the company's accounting information.

Therefore, the tools that the SET used to create confidence for investors is good corporate governance. So that the accounting information of each company can reflect the market price of securities trading volume and increasing the value of the business (Pipatanasern & Srijunpetch, 2017). Accounting conservatism is considered a hidden benefit in good governance (Duellman, 2006), helping to reduce the earnings manipulation, especially if the company has information asymmetry between high executives and investors (LaFond & Watts, 2008). If company is more conservative, the cost of capital will lower. It is in line with the view of investors that conservatism is a governance tool, helping to reduce earnings manipulation through accrual transactions (Garcia Lara, Osma, & Penalva, 2011). In addition, accounting conservatism also helps to control executives not to invest in projects that are negative NPV because the company has to recognize losses from negative NPV project is more sensitive than recognize positive NPV projects (Francis & Martin, 2010). Therefore, accounting conservatism is considered an appropriate tool that helps control executives to make investment decisions in accordance with shareholders' intentions (Ahmed & Henry, 2012). Increasing accounting conservatism of the company helps to enhance or replace good corporate governance and makes the value of the company higher (Sirada, 2014).

However, there are many research studies about the impact of accounting information that is operating under conservatism, such as reporting the net asset value at a value that is lower than the long-term market price (Feltham & Ohlson, 1995) as a result of anticipate no profit, but anticipate all losses (Bliss, 1924 cited in (Watts, 2003)). Such practices make the matching of income and expenses inappropriate. This is less earning persistence and when its less earning persistence, the ability of accounting earnings to predict the price of securities will also decrease (Paek, Chen, & Sami, 2007). Therefore, it can be concluded that accounting conservatism affects the valuation properties of earnings. The more earnings reflect the more actual value, the ability of valuation will be the same direction.

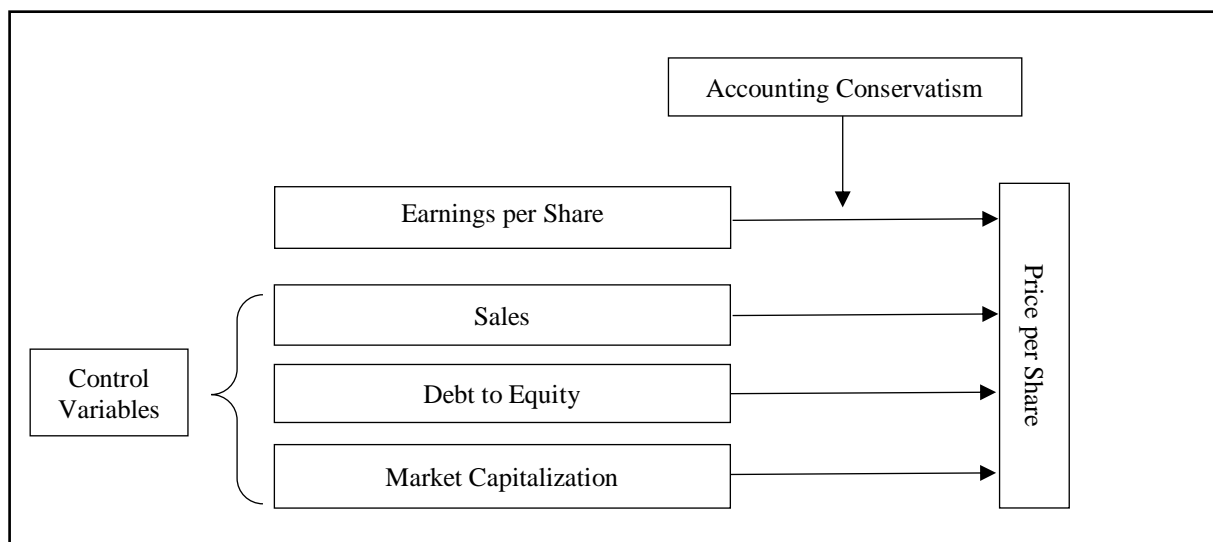
RESEARCH OBJECTIVES

To study the impact of accounting conservatism on the valuation properties of earnings of listed companies on The Stock Exchange of Thailand.

RESEARCH HYPOTHESES

The accounting conservatism that impact on the valuation properties of earnings of listed companies on The Stock Exchange of Thailand.

RESEARCH FRAME WORK



RESEARCH METHOD

This research is empirical research. Conduct research according to the following steps.

1. Population and sample

The population consists of 424 listed companies in the Stock Exchange of Thailand during the year 2016 - 2017 and selected companies with a return rate of less than 0, representing the first 50 bad news as a sample group by measuring the accounting conservatism, the data will be used for the past 3 years from the year you want to study with the Rolling Regression Model according to the Basu (1997) Model.

Table 1 Details of criteria used to consider accounting conservatism each year

Year considered	Year of calculation
2016	2014 - 2016
2017	2015 - 2017

Table 2 The size of the sample used in accounting conservatism

Year considered	Year of calculation
2014	50
2015	50
2016	50

2017	50
Total	200

2. Data collection

The data source used in this study is secondary data from the financial statements of companies registered during the year 2016 - 2017 by collecting data from SETSMART (Set Market Analysis and Reporting Tool)

3. The model used in data analysis

3.1 The model used to measure accounting conservatism

According to the Basu (1997) model developed from the theory of the relationship between earning and stock return from changed of market price. Accounting earnings and securities returns are therefore related in a way that both good news and bad news are reflected in the return of market securities immediately according to Fama (1970)'s Efficient Market Theory. The earnings value under accounting conservatism will reflect the bad news in a time manner and faster than the good news which is the case that the management has realized the possible situation that will result in a decrease in the future cash flow of the business, accounting conservatism requires management to immediately recognize the negative expectations in the income statement such as impairment of assets or present the inventories in the financial statements at the lower of cost or net realizable value. Therefore, this will find that the bad news will be reflected immediately in both earnings and return. While the good news will reflect only on returns, but will be delayed to recognize in accounting earnings. The result is the relationship between earnings and negative returns will have a higher level than the relationship between earnings and positive return. Therefore, this Basu (1997) concept measures accounting conservatism with the reversal regression of earnings on return. By giving earnings as a dependent variable and the return is an independent variable. As shown by the following regression model

$$E_{it} / P_{it-1} = \beta_{0it} + \beta_{1it} DR_{it} + \beta_{2it} R_{it} + \beta_{3it} R_{it} * DR_{it} + \varepsilon_{it} \quad (3)$$

By

E_{it} = Earnings per Share of business i at in fiscal year t

P_{it-1} = Price per Share of business i at end of fiscal year t – 1

R_{it} = Annual Return per share of business i at end of fiscal year t – 1 to end of fiscal year t

DR_{it} = Dummy variable is 1 if $R_{it} < 0$ and be 0 if $R_{it} \geq 0$

Annual Return per share = $r_{it} = (P_{it} + D_{it} - P_{it-1}) / P_{it-1}$

By

P_{it} = Price per Share of business i at end of time

P_{it-1} = Price per Share of business i at end of time t - 1

D_{it} = Dividend per Share of business i at time t

The model used to test impact of accounting conservatism on the valuation properties of earnings

$$P_{i,t} = \beta_0 + \beta_1 EPS_{it} + \beta_2 CON_{it} + \beta_3 EPS * CON_{it} + \beta_4 SALE_{it} + \beta_5 DE_{it} + \beta_6 MARKETCAP_{it} + \varepsilon_{it}$$

By

Dependent Variable

P_{it} = Price per Share of business i at time t

Independent Variable

EPS_{it} = Earnings per Share of business i at time t

Intervening Variables

CON_{it}	=	Accounting Conservatism of business i at time t
1	=	Business has accounting conservatism
0	=	Business do not has accounting conservatism
$EPS_{it} * CON_{it}$	=	The joint impact between earnings net profit per share and accounting conservatism

Control Variables

$SALE_{i,t}$	=	Sales of business i at time t
$DE_{i,t}$	=	Debt to Equity Ratio of business i at time t
$MARKETCAP_{i,t}$	=	Market Capitalization of business i at time t
e_{it}	=	Error of business i at time t
t	=	Year 2016 and 2017

4. Data analysis

The collected data were analyzed by:

4.1 Descriptive statistics: frequency, percentage, mean and standard deviation.

4.2 Inferential statistics for testing the hypotheses:

Accounting conservatism study using models reverse regression of earnings on returns developed by Basu (1997) in testing. The study of the impact of accounting conservatism on the valuation properties of earnings by using the multiple regression analysis.

THE RESEARCH RESULTS

The researchers have reported the results accordingly to the research objectives and research hypotheses as follows:

1. The basic characteristics of the data used to study the average price of the company is 11.01 baht, the average per share of the company is -0.16 baht, the average accounting conservatism of the company is 1.16 times, the average impact between the earnings per share and accounting conservatism of the company is 2.88 times. As much as, the average sale of the company is 9,421.95 million baht, the average debt to equity ratio of the company is 5.98 times and the average of the market capitalization of the company is 20,287.33 million baht.

2. The Hypotheses Testing Results

The researchers have validated the assumption for the linear multiple regression analysis as follows:

2.1 The average of errors was at zero.

2.2 The validating of linearity, it was found that all the independent variables had no interrelationship, with the tolerance value between 0.721-0.995 which is higher than 0.10, while the Variance Inflation Factor (VIF) was between 1.005-1.386 which is lower than 10, meaning that there was no effect of the multicollinearity or no interrelationship among the independent variables.

2.3 The validating of the independence of the errors, the correlation among the independent variables was between 0.005-0.464 (r was less than 0.80), it was found that all the pairs had no correlation exceed 0.80, meaning that the independent variables did not have the problem of multicollinearity.

2.4 The errors were independent, considered from the Durbin-Watson value of 1.755 which was between 1.50- 2.50, meaning that the errors among the variables were independent.

2.5 It was concluded that the data fit the assumption criteria then the researcher continue to analyze the collected data.

Table 3 The analysis results on impact of accounting conservatism on the valuation properties of earnings

Factors of the valuation properties	price per share			t	p
	B	SE	β		
Constant	10.279	1.983	-	5.184**	0.000
Earnings per Share	19.369	1.164	0.826	16.644**	0.000
Accounting Conservatism	-0.030	0.077	-0.017	-0.387	0.700
EPS and Accounting Conservatism	0.373	0.086	0.199	4.329**	0.000
SALE	0.000	0.000	0.096	2.191*	0.031
Debt to Equity	-0.001	0.048	-0.001	-0.016	0.987
Market Capitalization	6.878	0.000	0.180	3.614**	0.000
Adjust R Square = 0.829 R = 0.916 R Square = 0.840 Durbin-Watson = 1.755					

*p < .05, **p < .01

From table3, hypothesis testing accounting conservatism has an impact on the valuation properties of earnings. It is found that the joint impact between earnings per share and accounting conservatism with regression coefficient (p-value) is 0.199 (0.000). The p-value is less than the significance level defined as 0.05. Therefore, the result can be concluded that the analysis of accounting conservatism has a significant impact on earnings in describing the stock price with a statistically significant level of 95% confidence. Considering the decision coefficient (Adjusted R Square) it was found that before increasing accounting conservatism in the model, Adjusted R Square is 0.793. When adding accounting conservatism in the model, Adjusted R Square has an increase to 0.829, therefore the accounting conservatism positively affects the properties of earning in predicting the stock price. Thus, the assumption is accepted.

DISCUSSIONS

From the study, it was found that the accounting conservatism positively affects the properties of earning in predicting the stock price which could increasingly explain the price securities. It does not consist with the past research of Peak Paek et al. (2007), who studied the effects of accounting conservatism on the persistence of earnings and the use of earnings data in the valuation of securities in the United States between 1984 and 2003, it was found that accounting earnings of businesses with high levels of accounting conservatism were less persistence than businesses with low levels of accounting conservatism. Enabling businesses with low levels of accounting conservatism with the ability to forecast is better than businesses with a higher level of conservatism accounting, according to the study of Feltham and Ohlson (1995), it was found that the accounting earnings that are persistent can better predict the stock price than accounting earnings that without any persistence.

The reason that the research results are inconsistent with the previous research is because, in general, when good news or bad news affect accounting data, most executives are motivated to recognize the good news in the financial statements rather than bad news. Due to the management's compensation and the price of securities, they are often increased according to the performance of the business (Christensen & Demski, 2004), therefore it is an incentive for earning management. The listed companies in the Stock Exchange of Thailand have a earnings management. Causing accounting earnings to explain the declining stock prices (Orada, 2006). When accounting is prepared under the accounting conservatism principle, it helps reduce incentives for managing earnings of executives (Chen, Hemmer, & Zhang, 2007), which is due to accounting conservatism focusing on the business to recognize more bad news than good news. When earning management is less likely to occur, therefore the result in earnings can increasingly explain the securities prices.

RECOMMENDATIONS

1. The results of the study can be used as a guideline for developing or improving accounting standards. The Accounting Standards Committee can use such information to consider about accounting conservatism in accounting framework, still providing economic decision making benefits to users of financial statements.

2. The results of the study indicate that the financial report maker is aware of the impact of accounting conservatism on the ability of accounting earnings to explain the price of securities. Therefore, financial report makers should report accurately sufficient information under the accounting conservatism so that investors can use accounting earnings to make economic decisions.

3. The results of the study will make investors aware of the importance of accounting conservatism that affects the ability of accounting earnings in describing securities prices. Originally, investors only use accounting earning to forecast stock prices. Enabling investors to make economic decisions more accurately and more appropriately

REFERENCES

- Ahmed, K., & Henry, D. (2012). Accounting conservatism and voluntary corporate governance mechanisms by Australian firms. *Accounting and Finance*, 52(3), 631-662.
- Basu, S. (1997). The conservatism principle and the asymmetric timeliness of earnings *Journal of Accounting and Economics*, 24, 3-37
- Chen, Hemmer, T., & Zhang, Y. (2007). On the relation between conservatism in accounting standards and incentives for earnings management. *Journal of Accounting Research*, 45, 541-565.
- Christensen, J., & Demski, J. (2004). Asymetric monitoring: good versus bad news verification. *Schmalenbach Business Review*(July).
- Duellman, S. (2006). Evidence on the role of accounting conservatism and corporate governance. *North Dakota State University, North Dakota*
- Fama, E. (1970). Efficient Capital Markets: A Review of Theory and Empirical Work. *The Journal of Finance*, 25(2383-417).
- Feltham, G., & Ohlson, J. (1995). Valuation and clean surplus accounting for operating and financial activities. *Contemp Acc Res*, 11(2), 689-731.
- Francis, J., & Martin, X. (2010). Acquisition profitability and timely loss recognition. *Journal of Accounting and Economics*, 49(1/2), 161-178.
- Garcia Lara, J., Osma, B. G., & Penalva, F. (2011). Conditional conservatism and cost of capital. *Review of Accounting Studies*, 16, 247-271.
- LaFond, R., & Watts, R. L. (2008). "The information role of conservatism". *The Accounting Review*, 83(2), 447-478.
- Orada, O. (2006). Quality of disclosure, earnings management, and value relevance of earnings. *Master thesis in Accounting, Burapha University*.
- Paek, W. D., Chen, L. H., & Sami, H. (2007). Accounting conservatism earnings persistence and pricing multiples on earnings. *Social Science Research Network [Online]*. Available from: <http://papers.ssrn.com/so13/papers.cfm?abstractid=964250>

- Pipatanasern, A., & Srijunpetch, S. (2017). Response of the Stock Exchange of Thailand on Corporate Governance, Earnings Quality and Auditors. *Journal of Accounting Profession*, 13(40), 22–31.
- Sirada, N. (2014). Accounting conservatism and future investment opportunities. *Ph.D. Dissertation, Department of Accountancy, Chulalongkorn University*
- Tungsomworapong, S. (2017). Asian investors in Thai Stock Markets 2017. *SET Note*, 5/2560, 1-8.
- Watts, R. (2003). “Conservatism in accounting Part I: explanations and implications”. *Accounting Horizon*, 17 207–221.

BIOGRAPHY

1. Surachai Am-ugsorn

Position: Lecturer of Department of Accounting

Faculty of Business Administration and Information Technology, Rajamangala University of Technology Suvarnabhumi, Thailand

Degree: Master of Accounting

E-mail address: sudlo2000@hotmail.com

2. Jintana Somsoda

Position: Lecturer of Department of Accounting

Faculty of Business Administration and Information Technology, Rajamangala University of Technology Suvarnabhumi, Thailand

Degree: Master of Business Administration (Accounting)

E-mail address: jintana_nong@hotmail.com

3. Sukanya Wonglakorn

Position: Lecturer of Department of Accounting

Faculty of Business Administration and Information Technology, Rajamangala University of Technology Suvarnabhumi, Thailand

Degree: Master of Accounting

E-mail address: sukanya_su@hotmail.com

EXPERIENTIAL LEARNING FOR BUSINESS LAW WITH PADLET IN AN UNDERGRADUATE CLASSROOM

Thum Cheng Cheong

Singapore Institute of Management Global Education ("SIMGE")
461 Clementi Road, Singapore 599491
ccthum001@mymail.sim.edu.sg

ABSTRACT

Traditional methods of delivering learning materials via power-point slides, lectures and tutorials are not aligned with the learning preferences of Generation Z students (learners with birth years in mid-1990s to mid-2000s). These students are generally comfortable with technology and interacting on social media. Feedback given by students studying Business Law in SIMGE, a private tertiary institution in Singapore, revealed that they have difficulty understanding and memorising the materials. They became disengaged and cramped their learning to last minute reading. "Just in time" preparation for assessments increases their stress and likely resulting in exams performance to be below expectation.

KEYWORDS: Generation Z, technology, social media, business law, Padlet, experiential learning,

INTRODUCTION

As part of SIMGE's commitment to support and enhance the quality of teaching, a teaching and learning innovation grant is proposed to provide funding to associate lecturers to conduct an action research or teaching project. The grant is aimed to assist the exploration and implementation of innovative teaching strategies to enhance student learning. Feedback given by students studying Business Law in SIMGE revealed that they have difficulty understanding and memorising the materials. Traditional lectures tend to focus on delivering information in sequence using power-point slides to students. A class with an average of 50 students will comprise of students with different levels of ability, background, interests and learning styles. Hence, traditional methods can hinder students with preferences for a more "active" style of learning (Kolb & Fry 1975) and bore smarter students. Students do not have sufficient opportunity for interaction and engagement during the classes which could lead to reduced motivation amongst students. These Generation Z students are generally comfortable with technology and interacting on social media. The study undertaken here aimed to address this gap by investigating if technology could improve the learning experience of students with different learning styles.

RESEARCH PROJECT

Research Aims

This project investigated the implementation of Padlet within the context of SIMGE's teaching and learning environment. A group of students from Diploma in Management Studies ("DMS") were invited to participate in the project. The aims were to investigate the following research questions in the context of SIMGE for Business Law:

1. What is the extent to which Padlet improve the learning experience of students.
2. What is the students' receptiveness to the use of Padlet for learning.
3. How did students use Padlet to learn the legal concepts.

Procedure of Study

For the semester that commenced on 1st July 2018, students from a class taking LAW0115 course participated in the use of Padlet. The Business Law course (LAW0115) in the DMS programme was chosen. The study was conducted over three months and covered one semester. In the semester, a class of 50 students from the LAW0115 course was invited to participate, on a voluntary basis, in the project. All the lessons were conducted by the researcher-instructor who is an Associate Lecturer of SIMGE. The LAW0115 course had a total of 14 lessons in each semester. These were taught over a seven-week period with two lessons per week. The duration of each lesson was three hours. A total of 42 hours of classroom time for all students.

Learning activities with Padlet in Business Law class

Padlet was used in the research. In each lesson, the researcher-instructor would work with all the students simultaneously face-to-face.

Step 1:

The learning materials were designed by the researcher-instructor into Padlet with the following aims:

- 1) Engaging materials: Padlet comprises of “customisable bulletin boards jazz up collaboration and ease discussion” giving the educator and learner an intuitive interface to collect and save information in a simple and fun manner. This will make the lectures and materials more interesting and engaging to the students. Refer to Figure 1.
- 2) Multiple learning styles. Materials were redesigned into bite-size micro-learning lessons highlighting specific learning objectives which allows for greater overall comprehension and memory of the topics. The bite-size lessons incorporated further knowledge by posting additional medium to the Padlet i.e. newspaper articles, connecting / visiting questions, answer plans, visuals, concept maps. Content will be evolved to cater to the various types of learners. Refer to Figure 1.
- 3) Learn anytime anywhere. The bite-size lessons posted into Padlet may be accessed by students via their mobile devices namely their smartphones which they have with them most of the time. Students learn at their convenience as the materials are at their “fingertips” and available to them 24/7 whenever they have “learning moments”. Refer to Figure 2.



Figure 1. Contents in the Business Law Padlet lecture 01 – access via lap-top, desk-top or tablet viewed online

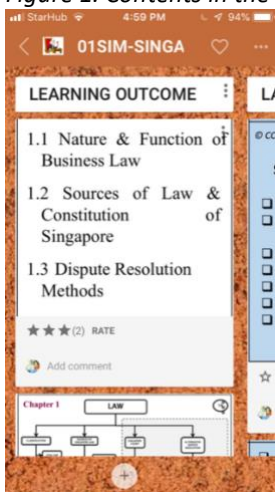


Figure 2. Contents in the Business Law Padlet lecture 01 – access via mobile devices.

Step 2:

Introduction to Padlet was done by the researcher-instructor. Instructions were given to students on the way to access the Business Law Padlet by downloading the app in their mobile devices which is available both in iOS and Android and joining the Business Law Padlet. The students using their lap-tops may also access the Business Law Padlet using the unique web address/ URL of the Business Law Padlet [<https://padlet.com/ccthum/01SIMGESLS>]

Step 3:

The students were guided on the way the learning materials were organised in the Business Law Padlet. The “Shelf” format was used as it has columns in which the materials for each learning outcome were posted into the respective

column (refer to Figure 1). Students using their mobile devices will be able to see the learning materials in each column (refer to Figure 2) by swiping left to right to move from column to column and swiping bottom to top to look at materials in the particular column (learning outcomes). Double tapping on the selected posting will open the material posted which could be an image or a link. The students were able to zoom out and in an image by the pinching motion. The students were able to ask questions using the “comment” function on any of the materials posted as well as to post any content e.g. images, videos, documents, text, audio files, etc from any device. Padlet is a device-agnostic tool which encourages creativity among students and the researcher-instructor to gather and share ideas with a mobile device anytime.

Research Methodology

Fifty-four students enrolled in the LAW0115 course. The researcher-instructor considered the goal-oriented evaluation following the principles set out by Moore (2009) as being most appropriate. Students were asked to complete a questionnaire containing quantitative questions about their experience using Padlet and the Padlet’s contribution to the students’ learning experience. The questions used a 7-point Likert scale. An online questionnaire was chosen in view of the high level of digital literacy of the students.

Using Kolb’s 1984 experiential learning framework, the pilot study was evaluated along the dimensions of concrete experience (CE), reflective observation (RO), abstract conceptualization (AC), and active experimentation (AE) using an online questionnaire.

A four-stage cycle of learning in which the learner “touches” all the four bases as represented in Figure 3. Effective learning is seen when a student goes through the four stages of having a concrete experience followed by observation of and reflection on that experience. This will lead the student to learn from that experience and form abstract concepts which is then used to experiment / apply their idea(s) to the world around them.

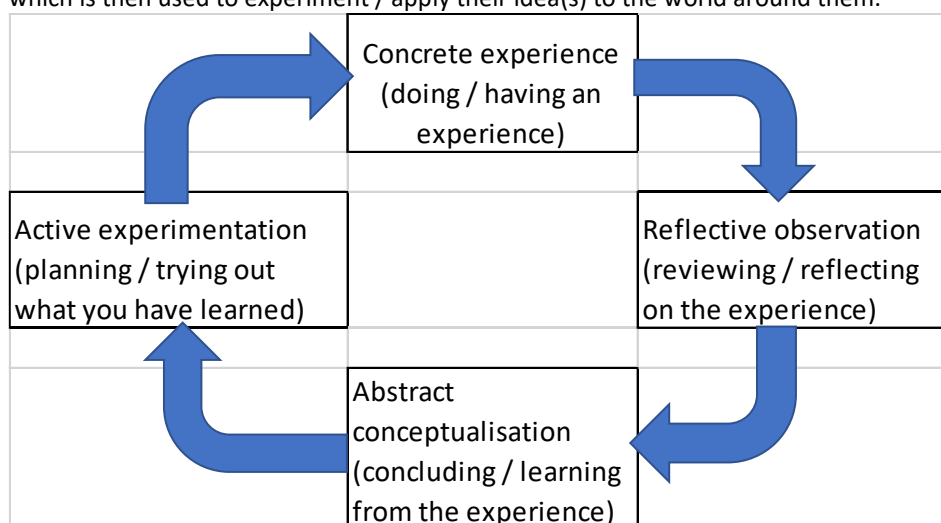


Figure 3: Kolb’s 4-stage learning cycle.

Findings and Discussions

(1) Research question 1 on the extent to which Padlet improve the learning experience of students.

The 40 completed responses to the questionnaire were analysed according to each of the dimensions when learning using Padlet. Refer to Table 1.

An analysis of the 40 completed questionnaires revealed that 75% of students (those indicating they agreed or strongly agreed) that there were step by step instructions and timely guidance during the trial. 67.5% of respondents agreed or strongly agreed that there was opportunity for them to observe how their classmates learn and record their thoughts. A higher percentage of the respondents (75%) agreed or strongly agreed that the learning activities in Padlet helped the students to analyse the legal concepts logically with a significant minority of the respondents neither agreed or disagreed (2.5%) or slightly disagreed (2.5%).

A slightly higher percentage of respondents (77.5%) agreed or strongly agreed that the learning activities in Padlet helped the students practice and apply the legal concepts while a significant minority (5.0%) neither agreed or disagreed and 2.5% slightly disagreed.

These results in Table 1 suggested that an equal percentage of students (75%) were able to “kick-start” the learning cycle (Concrete experience) and make sense of the abstract concepts using the materials in Padlet. These results also suggested that there was no significant difference (72.5%) in students planning and trying out what they have learned. An interesting result is the relatively lower percentage (67.5%) for reflective observation. This could suggest that the

students are taking less time reviewing what has been done and experienced and more time “doing”.

Question	count (%) where n=40						
	Strongly agree	Agree	Slightly agree	Neither agree nor disagree	Slightly disagree	Disagree	Strongly disagree
Concrete experience: There were step by step instructions and timely guidance	11(27.5%)	19(47.5%)	6(15.0%)	4(10.0%)	0(0.0%)	0(0.0%)	0(0.0%)
Reflective observation: There was opportunity for me to observe how my classmates learn and record their thoughts	10(25.0%)	17(42.5%)	6(15.0%)	4(10.0%)	1(2.5%)	1(2.5%)	0(0.0%)
Abstract conceptualisation: The learning activities helped me analyse the legal concepts logically	10(25.0%)	20(50.0%)	8(20.0%)	1(2.5%)	1(2.5%)	0(0.0%)	0(0.0%)
Active experimentation: The learning activities helped me practice and apply the legal concepts	13(32.5%)	18(45.0%)	6(15.0%)	2(5.0%)	1(2.5%)	0(0.0%)	0(0.0%)

Table 1: The responses to the Likert-scale questions addressing the student's perception of Padlet.

(2) Research question 2 on the students' receptiveness to the use of Padlet for learning.

The responses to the questions on the student's receptiveness to the use of Padlet for learning are shown in Table 2.

Question	count (%) where n=40			
	Every day	Every week	A few times a week	Occasionally
How often do you use Padlet?	1(2.5%)	9(22.5%)	12(30.0%)	18(45.0%)

Table 2: Frequency of Padlet usage.

The 40 completed responses to the questionnaire were analysed according to the frequency of Padlet usage by the students.

An analysis of the 40 completed questionnaires revealed that 30.0% of students used the Padlet to view the materials a few times a week and 22.5% used the Padlet every week. A small percentage (2.5%) used the Padlet every day and the remaining 45.0% used the Padlet occasionally.

The lessons were conducted twice a week and the results suggested that the students used Padlet during the lessons.

We will explore activities for students to do outside the lectures by designing self-paced learning exercises.

(3) Research question 3 on how students used Padlet to learn the legal concepts.

The responses to the questions on the features in Padlet that students use on their mobile device are shown in Table 3.

The findings in Table 3 suggested that students used Padlet for multiple activities.

These results suggested that looking at course materials (42.5%), understanding key legal concepts (25%) and recalling legal concepts (15%) are the top 3 activities on how the students are using Padlet.

These results show that almost half of the students (42.5%) were using Padlet to look at course materials. It is likely that the students are comfortable using their mobile devices to access the materials. The results indicated that 25.0% of the students are using their mobile devices to access the materials in Padlet to help them understand the key legal concepts as well as to recall legal concepts (15.0%).

From the results, only 1 student used Padlet to communicate with the lecturer. This result suggests that students are not likely to use Padlet to communicate with the lecturer and that the students are more likely to ask questions in class or by sending an email to the lecturer.

Five percent of the students used Padlet to look at answer plans and 5.0% attempt exam questions using Padlet. This percentage is likely to increase nearer to the exam period.

Question	count (%) where n=40						
	Looking at course materials	Understanding key legal concepts	Recalling legal concepts	communicating with lecturer	Looking at answer plans	attempting exam questions	others
Which features do you use on Padlet on your mobile device?	17(42.5%)	10(25.0%)	6(15.0%)	1(2.5%)	2(5.0%)	2(5.0%)	1(2.5%)

Table 3: Usage of features in Padlet.

Summary of interpretation of results

The researcher-instructor has also observed that all the students have mobile devices which they bring along with them every day. During the lessons, the researcher-instructor observed that the students were using their mobile devices to access Padlet and were familiar with downloading and using apps.

The results of the research suggested that students appear to be comfortable using their mobile devices to access the materials in Padlet. Some students have provided feedback on the use of Padlet as “user friendly” and were engaged “by learning through apps i.e. videos, pictures, etc.”.

These results suggested that the students who are Generation Z are generally comfortable with the bite-size lessons posted into Padlet available to them 24/7 and may be accessed via their mobile devices namely their smartphones which they have with them most of the time.

CONCLUSION

The pilot study has shown that students are receptive to learning the materials which are posted onto Padlet and that Padlet can improve the learning experience of students. The students also used Padlet to help them in their understanding and recalling of key legal concepts.

There was also evidence that learning using Padlet supports experiential learning.

Further research involving a larger sample of students is recommended to strengthen these findings and explore in more detail the use of Padlet as an innovative teaching strategy to enhance student learning of Business Law and other subjects.

AUTHOR

THUM Cheng Cheong is an Associate Lecturer with SIMGE. He received his LLB(Hons.) from the National University of Singapore in 1986. He has previously practised law and worked in local and foreign banks before embarking on a teaching career in 2008 with SIMGE. He is a certified mind map instructor and is an ACTA-certified (“Advanced Certified in Training and Assessment”) trainer. His interests include the use of creative approaches of teaching to enhance student learning.

REFERENCES

- Kolb, D.A. & Fry, R (1975) “Towards an applied theory of experiential learning.” in C. Cooper (Ed.) “Theories of Group Processes.” Wiley, London.
- Ellis, D. (2015) “Using Padlet to increase student engagement in lectures”, “European Conference on eLearning” Held 29-30 October 2015 at Hatfield, UK.
Retrieved from <https://pureportal.coventry.ac.uk/en/publications/using-padlet-to-increase-student-engagement-in-lectures-2>
- S.Sangeetha (2016) “Edmodo and Padlet as a collaborative online tool in Enriching Writing Skills in Language Learning and Teaching”. Global English-Oriented Research Journal Vol. 1 Issue 4-March 2016. Retrieved from https://www.researchgate.net/publication/302472966_Edmodo_and_Padlet_as_a_collaborative_online_tool_in_Enriching_Writing_Skills_in_Language_Learning_and_Teaching

Kolb's Learning Styles and Experiential Learning cycle. Retrieved from <https://www.simplypsychology.org/learning-kolb.html>

Why Padlet. Retrieved from <https://padlet.com/features>

Masami Kimura "ICT, A motivating tool: A case study with Padlet". Retrieved from http://www.fas.nus.edu.sg/cls/CLaSIC/clasic2018/PROCEEDINGS/kimura_masami.pdf

Teaching skills: David Kolb from University of Leicester. Retrieved from <https://www2.le.ac.uk/departments/doctoralcollege/training/eresources/teaching/theories/kolb>