LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU PEER REVIEW
KARYA ILMIAH : PROSIDING

Judul karya ilmiah (paper) : The Effect Of Collaborative Communication, Power Dependency, and Price Satisfaction on Trust and Loyalty of Individual Farmers to Dairy Cooperative; Case Study Dairy Supply Chain in Boyolali

Jumlah Penulis : 4 orang
Status Pengusul : Penulis ke-1
Identitas Makalah : a. Judul Prosiding

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f. Terindeks di (jika ada) : SCOPUS

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(beri √ pada kategori yang tepat)
√ Prosidng Forum Ilmiah Internasional

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<tr>
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<td>b. Ruang lingkup dan kedalaman pembahasan (30%)</td>
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Nilai Pengusul = (60%)*27,25 = 16,35

Semarang,

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Nilai Pengusul = (60%)*27,00 = 16,20

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1. **Kesepakatan dan kelengkapan unsur isi prosiding**: Penulisan sudah sesuai dengan "Guide for Author" (title, introduction, literature review, methods, data collection and discussion, and conclusion) dengan sistem Author. Substanti artikel sesuai bidang ilmu pengusul/penulis pertama (implementasi supply chain governance pada rantai pasok suatu). Ada benang merah dalam struktur penulisannya, terdapat kaitan antar permasalahan yang diajukan dan hasil yang diperoleh (skor=3,00).

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Semarang, 4 Oktober 2019
Reviewer I

Prof.Dr.H.Sugeng Wahyuadi, MM
NIP. 195109021981031002
Unit kerja : Fakultas Ekonomika Dan Bisnis, Universitas Diponegoro
**LEMBAR HASIL PENILAIAN SEJAWAT SEBIDANG ATAU PEER REVIEW**
**KARYA ILMIAH : PROSIDING**

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3. Kecukupan dan kemutahiran data/informasi dan metodologi: Artikel paper memaparkan pengolahan yang cukup dengan menggunakan pendekatan analisa data menggunakan Structural Equation Modelling (SEM) yang kemudian dilakukan analisa dengan oment Structure 22 (AMOS 22) Program. (skor = 8,10)

Jakarta, 9 Oktober 2018
Reviewer 2

Prof. Ir. Dana S Saroso, MEngSc.,PhD.
NIDN. : 0305026302
Unit kerja : Universitas Mercu Buana
SERTIFIKAT
PROOF OF ATTENDANCE

This is to certify that

Aries Susanty
Diponegoro University Indonesia

has participated in the

2016 IEEE International Conference on
Industrial Engineering and Engineering Management

held at

Bali Nusa Dua Convention Center
Bali, Indonesia

during the period

4 to 7 Dec, 2016

and presented the paper(s)

IEEM16-P-0036: The Effect of Collaborative Communication, Power Dependency, and Price Satisfaction on Trust and Loyalty of Individual Farmers to Dairy Cooperative Case Study Dairy Supply Chain in Boyolali
Aries SUSANTY, Arfan BAKHTIAR, Hery SULIANTORO, Christopher MANALU
University of Diponegoro, Indonesia
BUKTI SCOPUS
The effect of collaborative communication, power dependency, and price satisfaction on trust and loyalty of individual farmers to dairy cooperative case study dairy supply chain in Boyolali (Conference Paper)

Susanty, A., Bakhtiari, A., Suliantoro, H., Manalu, C.
Department of Industrial Engineering, University of Diponegoro, Semarang, Indonesia

Abstract

The study aims to investigate the effect of collaborative communication, power dependency, and price satisfaction on trust of individual farmers to the dairy KUD (a dairy cooperative). This study also aims to investigate the effect of trust on the loyalty of individual farmers to the dairy cooperative. The investigation will represented by the 165 individual farmers and several dairies cooperative in 6 districts in Boyolali, Central Java, Indonesia. The finding of this study indicates that the collaborative communication and price satisfaction have a significant positive effect on individual dairy farmer's trust of the competence-goodwill and producer's contractual of dairy cooperative; whereas, the imbalance power-dependency have a negative significant effect on the competence-goodwill and producer's...
contractual of dairy cooperative. The finding of this study also indicates that competence-goodwill and contractual trust of individual farmers have a significant effect on the level of their loyalty to the particular dairy cooperative. © 2016 IEEE.
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2. Morey, P.
   Jakarta: Morelink Asia Pacific

3. Yusdja, Y., Sayaka, B., Riethmuller, P.
   9 study of cost strutures of dairy o-operatives and farmer incomes in east Java

4. Boniface, B., Gyau, A., Stringer, R., Umberger, W.
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6  Rowley, J.
The four Cs of customer loyalty

doi: 10.1108/02634500510624138

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7  Diller, H.
Customer loyalty: Fata morgana or realistic goal? Managing relationships with customers
T. Hennig-Thurau, and U. Hansen

8  Caceres, R.C., Paparoidamis, N.G.
Service quality, relationship satisfaction, trust, commitment and business-to-business loyalty

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The role of trust in inter-organizational relationships' control and success," presented at
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IESEG School of Management, France
KEYNOTE AND INVITE SPEAKERS
"The Sputnik of Servgoods: Autonomous Vehicles"
Mon - 5 Dec | 09:45 - 10:30 | Pecatu 1 & 2

James M. TIEN
Member of US National Academy of Engineering
Former Dean of the College of Engineering
University of Miami, United States

Abstract
In an earlier paper [Tien 2015], the author defined the concept of a servgood, which can be thought of as a physical good or product enveloped by a services-oriented layer that makes the good smarter or more adaptable and customizable for a particular use. Adding another layer of physical sensors could then enhance its smartness and intelligence, especially if it were to be connected with each other or with other servgoods through the Internet of Things. Such sensed servgoods are becoming the products of the future. Indeed, autonomous vehicles can be considered the exemplar servgoods of the future; it is about decision informatics and embraces the advanced technologies of sensing (i.e., Big Data), processing (i.e., real-time analytics), reacting (i.e., real-time decision-making), and learning (i.e., deep learning). Since autonomous vehicles constitute a huge quality-of-life disruption, it is also critical to consider its policy impact on privacy and security, regulations and standards, and liability and insurance. Finally, just as the Soviet Union inaugurated the space age on October 4, 1957, with the launch of Sputnik, the first man-made object to orbit the Earth, the U. S. has inaugurated an age of automata or autonomous vehicles that can be considered to be the U. S. Sputnik of servgoods, with the full support of the U. S. government, the U. S. auto industry, the U. S. electronic industry, and the U.S. higher educational enterprise.

About the Speaker
After 8 years as Dean of the College of Engineering at the University of Miami, Coral Gables, Florida, Dr. James M. Tien stepped down in 2015; he remains a Distinguished Professor. He received the BEE from Rensselaer Polytechnic Institute (RPI) and the SM, EE and PhD from the Massachusetts Institute of Technology (MIT). He has held leadership positions at Bell Telephone Laboratories, at the Rand Corporation, and at Structured Decisions Corporation (which he co-founded). He joined the Department of Electrical, Computer and Systems Engineering at RPI in 1977, became Acting Chair of the department, joined a unique interdisciplinary Department of Decision Sciences and Engineering Systems as its founding Chair, and twice served as RPI’s Acting Dean of Engineering. Dr. Tien has published extensively, been invited to present dozens of plenary lectures, and been honored with both teaching and research awards, including being elected a Fellow in IEEE, INFORMS and AAAS and being a recipient of the IEEE Joseph G. Wohl Outstanding Career Award, the IEEE Major Educational Innovation Award, the IEEE Norbert Wiener Award, the IEEE Richard M. Emberson Award, and the IBM Faculty Award. He received a Doctor of Engineering (honoris causa) from Canada’s University of Waterloo and is also an Honorary Professor at over a dozen non-U.S. universities. Dr. Tien is also an elected member of the U. S. National Academy of Engineering.
Keynote Presentation

"Manufacturing and Engineering Networks in a Globalised and Data-rich World"
Mon - 5 Dec | 11:00 - 11:45 | Pecatu 1 & 2

Arnoud DE MEYER
President
Singapore Management University, Singapore

Abstract

It has become almost a cliché that the way we organize manufacturing and engineering, is changing because of two main reasons: globalization and the degree of data-intensity in products and services. Many sectors and markets are dominated by a small group of large producers, who have an international network of factories and design facilities. And the concept of a physical product or an intangible service has gotten blurred, because in most cases the value created for the customer now often consists of physical products and information and network based services.

This has obviously a major impact on how we think about global engineering and manufacturing networks. I will address three issues. First a lot more innovation and engineering is carried out in global ecosystems, or loose partnerships of companies and research institutes who together create value. This the way ARM, the British risc processor designer that was recently bought by Softbank, or Alibaba have organized their innovation systems. Such ecosystems have become possible thanks to the lower transaction costs between partners, as a result of better information and networking technology. I will propose under which circumstances such ecosystems are appropriate for engineering and manufacturing, and how they can be managed.

Secondly I have developed with my co-authors Ann Vereecke and Kasra Ferdows a model for the organization of global production networks, based on the degree of uniqueness of products and processes, which may help to delayer such networks. This empirically supported model helps us to spot anomalies in engineering and manufacturing networks and provides an excellent tool for the audit and management of such global networks.

Thirdly we have also explored what the implication is of the current hypes in manufacturing, e.g. re-shoring, 4.0 manufacturing and Internet of Things, the rise of e-commerce and digital manufacturing may imply for global engineering and manufacturing networks. Based on a number of case studies of companies like Johnson and Johnson, SAB Miller, Rolls Royce, BASF or Luxottica we hypothesize that the information density and interconnectedness of products and processes play a key role in the influence of these hypes on the organization of engineering and manufacturing networks.
Keynote Presentation

"Embracing the Future by Growing the Digital Ecosystem in Indonesia and Deliver Value to Customers"
Mon - 5 Dec | 11:45 - 12:30 | Pecatu 1 & 2

Marina KACARIBU
Vice President, Enterprise Digital Services
Telkomsel, Indonesia

Abstract
The rapid growing of cellular network and smartphone adoption in Indonesia has brought new digital behavior and brought many opportunities for the digital ecosystem players, as more people become connected to the Internet through their mobile phone.

As the largest mobile operator that deliver connectivity and digital services to our customers, we have seen how the new services has grown very fast in consumer areas such as social media, games, and entertainment.

Telkomsel has worked with many content partners, publishers, both global and local in driving the new services and distribute it to the right segment, leveraging on our asset and capabilities not only in network coverage and quality but also billing enablement, distribution, marketing and reaching out to the youth and community in various on the ground activities.

We learn that the innovation needs to happen not only in the product itself, but also in the business model, pricing, and how it is communicated and distributed to the relevant segment in the market. End to end user experience is critical and it needs dedicated effort to test and get market feedback continuously.

With the continue expansion of 3G and now 4G, the new landscape of Internet of everything has also been started to rise. Now, there are more applications and ways to connect not only people but also many types of devices and sensors, brings new potential use cases for new value creations to both consumer and enterprises.

In embracing the future growth in this area, Telkomsel has been launched key initiatives and products, focusing in mobile financial services, digital entertainment, IoT based services and digital advertising. It has challenges but the opportunities of value creation are huge, so collaboration with multiple parties along the value chain is imperative.

With more than 150 million customers and growing, Telkomsel continues to work with many of new stakeholders in the adjacent industries, find ways to stimulate the innovation and deliver more values to our customers.
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Author Index
Gamification based lean knowledge dissemination: A case study

Abstract:
Gamification is generally recognized as a traditional teaching methodology, e.g., expositive lectures, are prone to become inefficient, especially in terms of knowledge retention, because many students quickly lose attention. Therefore, it is vital the adoption of new teaching methodologies that enable the students' engagement in their own learning process. Based on a case study, this manuscript aims to demonstrate how game-based approaches can improve the teaching/learning processes in Industrial Engineering education, more specifically in the Lean Manufacturing context. The investigation is focused on: (i) type of achievable learning objectives (according to Bloom's taxonomy) and (ii) alignment with the students' learning styles (according to Felder-Silverman’s model). Data about (ii) is gathered by a questionnaire applied to students after the Lean Manufacturing game. The discussion of (ii) is based on the questionnaire and on the analysis of the type of game applied.

I. Introduction
Many engineering students start their degree without a high level of motivation and engagement[1]. Even for those highly motivated, that motivation may decrease if the teaching/learning approaches adopted are not appropriate. Thus, the ability to captivate students so they can successfully acquire the intended skills, with the support of innovative knowledge dissemination methods, is vital to academic (otherwise the dropout rate is likely to increase). However, it is generally accepted that the traditional teaching/learning approaches (where the students assume a passive role), extensively used by many engineering schools, are not the most suitable way to motivate/engage the students and are thus prone for lower levels of knowledge retention. For example, it was observed that only 10 to 30% of knowledge retention occurs when traditional approaches (i.e. teacher-centered, deductive learning, etc.) are applied extensively in the classroom (as is the case in many engineering schools) [2].

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How to Improve the Quality and Effect of Teaching in Engineering
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Assessing the effectiveness of diesel and petrol supply chain: A case of Namibia

Abstract:
Effective management of diesel and petrol supply chain (DPSC) is essential to achieve security of fuel supply. This study used qualitative and quantitative approaches to assess the effectiveness of DPSC in Namibia, recommending appropriate strategies to improve the supply chain. The study reveals that organizations’ internal arrangements in support of the DPSC are generally in a good state, though most internationally used strategies are underutilized. Close partnership with suppliers, close partnership with customer, and strategic planning, are the most used strategies. Government policy was adequate, and the road infrastructure and its management are in a good state. However, the railway infrastructure and its management were in a poor state. Further assessment showed that poor railway infrastructure and inadequate fuel storage facilities are the main challenges in the management of the supply chain. These should be the focal point for strategic improvement of the supply chain.

T. Iyambo, M. Mutingi ; C. Mbohwa

I. Introduction
A supply chain is a network consisting of facilities and distributing entities who work on raw material procurement, conversion of raw material into mid-product and end product, and distributing product to consumer [1] [2]. Modern commercial supply chains are in fact dynamic networks of interconnected firms. Efficient supply chains allow goods produced and delivered in the right quantities, at the right places, at the right time, and in a cost-effective manner [3]. Therefore, an effective and proper management of Petroleum Products supply chain is essential to achieve optimum result [5].

II. Methodology
The research aims to assess the effectiveness of DPSC in Namibia. The study involves the use of qualitative and quantitative approaches to assess the effectiveness of the supply chain. This study used a mixed research approach which combines both quantitative and qualitative measures to assess the effectiveness of the DPSC in Namibia. The objectives of the study are: to assess the effectiveness of DPSC in Namibia; to recommend appropriate strategies to improve the supply chain.

III. Results and Discussion
The findings of the study showed that organizations’ internal arrangements in support of the DPSC are generally in a good state, though most internationally used strategies are underutilized. Close partnership with suppliers, close partnership with customer, and strategic planning, are the most used strategies. Government policy was adequate, and the road infrastructure and its management are in a good state. However, the railway infrastructure and its management were in a poor state. Further assessment showed that poor railway infrastructure and inadequate fuel storage facilities are the main challenges in the management of the supply chain. These should be the focal point for strategic improvement of the supply chain.

IV. Conclusions
The study recommends the implementation of a suitable supply chain strategy that supports the DPSC. The study also places emphasis on the need to address the deficiencies of the railway infrastructure and the inadequacy of fuel storage facilities in order to improve the effectiveness of the DPSC in Namibia.

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Economic life prediction of repairable multi-component systems based on extension theory

Abstract:
Economic affordability is a crucial factor for repairable systems. Previous work about economic life prediction of systems mainly concerned about cost models, regardless of system structure or components' relationship. In this paper, a new economic life prediction method has been proposed with combination of a maintenance model and an accumulative damage model. The maintenance model is to depict the repairable deteriorating components of system. Non-repairable components' degradation processes are described by the accumulative damage model. Each component failure threshold can be obtained by allocating system failure threshold based on the extensive theory. Then, the objective of minimizing total cost determines the economic life value of system. Finally, a pump example is presented to illustrate the procedures.

I. Introduction

The repairable system, which suggests being fixable, like large industrial complex equipment or small household items, can return normal by repairing or replacing components once being out of function[1]. From the perspective of economic analysis, the system is put into use from beginning, to continue to the situation that it is updated: this period is called economic life[2].

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