

Geographic Information Systems Model for Curriculum Management on Cloud Computing in Supply Chain for Higher Education Institution

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Abstract— This article about geographic information systems model for Curriculum management on Cloud Computing in Supply Chain for higher education institution is important for the effectiveness of the model as well as the application in actual work settings. Literature on Cloud Computing in Supply Chain. The objectives of this study are to design and to evaluate geographic information systems model for Curriculum management on Cloud Computing in Supply Chain for higher education institution. The participants were 5 experts in supply chain management, 2 experts in information and technology and 3 experts in Curriculum, totalling 10 experts. The research tool was the questionnaire about geographic information systems model for Curriculum management on Cloud Computing in Supply Chain for higher education institution comprising of eight principal components, namely, Main components, Suppliers, University, Platform as Service, Information exchange, Internet access, Graduate student, Customers. The data were analysed by using arithmetic mean and standard deviation. The evaluation result from experts agreement geographic information systems model for Curriculum management on cloud computing in supply chain for higher education institution was a high level and can develop geographic information systems on cloud computing in supply chain the tasks

Keywords— *Geographic information systems model, Curriculum management on Cloud Computing in Supply Chain, higher education institution*

1. Introduction

The instruction is exceptionally critical in Thailand and the nation to extend its capability to compete with other nations in each viewpoint. Particularly, in instructive advancement that leads to the advancement of quality items , the government has defined the taking after approach: “To create quality of individuals, as the individuals are human assets of the nation and the key component in all

viewpoints of advancement, to change the total framework of instruction, to extend instruction and alter instructive structure, to decentralize instructive organization to the areas so that instructive administration gets to be more careful and responsive to the neighborhood needs”.[11] Arrangement too incorporates the foundation of private and open higher instruction educate to meet desires for national advancement and advancement of people who need to assist their ponders. One of the methodologies is the application of the supply chain administration framework to educational improvement in arrange to extend competitive capacity for the improvement of the nation and improve scholastic greatness. As such, the government has defined an vital approach that “The creation of a steady knowledge-based economy must bolster Thailand to be a canter of products and benefit generation within the locale based on inventive considering, creation of advancements, and expansion of the body of information in arrange to back the alteration of the structure of generation and benefit segment in each organize of supply chain Typically to empower the inventive economy to be a modern mobilizing control that leads toward a adjusted and sustainable economy within the long run, at the side the creation of geographic data frameworks and the supply chain framework, the administration of financial dangers, and a creation of the free and fair air to encourage the generation, commerce and investment inclusive of the improvement of unused business people, A creation of foundation and inner coordinations systems that interface with nations within the region.” Based on this arrangement, the 12th National Arrange for Social and Financial Improvement was defined [9]. The mindfulness geographic data frameworks demonstrate for Educational modules administration on Cloud Computing in Supply Chain for higher instruction institution which impacts the think about and viable preparing of understudies . In hone, graduates of the consider program are anticipated to oversee clashes of intrigued within the nation and survey

the affect of human action on person natural components. Both of these errands ruddy investigation and amalgamation and assess and translate the comes about precisely. Utilize of several close-knitted frameworks, the most one being geographic data frameworks on cloud computing in supply chain , gives a comprehensive arrangement to this issue. geographic information systems on Cloud Computing in Supply Chain may be a framework of equipment, computer program, information, individuals, organizations, and regulation courses of action for collecting, putting away, dissecting, and spreading data almost zones of a geographic data frameworks on Cloud Computing in Supply Chain are connected in land-use arranging, biological systems displaying, scene arranging and evaluation, transportation and framework displaying, advertise examination, visual affect examination, watershed examination, office administration, genuine bequest investigation, educating with Geographic data frameworks numerous other ranges. The utilize of a geographic data frameworks on Cloud Computing in Supply Chain devices has moreover ended up standard in logical exercises and it is an fundamental portion of inquire about for the think about in higher instruction institution Based on realization.[10] In sight of such a insight, A researchers had an idea to develop geographic information systems model for Curriculum management on Cloud Computing in Supply Chain for higher education institution for adding values to consumer.

2. Literature review

Toka, Darginis. & Aivazidou, Eirini (2013) said that computing in supply chain is innovation that seem contribute to this optimization by giving foundation, stage, and computer program arrangements for the entire supply chain organize through Web. The utilization of cloud-based administrations in supply chain administration leads to operational benefits, whereas at the same time potential risks and restrictions ought to be taken into consideration by all supply chain partners. The outline of cloud in supply chain that it can be obvious to all supply chain accomplices, from the producer to the client particularly real-time perceivability all through their client arrange. Cloud innovation makes a part of sense for supply chain directors.

Computing in the cloud makes it possible to closely track a product throughout its life cycle ,include it enables you to create quick decisions and effectively based on the determined strategies [14].

Geographic data frameworks for instructive administration can be overseen on a all encompassing level - from deciding the require for a Geographic data frameworks to the usage of the Geographic data frameworks in higher instruction

institution , or at errand level where workflows are utilized to track and oversee Geographic data frameworks for instructive administration to be specific position College position and Understudy Travel and the town populace, sub-district, an occupation populace can be a center and other information. There's a administrative evidence that lies between these two approaches - specifically supply chain administration. A supply chain envelops all exercises contributed with the stream and change of merchandise from crude materials arrange (extraction), through to the conclusion client, as well as the related data streams. The materials and data stream both up and down supply chain.[12]

Thai supply chain is an exercises required by the association to provide products or administrations to the shopper in Thailand A supply chain can be a center on the center exercises inside our association required to transform over crude materials that the organization operates smoothly and effectively.

Topographical data frameworks can be utilized within the supply chain in numerous diverse ways, but the essential one is progressed visualization, says Corridor. Geographic data frameworks mapping ties numerous diverse information sources together, he says, so rather than fair looking at spreadsheets, clients can have a visual and intuitive picture of what is going on within the supply chain at their fingertips. Geographic data frameworks employments Worldwide Situating Framework innovation for area purposes, but Geographic information frameworks includes information "in a way that permits the client to form cleverly key and strategic choices, says Lobby. Seri makes computer program that brings the information together, examinations and maps it "We moreover construct the devices that really do the progressed mapping," he says. The company as of now has 70 workplaces around the world and approximately a million clients of its program, within the supply chain as well as other industries. One application where Geographic data frameworks plays an imperative part is chance administration, says Corridor. we have had as of late where providers were not able to ship item, you'll be able see the value for key arranging of knowing what dangers are inalienable within the topography - level coastal ranges where a tidal wave might hit, for illustration. A sort of data can be seen ahead of time with mapping instruments and overlaid information which transportation courses will be impacted Geographic information systems is vital in real-time orchestrating, Campaign says, taking note that most emergency organization organizations inside the world utilize Seri Geographic information systems to diagram those events . "We have that data accessible right absent so we are ready show up people what is going on in honest to goodness

time, “Hall said that They can take that information and make operational choices in honest to goodness time to request supervise the supply chain and direct risk. Geographic data frameworks is crucial in real-time coordinating, Campaign says, taking note that most crisis organization organizations interior the world utilize of the Seri Geographic data frameworks to graph those occasions . "We have that information available right truant so we are prepared appear up individuals what is going on in fair to goodness time. [8]

3. Research Methodology

3.1. Survey document about geographic information systems model for curriculum management on cloud computing in supply chain for higher education institution

3.2. Design geographic information systems model for curriculum management on cloud computing in supply chain for higher education institution

3.3. Create the questionnaire for assessing the model.

3.4 The model is submitted to the experts for review and evaluate suitability.

3.5 Analyze the output data by using 5-point Likert Scale

4. Results

4.1 Results about model were presented in fig 1 .

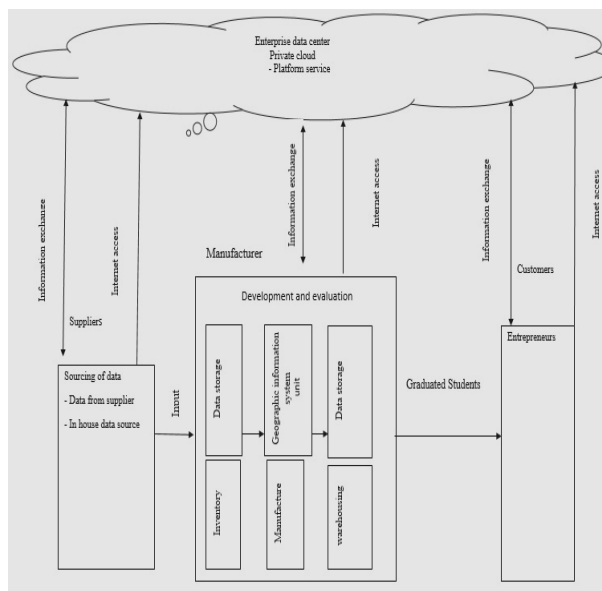


Fig: Geographic information systems model for curriculum management on cloud computing in supply chain for higher education institution

4.2 Principle on components about geographic information systems model for curriculum management on cloud computing in supply chain for higher education institution

1 Suppliers

The supplier is a data from supplier or basic and finished raw Materials namely Raw materials ,components , Parts ,Labour, Plant, Equipment, Energy etc.

2 University

A benefit supplier is a university .It performs the duty to transform raw materials namely Administration, Registration, Schedule, Maintenance, Lab setup, Licenses, Instructors Curriculum Course materials Case studies Online courses Authorized training and other data into the finished products. A benefit supplier will perform its obligation of item advancement and appraisal .It is based on the thought that all supply chain assignments and exercises, such as the college or Producer is begins to stream from the client to the higher instruction. The college at that point looks at the information distribution canter, to set up whether the geographic data framework item is sourced from the stockroom and conveyed to the client. A conveyance instrument is portion of the coordinations concerning the dispersion of the geographic data framework item and foundation shaping portion of the arranging and delivery.

3 Platform as service

Platform as Service is a program to run on or for the client to construct on cloud by utilizing lifecycle of cloud computing for application to increase satisfaction of consumers.

4. Information exchange

Information exchange mean exchanging information or sharing data with each other.

5. Internet access

Internet access or web get to is the method of interfacing to the web utilizing individual computers, tablets or versatile gadgets by clients or endeavors. web get to is subject to information signaling rates and clients can be associated at distinctive web speeds

6 Graduate student

Graduate student is the graduate from the university

7. Customers

Customers refer to an entrepreneurs They include the society in general and entrepreneurs who sended finished product from the university. Finally, an end product will add value of enterprises and increase satisfaction of consumers. [1],[2],[3],[4],[5],[6],[7],[12],[13]

Table 1: Results for evaluation of geographic information systems model for curriculum management on cloud computing in supply chain for higher education institution

No.	Items	\bar{X}	S.D.	Suitability
1	Main elements	3.62	0.56	High
2	Suppliers	3.60	0.51	High
3	University	3.60	0.51	High
4	Graduate student	3.70	0.48	High
5	Customers	3.60	0.51	High
6	Platform as Service	3.70	0.48	High
7	Internet access	3.70	0.48	High
8	Information exchange	3.60	0.51	High
	Total	3.64	0.50	High

Table 1, The experts found that geographic information systems model for curriculum management on cloud computing in supply chain for higher education institution is highly appropriate ($\bar{X} = 3.64$, S.D. = 0.50)

5. Discussion

According to the evaluation of geographic information systems model for curriculum management on cloud computing in supply chain for higher education institution is considered to be high appropriate shows the overall rating mean of 3.64 and standard deviation of 0.50. and the design was corresponds to the research of Chansamut and Piriyasurawong has studied supply chain and information system about educational [1] Also, the results are in accordance to those of chansamut who found that supply chain and information system. [2],[3],[4],[5],[6] and [7]

6. Conclusion

Geographic information systems model for curriculum management on cloud computing in supply chain for higher education institution is considered to be high appropriate can develop geographic information systems on cloud computing in supply chain the tasks

7. Recommendation

Geographic information systems model for curriculum management on cloud computing in supply chain for higher education institution is considered to be high appropriate if possible it

should . develop geographic information systems on cloud computing in supply chain.

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Reference

- [1] Chansamut, A., Piriyasurawong., P. Conceptual Framework of Supply Chain Management Information System for Curriculum Management Based on Thailand Qualifications Framework for Higher Education. International Journal of Managing Value and Supply Chains (IJMVSC) . Vol 5 No 4 , 33-45. 2014
- [2] Chansamut, A Supply Chain operation Model in Digital for Curriculum Management Based on Thailand Qualifications Framework for Higher Education. International Journal of Supply Chain Management (IJSCM). Vol 10 No 4 , 71-75. 2021.
- [3] Chansamut, A An Information System Model for Educational Management in Supply Chain According to Career standards on Thailand Qualifications Framework for Vocational Education International Journal of Supply Chain Management (IJSCM). Vol 10 No 4 , 51-55. 2021.
- [4] Chansamut, A Synthesis conceptual framework of Supply Chain Business Intelligence for Educational Management in Thai Higher Education Institutions International Journal of Supply Chain Management (IJSCM). Vol 10 No 5 , 25-31. 2021.
- [5] Chansamut, A Supply Chain Business Intelligence Model for Quality Assurance in Educational Management for ASEAN University Network Quality Assurance International Journal of Supply Chain Management (IJSCM). Vol 10 No 5 , 40-49. 2021.
- [6] Chansamut, A. ICT System in Supply Chain Management for Research in Higher Education Institute.University of the Thai Chamber of Commerce journal humanities and social sciences. Vol 36 No 2, 112-121. 2016.
- [7] Chansamut,. A. The development of patterns software for educational management on cloud computing in supply chain for asean university network quality assurance. International Journal of Supply Chain Management (IJSCM). Vol 10 No 6 , 23-32. 2021
- [8] Hall, W.2014.Global Industry manager ESRI. Available at <https://www.supplychainbrain.com/articles/18150-the-role-of-geographical-information-systems-in-the-supply-chain>

- [9] Jakab, I., Grezo, H., and Sevcik, M. Inquiry Based and Blended Learning Using Geographical Information System, ECEL 2016-Proceedings of the 15th European Conference on e-Learning, 287–295.2016.
- [10] Jakab., I, sevcik., M., Grezo., H. Model of Higher GIS Education. The Electronic Journal of eLearning.vol 15. Issue 3.2017.
- [11] Office of the National Economic and Social Development Board, (2021) , The Eleventh National Economic and Social Development Plan (B.E. 2017 – 2021) . Available at : <http://www.nesdb.go.th./Portals/0/news/plan/p11/plan11.pdf>. (accessed: 06 March 2022)
- [12] Schmitz.,P,Marais., M,La Rey. A.2005. USING SCM AND SCOR IN MANAGING GIS PRODUCTS AVAILABLE AT : <HTTPS://WWW.DIRECTIONSMAG.COM/ARTICLE/3137>.
- [13] Subhas,PROF. M.S., Sambrani,Vinod N. Geographic information system and supply chain management a manager's perspective. 10th ESRI India User Conference 2009.
- [14] Toka, A., Darginis.,KA.,Aivazidou,Eirini, 2013 Cloud Computing in Supply Chain Management: An Overview: Available at https://www.researchgate.net/publication/260510400_Cloud_Computing_in_Supply_Chain_Management_An_Overview