Information System: A Review of Emerging Issues

Ritu Vashistha*

The Information system (IS) is a discipline as well as a product too. As a product IS comprises of hardware, software, people, process, data and network. They all work together to achieve a common goal. As a discipline IS studies entities related to its product form, for example Human Resource Information System works on IS related concepts for Human Resource department only.

In the current scenario every organization whether it is of any type, size or belongs to any place; is using IS as a solution to manage their resources whether for physical or logical resources. Due to globalization the organizations have grown in size as well as their resources have also increased in numbers. To manage the resources and data effectively IS has proved itself as an effective and efficient solution.

The purpose of this research synthesis is to understand the current scenario and the various areas where IS is being used.

Information System as a solution

Weng Marc Lim (2018) examined that Information System is both a product and discipline. As a product it consists of a set of components like hardware, software, people, process, data, etc which work together to provide value to firms. Whereas, in discipline is the study of entities and events characterizing its product form. Lim also addressed some issues related to the technology acceptance model by viewing its critiques and responding to them with dialectic antidotes in form of conceptual, methodological and replication treatments. These treatments support the use of technology accepted model to understand the peculiarities of user interaction with technology in technology-mediated environment and are also relevant for behavioral modeling.

Further Marrone Mauricio et al (2018) considered IS as a product which is using information system for active learning processes and it is perceived positively by both the international and the domestic students. An active learning environment helps the student learn faster and analyze things in a better way making their attitude much more positive towards the course, the teaching staff, engagement and participation. Here the students feel safe, they are exposed to a variety of perspectives apart from the one of their lecturer, they get supportive and interactive peers where they get to learn from each other, and the ability to understand and apply the theoretical concepts in a practical way which helps them to reshape their thoughts.

However the international students benefit the most by this process due to the emphasis being given on integration and participation in weekly lectures. Furthermore the findings did indicate that the social constructivist theory helps in understanding the complexities in collaborative learning in a better way. Thus the study shows us how active learning benefits the students both domestic and international, the organizations and the

^{*} Assistant Professor at Amity Business School, Amity University Rajasthan, Jaipur. E-mail: rvashistha@jpr.amity.edu

measures that should be taken for a better result.

Another author Gupta Gaurav et al, 2018 examined the importance of information system in Resource Based View (RBV) and how it helps an organization to grow. It was revealed that there are two resources based view of information system-conventional and contemporary. The conventional RBV is for the firms in stable environment, it suggests that the firms should use information system as a resource to establish sustainable competitive advantages and also to make the firms performance better. Whereas, the contemporary RBV is for the firms operating in agile and dynamic environment, it encourages firms to use information system as a resource to establish competitive advantage and to drive the firm's performance.

Samhan (2018) examined the new perspective of resistance towards the technologies rather than any other object such as change. Samhan spells out conceptualization, contextualization, antecedents, interventions, and consequences of current and future work on technology resistance. He also states that technology resistance can be of various multiple forms and thus greater research should be done using multiple theoretical lenses and perspectives.

NamvarMorteza et al (2018) also examines that in this era of increasing competition the organizations rely on huge amount of data to monitor and analyze changes in their business environment. Business information systems help in this process by turning data into evidence which then supports the decisionmaking. A systematic explanation of sense making is offered along with discussing the way for including information system in contemporary business environment. Sense making is now much more visible in the field of information system but it still remains unknown compared to the other information system concepts. Also we should focus on using the existing and future business intelligence and analytics more effectively. According to Stevens Kenneth J et al (2018), the technological change in educational system is necessary to meet the students' learning needs. The paper also discussed about how students should use the technology in the academics and the approaches that are needed. Every student has a different learning style and the technology should suit their learning style for self-learning process. The motivation pattern of students was tested using the data collected from 16 students. The data was divided into two - 'Independent Learners' and 'Traditional Learners'. The results showed that the two groups achieved the same learning goal but by different paths. The limitation of this study is that every participant is capable; while there is no established measure of digital capability. Another limitation is the small sample. A larger scale would reveal additional or different factors that influence their use. The framework plays a vital role; it may vary from student to student. Further research is required to know more about the mental model for current student. In conclusion, the technological change is necessary. It is seen by the various surveys and evidences of data that whether a student has different learning pattern. Apart from this, students even thought that 'interaction' was a major factor ranked high in an interview. So, e-learning is a standard practice by all students now-a-days and Information system is supporting these platforms to manage the details and data accordingly.

According to Vass Tharaka de et al (2018), the effects of IoT (Internet of things) on supply chain integration lacks the exposure of the technology in the industries. A survey conducted reveals that the technology is positive and is beneficial if adopted in supply chain integration. To know more about the technology a cross-sectional survey data was collected of 227 Australian retail firms. The study indicates that the IoT contributes positively in supply chain integration and it enhances the performances. The effects of IoT are yet to be explored in the case of supply chain integration.

Broadening the Horizon of IS through New Innovations

Senarathna Ishan et al, 2018 examined the factors influencing cloud computing adoption by the Australian SMEs. It was found that Cloud Computing was accepted as a solution for the SMEs who wanted to be successful in the market. Cloud computing also offers a new business solution through a user pay system via the internet enabling customers to rent information technology (IT)infrastructure. platforms and software through positioning their business applications and data storage in the cloud. A significant and strong relationship was found between the awareness and adoption of cloud computing having a positive influence with both the quality of service and the cloud relative advantage. But there are some limitations to the study like the survey being restricted to the Australian SMEs thus limiting generalizability, in order to consolidate our derived understanding the quantitative methodology suggested value in additional qualitative techniques. Culture, different legal systems and cloud providers management style can be useful extensions. The value that the larger organizations see in cloud computing can be evidenced by their substantial investments. It is important to understand why SMEs intentions are slowly

moving toward the business value that can be generated adopting cloud computing.

According to Motahar Seyed Mohammad et al (2018), Enterprise resource Planning (ERP) training is a very important research in ERP systems. Its results have great potential to be applied in industry. A new emerging technology has improved the supply chain information flow – IoT. A survey conducted reveals that the technology is positive and beneficial when adopted in supply chain integration. The study indicates that IoT contributes positively in supply chain integration and enhances the performances. **References**

- Hasan H., Connery A., Crawford K. (2018).
 Challenges of IS Research Translation: a Study of Tensions between ICT Innovation and Conservative Bureaucracies. Australasian Journal of Information Systems.
- Lim W. M. (2018). Revisiting Concepts and Theories in Information Systems and Technology. Australasian Journal of Information Systems.
- Marrone M., Taylor M., Hammerle M. (2018). Do International Students Appreciate Active Learning in Lectures? Australasian Journal of Information Systems.
- Senarathna I., Wilkin C., Warren M., Yeoh W., Salzman S. (2018). Factors That Influence Adoption of Cloud Computing: An Empirical Study of Australian SMEs. Australasian Journal of Information Systems.
- Gupta G., Tan K. T. L., Ee Y. S., Phang C SC. (2018). Resource-Based View ofInformation Systems: Sustainable andTransient Competitive AdvantagePerspectives. Australasian Journal ofInformation Systems.

- Samhan B. (2018). Revisiting Technology Resistance: Current Insights and Future Directions. Australasian Journal of Information Systems.
- Namvar M., Cybulski J L., Phang C. S. C., Tan K. T. L., Ee Y. S. (2018).
 Simplifying Sensemaking: Concept, Process, Strengths, Shortcomings, and Ways Forward for Information Systems in Contemporary Business Environments. Australasian Journal of Information Systems.
- Vass T. D., Shee H., Miah S. (2018). The effect of "Internet of Things" on supply chain integration and performance: Anorganisational capability perspective.

Australasian Journal of Information Systems.

- Mukhtar M., Safie N., Ma'arif M Y. (2018). Towards a product independent ERP training model: An Insight from a literature review. Australasian Journal of Information Systems.
- Stevens K. J., Guo Z., Li Y. (2018). Typology and Hierarchy of Students' Motivations to Use Technology in Learning. Australasian Journal of Information Systems.