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## DISRUPTIVE INNOVATIONS and IT *Wicked yet Empowering.*

*Panel*

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### ABSTRACT

When Information Technology (IT) Innovations become Disruptive Innovations (DI), they bring along with them a dimension of “wicked problems” due to their disruptive attributes; they however, concurrently usher in an “empowerment opportunity” due to the typical nature of advances in IT. The session would explore the opportunities that this phenomenon holds for both “Blue Ocean” research and practice by exploring its implications from three angles - individuals, organisations and the society. This panel is set out to open up a fresh perspective to this unique dimension of IT trends that holds both theoretical and practical insight for the IS field.

### Keywords

Disruptive Innovations, IT Innovations, Wicked Problems, Blue Ocean Research

### INTRODUCTION

At its peak, Kodak employed over 140,000 people, while Instagram today employs only 13 people (Jaron Lanier, 2013). There is however a converse note. Firstly, consider yourself in the Kodak age. You just captured an amazing moment on your Kodak film and you wish to share that picture with your relative or friend who lives in another country. Try to imagine the process that would be required. Again, imagine how many of such virtuous desires went unfulfilled, at that time.

Similarly, not so long ago, there were businesses thriving by making / selling radios, cameras, alarm clocks, calculators, cassette players, compass, GPS, pocket dictionaries, atlas map, video recorders or ... but today you can replace ALL that by one device – the smartphone (Christopher Mims, 2012). Yet another converse note, imagine the possibilities that the smartphone brings to its users. The extent of the reach of the smartphone era can be easily visualized if you imagine yourself having to carry all those gadgets with you all day! It borders close to incredible if we consider what is possible today with a single device compared to what we could do or how we would have done these same things, a couple of years ago.

These two simple but classic scenarios, typifies what can be termed as the *wickedness* and *empowerment* nature of the Information Technology and Disruptive Innovation Combination (IT & DI Combo).

## PANEL OVERVIEW AND OBJECTIVES

The session is aimed at bringing different thought leaders together to discuss the consequences and interplay of the wicked challenges and empowerment openings that the combination of IT and DI pose for possible future scenarios. One key objective of the panel is to stimulate idea generation and opportunities for further scholarly inquiries. The consequences for three main actors (Society, Organization and Individual) would be discussed and future trends would be explored. At the end, we should arrive at different implications of this phenomenon for the future of “Blue Ocean” IS research as well as practice.

### Key constructs

*Disruptive Innovations:* Disruptive innovation introduces a different set of rules to the traditional act of doing business in a domain. In the face of disruptive innovation, the functional knowledge and operational process skills gathered by a company over several years could see itself gradually facing a rising risk of irrelevance and obsolescence (Johnson, Christensen & Kagermann, 2008). Generally, DI introduces a different set of attributes relative to a market which are unattractive for mainstream customers on inception due to variance in attributes valued by this market (although a different market segment may value the new attributes - Baiyere & Salmela, 2013). They usually begin with simplistic applications at the fringe of a market but gradually gains adoption and develop with a potential to displace established market leaders (Christensen, 2006).

*Wicked Problems:* describes complex issues that are difficult to solve because of incomplete, contradictory, and changing requirements that are often difficult to recognize (Churchman 1967). The "wicked" concept is used to characterize complexity, uncertainty and divergence of the problem rather than “evil” (Conklin, E. J., & Conklin, J. (2006). Furthermore, due to its uncertainty and complex interdependencies, the process of resolving an aspect could lead to or reveal other concealed problems (Ferlie, E, Fitzgerald, L, McGivern, G, Dopson, S & Bennett, C, 2013).

*Empowerment:* can be expressed as a multi-faceted social process which enables individuals/group of people/organisations to gain control over their own lives/activities and opens up opportunity to do things that hitherto were not possible. It is a concept that nurtures power (that is, the capacity to implement) in people, for use in their own actions, their environment, and in their society, by acting on matters which are of essence to them (Page and Czuba 1999).

### PANEL LAYOUT/DESIGN

The structure of the panel is in three phases.

- Panel presentation phase (20 minutes)
- Panel interaction phase (20 minutes)
- Open question and answer phase (20 minutes)

Panelists are required to give a 5 minutes presentation with a maximum of 10 slides each. The presentation should present the position and viewpoint of individual panelist. The focus of each presentation would be the core areas of each panelist, at the end of which, participants should have an understanding of: a) key constructs, examples, historical background b) practical perspectives, future/current trends c) theoretical and research perspectives, plus their relationship to research methods.

The panel interaction phase would be a moderator-facilitated session with preplanned questions to be discussed. These questions will be hinged on the presentation contents vis-à-vis its relation to the three actors (individuals, organization and society). The four defining categories for the questions will be a) trends and future implications b) practical implications c) theoretical implications and d) implications for research design. For instance: in disruptive innovation scenarios, how has IT been an enabler, a sustainer, or even a barrier? What are the relevant research opportunities that this topic opens for IS scholars? How can different IS research approaches (e.g design science) be best used to capture insights about this phenomenon? How can IS research about DI and IT be positioned to also contribute value to societal concerns?

The third and final phase will involve an open floor questions and answers session which will be guided by the panel moderator. The session is planned to be an avenue for interactions and for participants to stimulate further discussions.

### PANEL PARTICIPANTS

#### Alan Hevner (Confirmed)

Alan Hevner is an Eminent Scholar and Professor in the Information Systems and Decision Sciences Department in the College of Business at the University of South Florida. Emphasizing the synergy between research and practice; Hevner has been one of the main voices advancing the design science research approach as one of the valuable approaches that can be used to introduce relevance to IS research. His recent works have emphasized the link between innovation and IS research with a theoretical and practical balance. A significant number of his research contributions have been implemented and

evaluated in business and industrial information systems; he was recently honored with a Lifetime Achievement Award for his contributions to the field of design sciences at the 2009 International Conference on Design Science Research in Information Systems and Technology. He is expected to bring research design angles to the panel among other contributions.

**Jim Stikeleather** (Confirmed)

Jim Stikeleather is the Chief Innovation Officer of Dell where he leads a team of information technology and business experts who identify, evaluate and assess the future potential of new technologies, business models and processes to address evolving business, economic and social trends for the company and customers. A recognized thought leader who has two patents, authored two business books, and contributed to four more. He regularly writes for the Harvard Business Review and Management Innovation eXchange blogs and he is a speaker at industry and academic events. Organizations worldwide rely on Stikeleather for guidance on digital infrastructures, evaluation of emerging technologies, and strategic guidance on their application. He is expected to highlight historical, present, and future trends and related practical insights to the panel.

**Brian Donnellan** (Confirmed)

Innovations in information technology come fast and often. As a Professor of Information System Innovation and Co-Director of the Innovation Value Institute, Brian Donnellan's research helps define how these IT innovations shape organizations. Guided by 20 years industrial experience in IT and Innovation Systems Management, Donnellan's research interests lie in the area of innovation systems, which encompasses how information systems can be used to support innovation, new product development and technology management. He is an expert evaluator for the European Commission and has been guest and associate editor of several leading IS journals including Journal of IT, Journal of Strategic Information Systems and MIS Quarterly. He is expected to contribute theoretical insights and opportunities for future research to the panel among others.

**Calvin Smith** (Confirmed)

Calvin Smith is the Principal Manager of Global Innovation Corporation in EMC. He drives EMC's primary organic ideation and innovation globally through - The Innovation Network, Roadmap, and Conference. He has facilitated the incubation of over 100 ideas over the past 3 years, resulting in over six digits dollars in direct revenue. He has additionally facilitated hundreds of invention disclosures and patent filings, and countless process improvements and cost reductions. He is a seasoned speaker in academic and practitioner conferences on topics related to innovation, trends, and future opportunities. He is expected to relate the panel discussions to practical examples and possible applications.

**EQUIPMENT REQUIREMENTS**

For an effective conduct of the panel session, the following equipment will be beneficial if available.

- A projector (for presentations and for projecting pre-planned questions)
- Sound system - Microphones and Speakers – (depending on the size of the allocated venue)

**REFERENCES**

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