Selecting A Topic for Information Systems Research

By

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Biography

Name: Achmad Nizar Hidayanto
Position: Coordinator of IS/IT Stream, Fasilkom UI
Education: S1 – S3, in Computer Science, Univ. Indonesia
Editorial Board:
- International Journal of Management and Enterprise Development, Inderscience Publisher
- Jurnal Sistem Informasi, ITS
- Jurnal Sistem Informasi, UI
- Jurnal Pekommas, BBPPKI Makassar, Kominfo
Reviewer:
- International Journal of Industrial Management and Data Systems (Emerald Insight)
- Entropy (Multidisciplinary Digital Publishing Institute)
- Knowledge Management and e-Learning (The University of Hongkong)
- International Journal of Innovation and Learning (Inderscience)
- International Journal of Management in Education (Inderscience)
- Electronic Government (Inderscience)
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Purpose

After completing this session, the participants are expected to be able to:

1. Explain the importance of a good research topic
2. Explain the criteria of a good research topic
3. Explain the cutting edge research topics in information systems (IS)
4. Search sources for getting insight of IS research topics
5. Choose and define a research topic for international journal publication
CHOOSING YOUR TOPIC IS A RESEARCH
See
https://www.youtube.com/watch?v=TdJxY4w9XKY
WHY IS IT IMPORTANT TO SELECT A GOOD RESEARCH TOPIC?
Why is it Important to Select a Good Research Topic?

- A good topic is a key for international publication!!
- Although you write your paper very well, if the topic is not good, your effort will be useless
What should we do to get insight of a good topic?

- Read, Read and Read...
- Know good journals and conferences in IS research area
  - IS/IT top conferences:
    - ICIS, ECIS, AMCIS, PACIS, ACIS, MCIS, HICSS, etc.
  - Top IS/IT journals:
  - Edited and peer reviewed book chapters
Sources to Search IS Journal Rankings

- IS communities
  - Association of Business School (ABS) journal list (www.kfs.edu.eg/com/pdf/20820152253917.pdf)

- Reputable database:
  - Scopus (www.scimagojr.com)
  - ISI Thomson
### Sources to Search IS Journal Rankings

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<td>1. Molecular Systems Biology</td>
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<td>5. Journal of Service Research</td>
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<td>6. Briefings in Bioinformatics</td>
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Criteria for a Good Research Topic

- A good research topic should be:
  - Feasible (can be done/workable)
  - Interesting (up-to-date, wider audience, etc.)
  - Novel
  - Ethical
  - Relevant (has an implication)

These criteria have been collectively called the FINER formula (Hulley et al., 2001)
Criteria for a Good Research Topic

- Example of interesting issues in IS area:
  - social media, cloud computing, outsourcing, big data, global software development, internet of things, mobility, e-health (medical informatics), etc.
- Others: see journal scopes/conference tracks
Example from ICIS 2017 tracks

- Track 1. Conference Theme Track: Transforming Society with Digital Innovation
- Track 2. Paper-a-thon
- Track 3. Economics and Value of IS
- Track 4. E-business and E-Government
- Track 5. IS Curriculum and Education
- Track 6. Peer-to-Peer and Crowd Markets
- Track 7. Global IS Issues
- Track 8. Digital Platforms, On-line Communities, and Open Governance
- Track 9. Security, Privacy and Ethics of IS
- Track 10. IT and Healthcare
- Track 11. Research Methods, Theorizing, and Philosophy
- Track 12. IS development and project management
- Track 13. Human behavior and IS
- Track 14. Strategy, structure, and organizational impacts of IT
- Track 15. Data Science, Decision analytics and visualization
- Track 16. Service Science and IS
- Track 17. HCI, Design Issues and Design Science Research
- Track 18. Social Media and Digital Collaboration
- Track 19. IT and social change
- Track 20. Practice Oriented Research
- Track 21. Panels
- Track 22. General Topics
Example from ECIS 2017 tracks

- Business Intelligence and Decision Support
- Business Process Management
- IS Diversity and Diversity in IS
- E-Business and Competitive Strategy
- Economics and the Value of IS
- Enterprise Systems
- European and Cultural Issues in IS
- Healthcare Information Systems
- Human-Computer Interaction
- Information and Enterprise Content Management
- Inter-Organizational Systems
- IS Artifacts and IS Artifact Design
- IS Governance and Sourcing
- IS Innovation, Adoption and Diffusion
- Project Management and IS Development
- Research Methods and Philosophy
- Security and Privacy of Information and IS
- Service Engineering and Service Management
- Social Media
- Ubiquitous and Mobile Information Systems
Common Mistakes

Common mistakes by Indonesian researchers:

IS research = IS development

1. The development of human resources information systems for PT ABC
2. KMS development for PT ABC
Common Mistakes

Using (framework, best practice, algorithms, etc) instead of creating/developing

- Measuring IT Governance Capability of PT ABC using COBIT 5.0
- Assessing IT security implementation of PT ABC using ISO 270001
- Product bundling strategies for PT ABC using Apriori algorithm
Common Mistakes

The benefits are limited to a particular organization

- Measuring IT Governance Capability of PT ABC using COBIT 5.0
- Factors influencing knowledge sharing in PT ABC.
Common Mistakes

Repeating the works of other scholars (exactly from the same angle)


Factors Influencing Repurchase Intention in Online Marketplace
How to assess the novelty of your research?

- Do a systematic literature review
- Obtain the state of the art
- See the position of your work among others
- Is your work just repeating other researcher’s work?
Selecting A Topic for IS Research

- Find the key research issues in each topic
- For example, some key issues in e-commerce research:
  - Purchase intention
  - Loyalty/repurchase intention
  - Electronic words-of-mouth (ewom)
  - etc
Selecting A Topic for IS Research

- Sensing the editor expectation, by looking at the title of the papers in reputable journals/conferences
- You are in the right ‘direction’, when your topic is ‘similar’ and having the same ‘taste’ to those papers
- For example:
  - ECIS 2017
  - International Journal of IT/Business Alignment and Governance (IJITBAG)
Selecting A Topic for IS Research

**T26. Service Innovation, Engineering and Management**

14:00 - 16:00 | Room: S1

Session Chair: Roman Beck

NEVER CHANGE A RUNNING SYSTEM? HOW STATUS QUO-THINKING CAN INHIBIT SOFTWARE AS A SERVICE ADOPTION IN ORGANIZATIONS
Margareta Heidt, Rabea Sonnenschein, André Loske ............................................................... 101

EXPLAINING THE ROLE OF SERVICE-ORIENTED ARCHITECTURE FOR CYBER-PHYSICAL SYSTEMS BY ESTABLISHING LOGICAL LINKS
Arne Gruettner, Janek Richter, Dirk Basten .......................................................... 101

MULTI USER SERVICE RE-SELECTION: REACT DYNAMICALLY TO EVENTS OCCURRING AT PROCESS EXECUTION
Michael Mayer ........................................................................................................ 102

THE ROLE OF TECHNOLOGY FOR SERVICE INNOVATION IN SHARING ECONOMY ORGANIZATIONS – A SERVICE-DOMINANT LOGIC PERSPECTIVE
Alexander Frey, Manuel Trenz, Daniel Veit ........................................................................ 102

**T29. Social Media in Business and Society**

14:00 - 16:00 | Room: S2

Session Chair: Alexander Richter and Hanna Krasnova

WHAT BENEFITS DO THEY BRING? A CASE STUDY ANALYSIS ON ENTERPRISE SOCIAL NETWORKS
Benjamin Wehner, Thomas Falk, Susanne Leist ........................................................... 108

ENTERPRISE SOCIAL MEDIA: THE OPPORTUNITIES AND CHALLENGES FOR START-UP COMPANIES
Wietske Van Osch, Yi-Chuan Wang ............................................................................ 108

ANALYSING EMPLOYEES’ WILLINGNESS TO DISCLOSE INFORMATION IN ENTERPRISE SOCIAL NETWORKS: THE ROLE OF ORGANISATIONAL CULTURE
Adrian Engelbrecht, Jin Gerlach, Alexander Benlian, Peter Buxmann ............................ 109

VALUE CO-CREATION AND TRUST IN SOCIAL COMMERCE: AN FSQCA APPROACH
Selecting A Topic for IS Research

International Journal of IT/Business Alignment and Governance (IJITBAG)

Article 1
Socio-Technical Punctuated Equilibrium Model Enhanced with Social Network Theory: As the Descriptor of Changes in the Equilibria of CIO Work (pages 1-16)
Tomi Dahlberg, Päivi Hokkanen, Mike Newman
We investigate the equilibria of CIO work. We apply the punctuated equilibrium paradigm based socio-technical model as our theoretical basis. We use this model to vi...
Sample PDF

Article 2
Examining Cross-Domain Alignment: The Correlation of Business Strategy, IT Management, and IT Business Value (pages 17-31)
Anna Wiedemann, Heiko Gewald
Prior research hardly investigates how externally focused competitive strategies can be bridged with internal IT processes. We aim to explore the relationship between...
Sample PDF

Article 3
CIO Perspectives on Organizational Learning within the Context of IT Governance (pages 32-47)
Koen De Maere, Steven De Haes, Michael von Kutschenbach
Why is it that, despite the large amount of studies on IT governance, many professionals still fail to put these theories into practice? Building on the previous que...
Sample PDF

Article 4
Continuous Business Case Usage in the Context of a Strategic IT Enabled Investment at Rabobank (pages 48-64)
Kim Maes, Steven De Haes, Wim Van Grembergen, Tim Huys, Jos Maaswinkel
How to Replicate the Research from Other Scholars?

- The easiest way to find research topics is by looking at other work and replicating and adapting it in different context/domain.
  - Ensure within the target context/domain that the topic provides a new perspective
- For example, my PACIS paper:
  - Trust Transfer and Its Effects on The Continuance Usage of Mobile Service in B2C E-marketplaces
- Was inspired by:
  - Trust transfer in the continued usage of public e-services
How to Replicate the Research from Other Scholars?

- Exercise, please replicate this research in different domain:
  - Trust transfer in the continued usage of public e-services
Which ones are having more impacts/implications?

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<tr>
<th>Title</th>
<th>Description</th>
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<tr>
<td>Understanding Student Acceptance of e-learning tools in Learning</td>
<td>TOGAF Architecture Vision for Integrated Agriculture Information Systems</td>
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<td>Stakeholder Definition and Mapping to Develop Integrated Agricultural Information Systems (IAIS) based on Ent.Architecture</td>
<td>E-learning for facilitating learning</td>
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<td>Trends Information Technology in E-Agriculture:A Literature Review</td>
<td>Barriers Factors in Contributing Knowledge at Virtual Communities (Literature Review)</td>
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<td>The University of Lampung Internet Traffic Measurement: Trends and Impact in Campus Network</td>
<td>Information Systems of Freight Forwarding:A Case Study</td>
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<td>Factors Affecting Knowledge Sharing and Knowledge Utilization Behavior in an Indonesian Airline Company</td>
<td>Alignment of Business Goals and Objectives of Information Technology Using COBIT Framework 4.1</td>
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<td>Automatic Detection of Learning Style in Adaptive Online Module System</td>
<td>Optimization Cost and Time Project Management Schedule with Project Management Process Mining (PM2)</td>
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<td>A Conceptual Green-ICT Implementation Model Based-on ZEN and G-Readiness Framework</td>
<td>Automatic Extraction of Multiword Expression Candidates for Indonesian Language Sundanese Ancient Manuscript Retrieval System Comparison of Two Probability Approaches</td>
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<td>Analysis of Online Training System from Economic Perspective Using Ranti's Generic IS/IT Business Value (Case Study: Bank Rakyat Indonesia)</td>
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<td>Title</td>
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<td>Using GPS and Google Maps for Mapping Digital Land Certificates</td>
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<td>E-Commerce Based on The Business Model Canvas to Improve Competitiveness in Small and Medium Enterprises</td>
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<td>Customer Loyalty Prediction in Multimedia Service Provider Company With K-Means Segmentation and C4.5 Algorithm</td>
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<td>E-Learning Infrastructure Model for Implementation of Curriculum based on Competencies</td>
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<td>Acceptance and Use of Technology Evaluation on Insurance Data Processing System (Care Tech): A Case Study on Insurance Company in Indonesia</td>
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<td>The Evaluation of Academic Information System Implementation Success Using ERP Success Model (Case Study at XYZ)</td>
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<td>Management Information System to Combine Six Sigma with Balanced Scorecard For Small Business</td>
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<td>Pecel Lele Mobile Advertisement System Utilizing Location Based Service</td>
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<td>Cloud Computing as Support for Multimedia Based Mobile Learning</td>
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<td>General Considerations Security on Mobile Computing</td>
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<td>Evaluation Model of Information Technology Innovation Effectiveness Case of Higher Education Institutions in Indonesia</td>
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<td>Developing Spatial Information Application of SKPD for Local Goverment Geographic Information System Case study Spatial Information for Agency of Education, Youth and Sport</td>
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<td>E-Procurement System Development With Analytic Hierarchy Process Methodology of Supplier Performance Evaluation in PT. Tata Udara Nusantara</td>
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Assess These Titles (Taken from ICIC 2016)

Which ones are having more impacts/implications?

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<td>Election Fraud and Privacy Related Issues: Addressing Electoral Integrity</td>
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<td>Current State of Personal Data Protection in Electronic Voting: Demand on Legislature’s Bill</td>
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<td>Development of Web-Based Integrated Information Systems in BPR With Scale Small Organizations For Lending Decisions Support</td>
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<td>Feasibility Analysis of Integrated Digital Forensics Investigation Framework (IDFIF) v2 for the Investigation Process</td>
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<td>Detecting Most Central Actors of an Unknown Network Using Friendship Paradox</td>
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<td>Usefulness of Gamification in Learning</td>
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<td>Data Mining Model In Forecasting change Of Profit In The Future The Jakarta Stock Exchange Industrial Banking Using Artificial Neural Network</td>
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<td>Components of ICT Adoption for Education: A Review</td>
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<td>Analyzing E-business Application Portfolio in Remanufacturing Industry's SMEs</td>
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<td>Analyzing security risk of information technology asset using BS: ISO 27001</td>
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<td>ARmatika: 3D Game for Arithmetic Learning with Augmented Reality Technology</td>
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<td>Development Of Information Systems About The First Aid Accident On Android</td>
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<td>Integration of Updated DeLone &amp;McLean Success Model, Kano Model and QFD to Analyze Quality of an Information System</td>
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<td>Applying Open Content Concept by Synchronizing Lecture Video and Slide</td>
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<td>Social Media Supported Supply Chain Management In Tourism</td>
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Group Assignment (60 minutes)

- Form a group of four people
- Choose a paper of your interest
- Replicate and adapt to different context
  - Do a small research for building the mind map in that topic
  - Can you justify the contribution of your topic? Which gap of theories/practices that do you want to address?