

**WORK IN PROGRESS**

# **TRENDS OF ELECTRONIC GOVERNMENT RESEARCH**

**Professor Zahir Irani**

*Dean of Professional School of Development*

*Head of Brunel Business School*

*Brunel University*

Email: [Zahir.Irani@Brunel.ac.uk](mailto:Zahir.Irani@Brunel.ac.uk)

Twitter: @ZahirIrani1



# Presentation Agenda

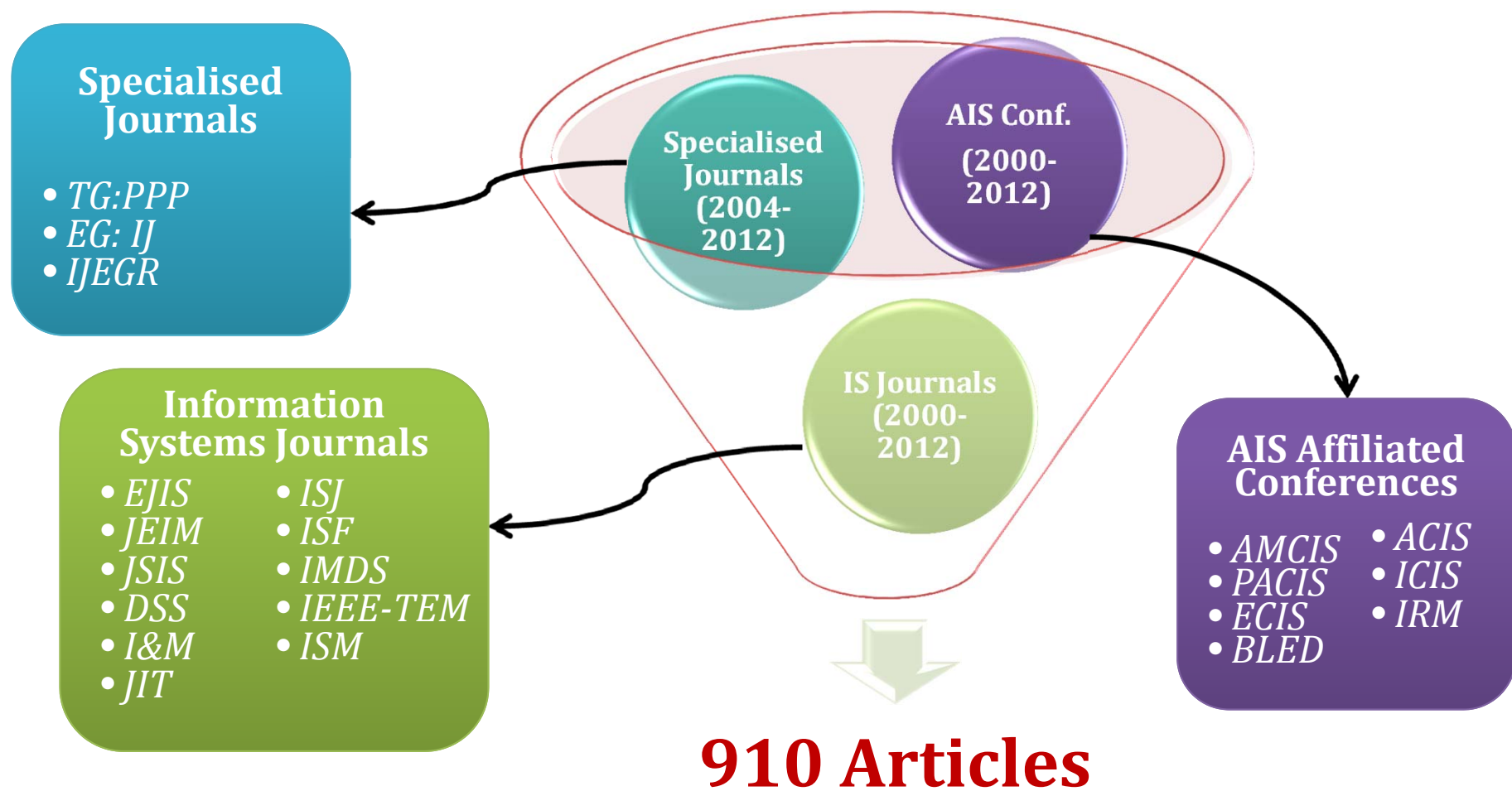
- ◆ Rational for this Scoping Study
- ◆ Research Methodology
- ◆ Research Findings:
  - ◆ *Type of e-Government Research Published*
  - ◆ *Countries with Most e-Government Publications*
  - ◆ *Methodological Underpinnings of e-Government Research:*
    - Empirical vs. Non-Empirical
    - Qualitative vs. Quantitative
    - Type of Research Methods Employed
  - ◆ *Most Productive e-Government Authors*
  - ◆ *Co-Author Analysis*
- ◆ Q&A

## Rationale for this Scoping Study

“To Scope out a historical view of the kind of **e-Government** research that has been undertaken and how it was conducted” ....

Might help me Horizon Scan!

# Research Methodology: The Sample



**Keywords Search:**

*e-Gov, eGov, Electronic Government, e-Government, Digital Democracy, Online Government.*

# Research Methodology – *Journals Included in Analysis*

Electronic Government Journals (2004 - 2012)	No. of Papers Analysed
Electronic Government: An International Journal (EG:AIJ)	236
International Journal of Electronic Government Research (IJEGR)	153
Transforming Government: People, Process & Policy (TG:PPP)	110
<b>499</b>	

Information Systems Journals (2000 - 2012)	No. of Papers Analysed
European Journal of Information Systems (EJIS)	18
Journal of Enterprise Information Management (JEIM)	18
Journal of Strategic Information Systems (JSIS)	11
Decision Support Systems (DSS)	9
Information & Management (I&M)	7
Journal of Information Technology (JIT)	5
Information Systems Journal (ISJ)	8
Information Systems Frontiers (ISF)	3
Industrial Management & Data Systems (IMDS)	3
IEEE Transactions of Engineering & Management (IEEE TEM)	2
Information Systems Management (ISM)	11
<b>95</b>	

# Research Methodology – *Journals Included in Analysis*

AIS Affiliated Conferences (2000 - 2012)	No. of Papers Analysed
American Conference on Information Systems (AMCIS)	146
Pacific Asia Conference on Information Systems (PACIS)	49
European Conference on Information Systems (ECIS)	47
Bled Electronic Commerce Conference	19
Australian Conference on Information Systems (ACIS)	23
International Conference on Information Systems (ICIS)	21
Information Resource Management (IRM)	11
	<b>316</b>

# Type of e-Government Research Published

◆ **E-Government** research has been clustered around *(based on Barki & Rivard's [1988] keyword classification scheme of IS literature)*:

- ◆ *e-Gov Management (**EGM**) – this constitutes a view of management that sees its functions as including:*
  - Planning (e.g., critical success factors),
  - Organising (e.g., centralisation / decentralisation of e-Gov applications),
  - Staffing (e.g., data administration),
  - Evaluating (e.g., cost/benefit analysis),
  - Controlling (e.g., chargeback),
  - Security (e.g., public key encryption)
  - Data resource management, e-Gov security (e.g., public key encryption), and
  - IS management issues (e.g., information technology/e-Government adoption).
  
- ◆ *e-Gov (**EGENVIRON**) – organisational and external environmental (legal, economical & social) issues:*
  - Organisational environment includes organisational characteristics (e.g., size), organisational functions (e.g., marketing), task characteristics (e.g., complexity), and organisational dynamics (e.g., organisational change).
  - External environment includes economic (e.g., public sector), legal (e.g., software protection), political (e.g., regulation), and social (e.g., computers and society) environmental factors.



# Type of e-Government Research Published

- ◆ *e-Gov Technological & Developmental Issues (EGTD) – this category includes topics related to:*
  - Development strategies (e.g., prototyping),
  - Life cycle activities (e.g., information requirements analysis),
  - Testing, development methods and tools (e.g., data flow diagrams),
  - Project management (e.g., chief programmer teams),
  - Implementation (e.g., user involvement),
  - Input operations (e.g., data validation),
  - Data processing (e.g., file updating),
  - Database operation (e.g., retrieval), and
  - Hardware and software concepts, such as computer organisation, computer networks, etc.
- ◆ *e-Gov Applications (EGA) – this category includes topics related to*
  - Types of applications (e.g., transaction processing systems, MIS, DSS, computer-based communication systems, & document management systems).
  - Application products related to areas such as marketing, health, and human resource.
  - Components of application products (e.g., user interface, knowledge base), and
  - Characteristics of application products (e.g., graphics).
- ◆ *e-Gov Research (EGR) – [In] this category*
  - Status / maturity of e-Gov research (e.g., inquiries into the status of the e-Gov field itself),
  - Trends in e-Gov research (e.g., diffusion of e-Gov research), and
  - Historical aspects of e-Gov area.





# Type of e-Government Research Published

E-Government Research	Total Count	IS Journals	EG Journal	AIS Conf.
		Frequency	Frequency	Frequency
EG Management	397	53	188	156
EG Environment	295	30	152	113
EG Technology & Development	188	22	95	71
EG Applications	140	11	61	68
EG Research	27	6	14	7

**1047**

1047\* figure is more than the number of papers reviewed. This signifies that that there were more papers that fall within more than one category.

# Countries Generating the Most e-Gov Publications *(Top 20)*

SL	Country	Total Counts	IS Journals	EG Journals	AIS Conferences
1	USA	518	49	326	143
2	UK	441	66	231	144
3	Australia	174	12	40	122
4	Greece	102	9	81	12
5	Singapore	85	25	10	50
6	Germany	83	1	36	46
7	India	69	7	56	6
8	The Netherlands	56	4	36	16
9	Taiwan	53	7	25	21
10	Canada	53	2	33	18
11	China	43	2	9	32
12	Thailand	42	---	33	9
13	Italy	39	7	28	4
14	Sweden	39	2	21	16
15	Turkey	34	4	25	5
16	Brazil	34	---	15	19
17	Norway	32	---	30	2
18	Denmark	30	5	15	10
19	Malaysia	30	---	22	8
20	Ireland	29	5	10	14

# Empirical/Non-Empirical e-Gov Research

Empirical vs. Non-Empirical Research	IS Journals	EG Journal	AIS Conf.	Total Count
	Frequency	Frequency	Frequency	
Empirical	84	320	239	643
Non-Empirical	11	179	77	267
<b>Total</b>	<b>95</b>	<b>499</b>	<b>316</b>	<b>910</b>

◆ Limited e-Gov research in IS journals - Possible explanation of the difficulty in publishing **e-Gov** research in IS journals could be explained by:

- ◆ *lack of theory,*
- ◆ *difficulty in producing generalisable findings, and*
- ◆ *poorly articulated methodology*



# Qualitative vs. Quantitative Research

Type of Research Methods Employed	IS Journals	EG Journal	AIS Conf.	Total Count
	Frequency	Frequency	Frequency	
Qualitative	41	146	120	307
Quantitative	37	158	106	301
Descriptive-Conceptual	11	179	77	267
Mixed	6	16	13	35
<b>Total</b>	<b>95</b>	<b>499</b>	<b>316</b>	<b>910</b>

# Research Strategies Employed in e-Gov

Research Strategies Employed	IS Journals	EG Journal	AIS Conf.	Total Count
	Frequency	Frequency	Frequency	
Conceptual & Review	11	158	68	237
Case Study [ies]	27	93	83	203
Survey	28	112	91	231
Development	---	28	9	37
Data Analysis	1	23	7	31
Content Analysis	2	21	9	32
Meta Analysis	2	---	2	4
Multi-Method	6	19	12	37
Interviews	9	19	28	56
Others	1	15	3	19
Experimental	7	6	2	15
Action Research	1	4	2	7
Ethnographic Studies	---	1	---	1
<b>Total</b>	<b>95</b>	<b>499</b>	<b>316</b>	<b>910</b>

# Authors Productivity –

*Most Productive e-Gov Authors  
(Top 15)*

Authors	University Affiliation	Country	IS Journals	EG Journal	AIS Conf.	Total Count
Weerakkody, V.	Brunel University	UK	4	17	12	33
Dwivedi, Y. K.	Swansea University	UK	1	18	7	26
Kamal, M. M.	Brunel University	UK	3	7	8	18
Williams, M. D.	Swansea University	UK	1	9	6	16
Pan, S. L.	National University of Singapore	Singapore	6	2	7	15
Irani, I.	Brunel University	UK	5	9	1	15
Janssen, M.	Delft University of Technology	The Netherlands	3	7	5	15
Teo, T. S. H.	National University of Singapore	Singapore	---	2	12	14
Choudrie, J.	University of Hertfordshire	UK	---	9	3	13
Carter, L.	North Carolina A& State University	USA	3	5	3	11
Srivastava, S. C.	HEC, Paris	France	---	3	6	9
Elliman, T.	Brunel University	UK	3	4	2	9
Tan, C. -W.	National University of Singapore	Singapore	2	2	4	8
Gottschalk, P.	Norwegian School of Management	Norway	---	7	---	7
Beynon-Davies, P.	Cardiff University	UK	2	1	3	6

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# Co-Author Analysis

No of Co-Authors	IS Journals	EG Journal	AIS Conf.	Total Count
	Frequency	Frequency	Frequency	
1	14	127	45	186
2	45	181	138	364
3	24	109	95	228
4	4	52	28	84
5	5	15	9	29
6	2	6	1	9
7	---	4	---	4
9	---	3	---	3
10	1	---	---	1
24	---	1	---	1
25	---	1	---	1
<b>Total</b>	<b>95</b>	<b>499</b>	<b>316</b>	<b>910</b>



## What next?

... So, what kind of further analysis would you find interesting?



# Thank You

## Questions & Answers

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Email: [Zahir.Irani@Brunel.ac.uk](mailto:Zahir.Irani@Brunel.ac.uk)

Twitter: @ZahirIrani1