Information systems shaping the dynamics of organizational attention

Reflections and empirical evidence

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Department of Information Systems
University of Minho
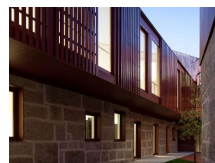Portugal

iramos@dsi.uminho.pt

The University of Minho

Campus of Gualtar

Campus of Azurém

Campus of Couros
UNU unit for EGov

20 000 students
1200 faculty and researchers
11 Schools and Institutes

15/04/2018

2

1

The Department of Information Systems

26 lecturers
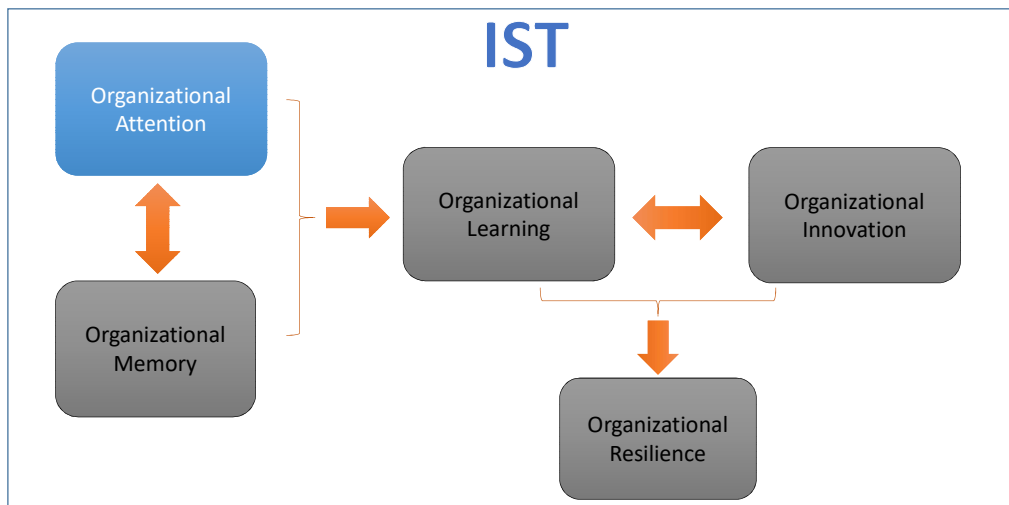27 invited lecturers
753 students (597 bachelor/integrated master, 85 master,
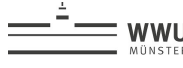   71 doctoral)

15/04/2018   3

My Research – The impact of IST adoption on organizational capabilities

IST

Organizational Attention

Organizational Memory

Organizational Learning

Organizational Innovation

Organizational Resilience

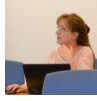15/04/2018   4

With whom I collaborate in my department

Me

João Carvalho
IST for
Organizational Development

Rui Dinis Sousa
Business Process Management

Victor Barros   Fernanda Bigolin   Ashraf Qutaishat   Rafael Cardoso

Organizational Attention (understand, assess, intervene)

15/04/2018   5

Why organizational attention is relevant?

Internal Stimuli → **ORGANIZATION STRATEGY** ← External Stimuli

PROVIDES THE PATTERN OF ORGANIZATIONAL ATTENTION

15/04/2018   6

How is Organizational Attention Defined?

ORGANIZATIONAL ATTENTION AS A DISTRIBUTED CAPABILITY

➢ Organizational attention is a collective and distributed organizational capability;

➢ Organizations focus a set of issues and action alternatives that are considered relevant to realize their mission;

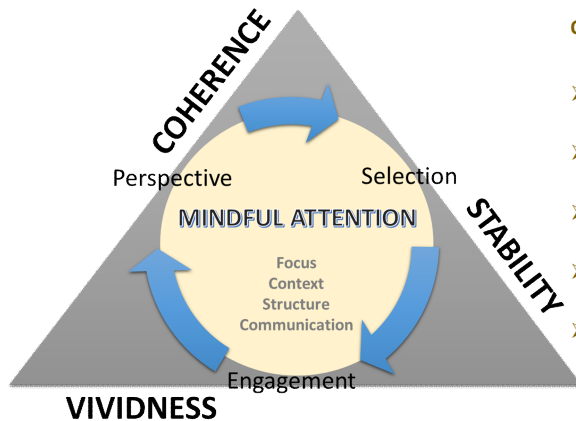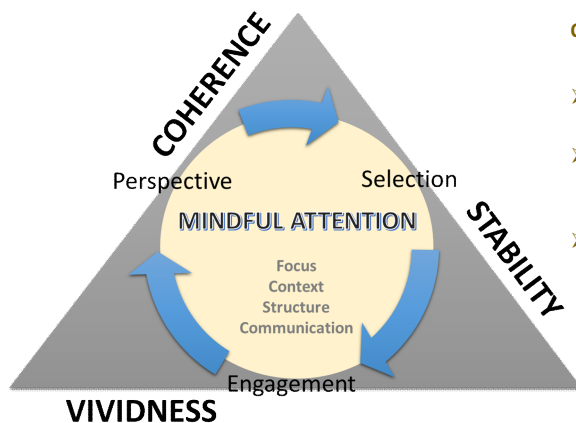➢ The focus of attention is situated in the organizational culture and environmental constraints of decision and action;

➢ Units, functions, routines, norms and responsibilities provide the structure of organizational attention

➢ Procedural and communication channels provide the context for social interaction in the organization, helping to shape what the organization "sees" and "ignores".

William Ocasio (1997) – Attention Based View of the Firm & Claus Rerup (2009) – Attentional Triangulation

15/04/2018   7

How is Organizational Attention Defined?
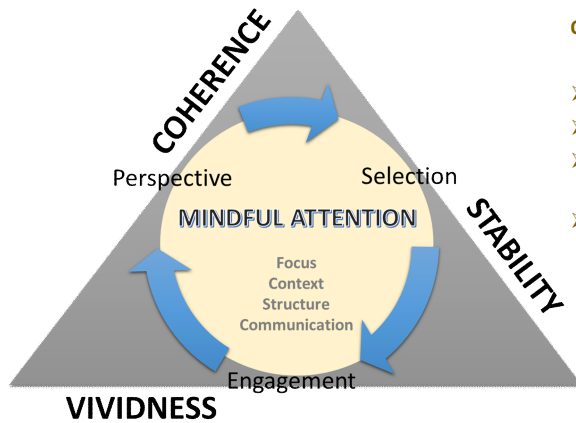

ORGANIZATIONAL ATTENTION AS A PROCESS

➢ PERSPECTIVE allow for the allocation of organizational resources and cognition towards the achievement of goals.

➢ ENGAGEMENT allow for problem solving, planning and decision grounded in the communication and the interpretation of unexpected cues and signs.

➢ SELECTION allows for the continuous monitoring of subsets of issues and provides the boundary of what is monitored and interpreted, and what can be ignored.

William Ocasio (1997) – Attention Based View of the Firm & Claus Rerup (2009) – Attentional Triangulation

15/04/2018   8

How is Organizational Attention Defined?

QUALITY OF ORGANIZATIONAL ATTENTION

- STABILITY: constant attention to issues and alternative actions;
- VIVIDNESS: complex interpretation of situations;
- COHERENCE: interconnection among the various focus of attention in the organization
- The concept of TRIANGULATION – mindful information processing

COHERENCE

STABILITY

VIVIDNESS

Perspective · Selection

MINDFUL ATTENTION

Focus
Context
Structure
Communication

Engagement

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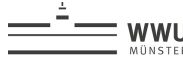
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9

Our research questions

- LONG TERM
  - How can information systems support a healthy organizational attention?

- SHORT TERM
  - How do IS-supported/enabled communicative and discursive practices shape attentional engagement associated with strategic shifts?
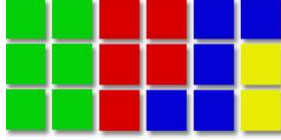
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10

5

Results from our field research

Division of Urbanism of the
City of Porto

Portuguese Company in the
Cork Sector

Portuguese Association
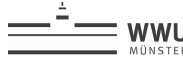for Information Systems

(experimenting with emerging theory)

15/04/2018

11

**Division of Urbanism of the
City of Porto**

(citizens' requests & urban projects - 15 IT applications analyzed, 10 interviews, regular on site observations)

➢ Shift in local government strategy – from legal issues to quality of life;

➢ Shift from paperwork to workflow (citizens' requests and urban projects);

➢ Domain ontologies and information systems supporting document management;

➢ Inability to produce overviews about processes and information flows;

➢ Spreadsheets as unofficial communicative practices to circumvent collective "blindness" and cognitive overload.

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12

ERCIS

Portuguese Company in the
Cork Sector

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(communication promoted by the in-house developed collaborative tool, 13 interviews, regular on site observations)

- 144 years of history – World's leader in the cork sector: Holding company, 5 Business Units and 1 R&D Unit; each Unit is a big company by itself and is managed separately; the Holding defines the overall strategy and the R&D Unit addresses the innovation demands of all Units .

- Communication in each Business Unit developed independently over the years (including different IS-supported communicative practices); communication between units is difficult (different attentional focus and structures).

- Goals of the collaborative tool:

  o Promote inter-unit communication;

  o Discuss opportunities for innovation and negotiate priorities for innovation investments;

  o Share lessons learned with the innovation within the 5 units.

15/04/2018   13

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- Discursive elements: "innovation for a modern/strong brand", "innovation as a tool to align the strategies of the various units", "innovation as a tool to leverage coordinated change" – instrumental role of innovation, units as silos that need to be interconnected.

- Collaborative tool seen as a communicative tool that

  o Promotes the communication of innovation needs and implementations across units;

  o Promotes awareness of the diverse cultures of the Business Units – transversal communication;

  o Leverages process innovation; did not bring more product innovation.

  o It is not used to facilitate bottom-up communication and the participation in decision-making;

  o Produces cognitive overload due to pressure to carry out work and also continuously provide, discuss, assess ideas for innovation; fragments the attention by being too much exposure to innovation demands in other Business Units;

  o Exacerbates the digital divide in the organization despite the role of "intermediary user" – at the shop-floor employees cannot use the tool and it is there that the needs for process innovation are felt (or the impacts of that innovation).

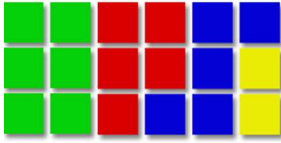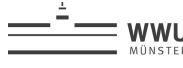15/04/2018   14
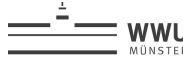
Portuguese Association for Information Systems
Community of Researchers

➢ Experimenting with concepts;

➢ Newsletters as communicative practice to engage researchers in the discussion and adoption of innovative research topics;

➢ Pattern of attention enacted by discourse structured around worldwide emerging IS research focusing innovative processes, services and business model promoted by the technologies in the "Innovation trigger" and "Peak of inflated expectations" categories of the Gartner Hype Cycle;

➢ Focus of attention guided by the results returned by a social media monitoring tool.
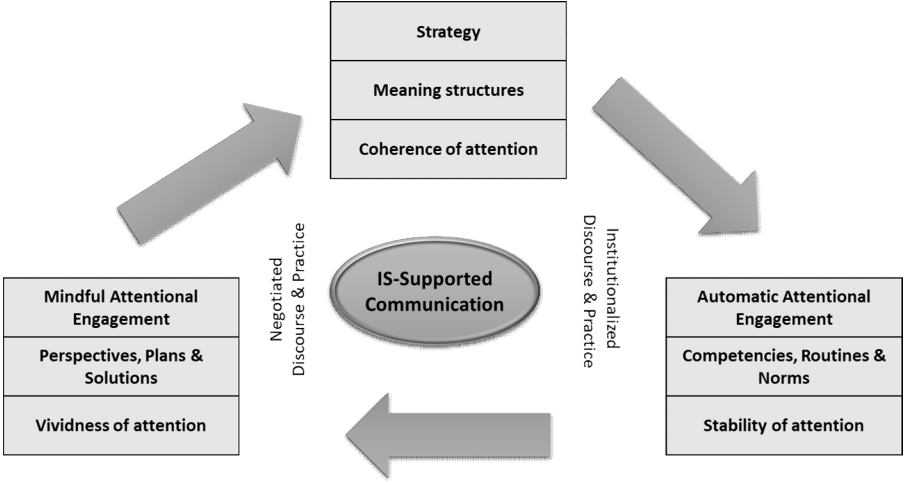
Ongoing Experiment

15/04/2018   15

The Emerging Situated Theory

15/04/2018   16

8

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Research Contributions

1. Extend ABV theory by providing an explanation for the role played by IS-supported communicative practices in shaping strategic agendas.

   Ocasio, W., Laamanen, T., & Vaara, E. (2018). Communication and attention dynamics: An attention-based view of strategic change. *Strategic Management Journal*, *39*(1), 155–167. https://doi.org/10.1002/smj.2702

2. Extend the scientific knowledge in the IS filed by explaining how information systems can leverage organizational mindfulness.

   Dernbecher, S., & Beck, R. (2017). The concept of mindfulness in information systems research: A multi-dimensional analysis. *European Journal of Information Systems*, *26*(2), 121–142. https://doi.org/10.1057/s41303-016-0032-z

3. Create an instrument to assess the quality of attention mediated by information systems;
4. Create a methodological tool to perform IS-based organizational interventions to improve the quality of attention;

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17

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