Background

• LEIC & MEIC

• DEIC - Sistemas de informação:

  “Enterprise Dynamic Systems Control enforcement of the run-time business transactions using DEMO: principles of design and implementation”

• Engenharia: E.S.D.I. & Optimus/Sonae.com

• Docência: ULHT & UBI
Temas de Investigação em Enterprise Engineering:
  • Conferências alvo: ER, HICSS, ECIS, ICIS, ISOC, ACMSAC, CBI, EMMSAD, EEWC, EOMAS,…

Open Calls Organization:
  • EMMSAD17@CAiSE, short papers 10 - April - 2017
  • INFORUM, BusIS topic, 8 – June - 2017

Conferências: PoEM, BPMDS, EMMSAD
Enterprise Engineering (EE): Research Challenges

- Modeling
- Operation
- Decision making

ex ante | ex dure | ex post
Enterprise Engineering (EE): Research Challenges

Modeling

- ArchiMate
- DEMO
- BPMN
- UML / SysML
- Ontologies
- Conceptualization

ex ante
Enterprise Engineering (EE): Research Challenges

Modeling

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*ex ante*
Enterprise Engineering (EE): Research Challenges

**Operation**
- Software applications
- Business transactions
- DEMO engine

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**Ex dure**

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**Time**
Enterprise Engineering (EE): Research Challenges

Example….Workarounds…

Decision making

- Observation
- Partial observation
- Process mining
- Markov theory
- Kalman filter
- Compliance
- GRC

Ex post
Enterprise Engineering (EE): Research Challenges

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Decision making

Observation
Partial observation
Process mining
Markov theory
Kalman filter
Compliance
GRC
Enterprise Engineering (EE): Research Challenges

Decision making
- Observation
- Partial observation
- Process mining
- Markov theory
- Kalman filter
- Compliance
- GRC

Positive
Negative
Unknown
Enterprise Engineering (EE): Research Challenges

From: control policy graph

Decision making

- Observation
- Partial observation
- Process mining
- Markov theory
- Kalman filter
- Compliance
- GRC

..to most valuable redesign decisions?

From: control policy graph

ex post

time
Enterprise Engineering (EE): Research Challenges

**Modeling**
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- DEMO
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- Conceptualization

**Operation**
- Software applications
- Business transactions
- DEMO engine

**Decision making**
- Observation
- Partial observation
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- Markov theory
- Kalman filter
- Compliance
- GRC

**Control loop**
- ex ante
- ex dure
- ex post

**Time**