

Business Process Orientation to Business Students - Enabling role of enterprise systems in Curriculum

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Discipline of Business Information Systems



Overview

- Current business curriculum
- Process orientation – concepts & benefits
- ERP software solutions in business curriculum
- Research – background and current work
- Findings
- Limitations and further study



Current business curriculum

- Discipline based structure of university business schools:
 - Functionally oriented (develops good specialists though)
 - Reluctance to change
- Employers' concerns:
 - No alignment of curriculum with changing business needs
 - Narrowly trained graduates with functional 'silo' view of business
- Inadequate teaching & learning:
 - Integration left to individual academic/student
 - Structure, syllabus and T&L strategies inconsistent with modern idea of integrated processes
- Usage of Info technologies:
 - Undue focus on imparting IT skills than T&L effectiveness
 - Underlying importance of process and info links in developing integrated view generally ignored



Process Orientation (PO)

- Refers to the awareness of interdependencies and information sharing between various functional units & business models with focus on customer needs
- Violates functional specialization – a classic management principle
- Empirical evidence of its benefits:
 - Improves business performance & customer satisfaction
 - Facilitate reduction of inter-functional conflicts
 - Creates environment for continuous process improvement
- Achieving PO is an ongoing process & challenging; requires a high degree of self-awareness, critical thinking and deep learning
- Pedagogically encourages deep learning & facilitates better understanding of intersections and interactions of traditional disciplines



Enterprise Systems

- A packaged software solution that integrates information and processes across the enterprise and provides a common link between traditional functions in real-time information environment
- Challenges:
 - Uncertainty of pedagogical benefits
 - Complexity & challenges of designing and administering assessment tasks
 - Administrative and academic challenges of managing the system, its upgrades and maintenance
- Though adoption by University business schools is slow, anecdotal evidence so far is good
- About 100 universities all over the world and about 8 in Australia include ERP software in their curricula (nature, extent & focus vary widely)



Background to research

- Environment and past work:
 - Business Information Systems (BIS) – best-positioned discipline
 - One PG unit and one UG unit introduced in 2003/2004
 - Feedback from students – positive so far
- Present and future:
 - Embedding process orientation, the key employability skill, more deeply into the curricula will assist in strengthening the links between education and the labour market
 - Using a standard, industry best practice software as a common tool in all the discipline-focused subjects will demonstrate the need for an integrated view
- Objectives of current research:
 - To develop an understanding of business processes relevant to their function and their integration with other functions
 - To impart process orientation and process view of business
 - To measure its effectiveness



Research methodology

- T & L Approach:
 - Two SAP lab sessions of 3 hours each for Accounting and HR students
 - Focus on hands-on exercises (master data, transaction cycles) and discussion of information flows & integration
- Data collection:
 - Self-assessment of their understanding and knowledge on purpose of ES, interdependencies, info flows, potential impact on work etc.) - before and after the lab sessions
 - Evaluation of learning effectiveness
 - Questionnaire using 'Likert' scale employed
- Demographics:
 - 51 from HR and 53 from Accounting - valid responses
 - 58% employed currently
 - 59% have no previous work experience



Findings (1)

- Perceived level of understanding is significant in for both HR and Accounting students
 - Concepts of information and process integration,
 - Inter-dependencies between different functions,
 - Ability of enterprise system to support execution and control of tasks and
 - Integrated view of business
- No significant gain in knowledge that relates to business process orientation:
 - Ability to reduce inter-functional conflicts,
 - Ability to improve interdepartmental connectedness, and
 - Ability to develop customer focus & process context
- BP orientation – a complex skill; improves with experience; not possible to do just with ES in class room



Findings (2)

- HR students – less appreciative of ‘integration’:
 - Integration with other functions probably do not consider important
 - Limited functionality of SAP HR and inability to demonstrate the influence of HR costs/decisions on other functions
- More effective for Accounting students – because of the
 - Centrality of accounting discipline
 - Integrative influence of accounting transactions
 - Ability of ES to demonstrate accounting aspects in all transactions cycles
- Respondents with no experience reported greater improvements in understanding of integration concepts, processes and interdependencies



Findings (3)

- Students are appreciating the integrated view of business and deep learning that is taking place because of:
 - the hands-on nature of the software,
 - exposure to the real-world business contexts, processes and transactions
- Students tend to get stuck with the software and its complexity rather than integrated view and cross-functional elements facilitated by software; appears to be influenced by other independent variables
- Is resource intensive and challenging (especially in the design and administration of assessment tasks)



Limitations & further study

- Limitations:
 - Designed and administered by author: inherent bias
 - General limitations of questionnaire survey and self-assessment of knowledge
 - Small sample size and
 - Limited exposure to the software (novelty factor)
- Further study:
 - To further operationalize the construct 'business process orientation' and to develop a skill matrix for BP owners
 - To collect and analyse students' responses (cognitive and behavioural) in long term
 - To analyse the influence of different learning styles and processes on the self-efficacy and performance of students

