University of Huddersfield Repository

Conlon, Jo

Embedding Product Life-cycle Management (PLM) in Higher Education: A Case Study in Fashion Business

Original Citation


This version is available at http://eprints.hud.ac.uk/id/eprint/25988/

The University Repository is a digital collection of the research output of the University, available on Open Access. Copyright and Moral Rights for the items on this site are retained by the individual author and/or other copyright owners. Users may access full items free of charge; copies of full text items generally can be reproduced, displayed or performed and given to third parties in any format or medium for personal research or study, educational or not-for-profit purposes without prior permission or charge, provided:

- The authors, title and full bibliographic details is credited in any copy;
- A hyperlink and/or URL is included for the original metadata page; and
- The content is not changed in any way.

For more information, including our policy and submission procedure, please contact the Repository Team at: E.mailbox@hud.ac.uk.

http://eprints.hud.ac.uk/
**INTRODUCTION:**

Research Questions: How might Product Lifecycle Management (PLM) be employed to foster a critical mindset and better prepare learners for occupational practice?

**Challenges of PLM / technical innovation for industry-orientated educational courses:**

- Shortening product and component life cycles and growing customer needs.

**The holistic approach of product life-cycle management:**

Diverse industries have adopted PLM as an essential tool for coping with the challenges of more demanding global competition. PLM provides a means to manage the complexities of products that are created, sourced and retailed globally.

**Research Question:** How might Product Lifecycle Management (PLM) be employed to foster a critical mindset and better prepare learners for occupational practice?

**References:**


**Fig 1. Visual representation of Product Lifecycle Management**

![Visual representation of Product Lifecycle Management](image)

**BENEFITS / PRELIMINARY FINDINGS:**

**For curriculum design:**

- The visual representation of PLM enables the curriculum to be contextualised in the industry.
- Provides a mechanism for aligning the curriculum with changing business needs.
- "Critical holes" where there are issues applying theoretical knowledge in practice are revealed to the students.

**For learning:**

- Provides a map through which the significance of the constituent parts of product realisation can be readily identified offering a pathway to develop higher cognitive skills.
- PLM provides a theoretical and practical basis for active participation and application of ideas in an authentic setting.
- It has enabled PLM to be identified as a representation of a “threshold concept” – the interaction of all the elements in a process in order to ensure that all requirements are effectively met.
- Facilitates the critique of current practices and processes.

**For preparation for future practice:**

- Learners develop creative alternatives in response to the challenges and opportunities in the industry.
- Provides a mechanism to foreground a praxis stance / moral purpose as an aim for all professionals.

**DATA ANALYSIS:**

**With a social practice perspective the level of analysis is at the level of the work group rather than the individual and it is necessary to examine the context of the practices and the relationships between the players and the environment** (Kemmis, 2014:39) is considered a useful method of analysis.

- A parallel ethnographic study of the intervention is proposed as a mechanism for reflecting on actions and consequences and is supported by Schatzki (2005) who states: "we cannot transform practices without transforming existing arrangements in the intersubjective spaces in which they are situated."
- A case study approach is judged to be the most appropriate methodology as it aims to understand both complexity and context in a natural setting. A case study approach has been adopted in order to gain sufficient emphasis in the particular at the site of the project influenced by Schatzki’s (2005) conception of ‘the practical’. It is in this way the influence of the site is recognised beyond a description of the context where the practice occurs but to understand the site, it is a set of conditions impacting on the practice. This is consistent with social practice theory where the practice landscape and its associated practice traditions are recognised to be as significant as the practice under scrutiny and transformation. Kemmis (2014:4) and states: “we cannot transform practices without transforming existing arrangements in the intersubjective spaces in which they are situated.”

**METHODOLOGY:**

- With a social practice perspective the level of analysis is at the level of the work group rather than the individual. At this stage the main aim of the study is to understand the context of the practices and the relationships between the players and the environment.
- Traditional education is being supplemented by more recent and innovative teaching tools and techniques.
- There is a plethora of robust evidence of the impact and value of educational developments involving PLM (Grimes, 2011).
- Only a few research papers reporting on attempts to design and deliver courses which intensively use enterprise-level systems (Baumgartner & Shankararaman, 2014).

**ACKNOWLEDGEMENTS:**

- Thank you to Nicola Tarratt at George at Asda for her support during PLM event week.
- To Mani from ITC Infotech for support with software installation and training.
- To Mark Harrop and Morag Ashworth at WhichPLM for their expert advice and support.
- To Mark Lyness and the team at PTC for proposing the educational partnership for FlexPLM.
- To Niyi Adewale and Vivek from ITC Infotech for support with software installation and training.
- To Jo Conlon: j.conlon@hud.ac.uk

**REFERENCES:**

- Kemmis, et al. (2014:39)"The critical holes" where there are issues applying theoretical knowledge in practice are revealed to the students.
- A parallel ethnographic study of the intervention is proposed as a mechanism for reflecting on actions and consequences and is supported by Schatzki (2005) who states: "we cannot transform practices without transforming existing arrangements in the intersubjective spaces in which they are situated."

**DATA ANALYSIS:**

- With a social practice perspective the level of analysis is at the level of the work group rather than the individual. At this stage the main aim of the study is to understand the context of the practices and the relationships between the players and the environment.
- Traditional education is being supplemented by more recent and innovative teaching tools and techniques.
- There is a plethora of robust evidence of the impact and value of educational developments involving PLM (Grimes, 2011).
- Only a few research papers reporting on attempts to design and deliver courses which intensively use enterprise-level systems (Baumgartner & Shankararaman, 2014).

**ACKNOWLEDGEMENTS:**

- Thank you to Nicola Tarratt at George at Asda for her support during PLM event week.
- To Mani from ITC Infotech for support with software installation and training.
- To Mark Harrop and Morag Ashworth at WhichPLM for their expert advice and support.
- To Mark Lyness and the team at PTC for proposing the educational partnership for FlexPLM.
- To Niyi Adewale and Vivek from ITC Infotech for support with software installation and training.
- To Jo Conlon: j.conlon@hud.ac.uk

**REFERENCES:**

- Kemmis, et al. (2014:39)"The critical holes" where there are issues applying theoretical knowledge in practice are revealed to the students.
- A parallel ethnographic study of the intervention is proposed as a mechanism for reflecting on actions and consequences and is supported by Schatzki (2005) who states: "we cannot transform practices without transforming existing arrangements in the intersubjective spaces in which they are situated."

**DATA ANALYSIS:**

- With a social practice perspective the level of analysis is at the level of the work group rather than the individual. At this stage the main aim of the study is to understand the context of the practices and the relationships between the players and the environment.
- Traditional education is being supplemented by more recent and innovative teaching tools and techniques.
- There is a plethora of robust evidence of the impact and value of educational developments involving PLM (Grimes, 2011).
- Only a few research papers reporting on attempts to design and deliver courses which intensively use enterprise-level systems (Baumgartner & Shankararaman, 2014).

**ACKNOWLEDGEMENTS:**

- Thank you to Nicola Tarratt at George at Asda for her support during PLM event week.
- To Mani from ITC Infotech for support with software installation and training.
- To Mark Harrop and Morag Ashworth at WhichPLM for their expert advice and support.
- To Mark Lyness and the team at PTC for proposing the educational partnership for FlexPLM.
- To Niyi Adewale and Vivek from ITC Infotech for support with software installation and training.
- To Jo Conlon: j.conlon@hud.ac.uk