

Chapter 2

State of the Art of BPS Research

ABSTRACT

The goal of this chapter is to provide an overview of the state of the art of BPS research, including a reflection on approaches to define BPS, an overview of drivers/antecedents, and consequences/value dimensions of BPS.¹

A review of prior, relevant literature is an essential feature of any academic project. An effective review creates a firm foundation for advancing knowledge. It facilitates theory development, closes areas where a plethora of research exists, and uncovers areas where research is needed. (Webster & Watson, 2002, p. xiii)

2.1 BUSINESS PROCESS STANDARDIZATION: A LITERATURE REVIEW

A review of academic and business sources indicated that work on process standardization is conspicuously absent. (Ungan, 2006a, p. 135)

In this section we want to provide an overview on BPS by reviewing an extensive set of existing research publications and providing detailed concept centric analysis on the results. Although Ungan (2006a) is presumably right by remarking that “a review of academic and business sources indicated that work on process standardization

is conspicuously absent” (p. 135), but before coming to such kinds of conclusions we want to screen existing literature on BPS to compile a set of research publications for subsequent detailed analysis. To compile this set of research publications we followed the literature review guidelines proposed by Webster and Watson (2002):

1. They recommend to start populating the set by identifying research publications by screening the leading journals (also by scanning the journals’ table of contents to not miss a relevant article due to missing key words when conducting searches), because “major contributions are likely to be in the leading journals. It makes sense, therefore, to start with them.” (p. xvi).
2. Further, they recommend to screen “selected conference proceedings, especially those with a reputation for quality.” (p. xvi).
3. In addition they recommend to apply the “going backward” and “going forward” technique, i.e. they recommend to review

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the citations for articles already identified and thereby identify prior articles that should be included in the set (backward) and by using web based search engines² to identify research publications citing the research publications identified in the previous steps and to “determine which of these research publications should” (p. xvi) be included in the set.

With respect to 1, we screened (a) leading IS journals such as MIS Quarterly, Information Systems Research, Journal of Management Information Systems, Communications of the ACM, European Journal of Information Systems and Wirtschaftsinformatik (b) leading business process journals such as e.g. Business Process Management Journal, Business Process Re-engineering and Management Journal and (c) high quality “management practitioner” journals such as Harvard Business Review, Sloan Management Review.

With respect to 2, we screened 14 leading IS and non-IS conferences such as e.g. International Conference on Information Systems (ICIS), European Conference on Information Systems (ECIS), Hawaii International Conference on System Sciences (HICSS), Americas Conference on Information Systems (AMCIS), International Conference on Information Resources Management (ConfIRM), International Conference on Industrial Informatics (ICII).

With respect to 3, we applied both the “going backward” and “going forward” technique extensively leveraging both the “web of science” (Thomson Reuters, 2011) and “Publish or Perish” Harzing (2007).

Presumably a search for relevant research publications will never be completed and the risk of missing out some relevant publications can probably not be mitigated a hundred percent. However, in accordance with Webster and Watson (2002) we felt that regardless of how intensive we tried to identify additional relevant research publications we did not find any new concepts: “You can gauge

that your review is nearing completion when you are not finding new concepts in your article set. Of course, you will miss some articles.” (Webster & Watson, 2002, p. xvi).

In total 119 research publications in the field of BPS have been identified and selected for detailed analysis as part of this research effort³. Webster and Watson (2002) provide criteria to evaluate the quality of the set of research publications identified: “A complete review covers relevant literature on the topic and is not confined to one research methodology, one set of journals, or one geographic region” (p. xv). In the following we check the identified set of research publications for Webster and Watson’s criteria:

- The set of research publications identified is not confined to one research methodology applied given that we explicitly differentiated between purely theoretical articles (40 research publications), research publications that provide qualitative a BPS case study (48 research publications) and research publications that investigate BPS with a quantitative approach (19 articles)⁴.
- The research publications identified do not only stem from one set of journals. In total the identified research publications stem from 57 different journals showing an impressive content breadth ranging from IS journals, over manufacturing journals, to organizational and even health care journals.
- The research publications identified do not only cover on geographic region. The 57 journals cover multiple geographies (amongst them the Americas and Europe) and are written in multiple languages (e.g. English, German).

Figure 1 provides an overview of the number of BPS research publications in the set identified along a) year of appearance and b) type of research publication (quantitative study or case study).

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