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Operations in Financial Services: Processes, Technologies, and Risks

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Operations in Financial Services: Processes, Technologies, and Risks

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ABSTRACT

This monograph is an attempt to establish a framework for Operations in Financial Services as a research area from an Operations Management perspective. Operations in Financial Services has not developed itself yet as a well-defined research area within the Operations Management community. It has been touched upon by researchers from various different disciplines, including Operations Management, Statistics, Information Technology, Finance, and Marketing. However, each discipline has a different perspective on what the important issues are and the various disciplines are often at odds with one another. This monograph has been written from an Operations Management perspective.

Preface

This monograph is an attempt to establish a framework for Operations in Financial Services as a research area from an Operations Management perspective. Operations in Financial Services has not developed itself yet as a well-defined research area within the Operations Management community. It has been touched upon by researchers from various different disciplines, including Operations Management, Statistics, Information Technology, Finance, and Marketing. However, each discipline has a different perspective on what the important issues are and the various disciplines are often at odds with one another. This monograph has been written from an Operations Management perspective. After a lot of discussion with colleagues of ours from the various different research communities, we settled on the current structure and Table of Contents.

In the first section we present an introduction and provide an overview of the monograph. In the second section, we establish links between the current state of the art in relevant areas of Operations Management and Operations Research and three of the more important aspects of operations in financial services, namely (i) financial product design and testing, (ii) process delivery design, and (iii) process delivery management.

The third section focuses on the current issues that are important in the financial services operations area. These issues center primarily on mobile online banking and trading in a global environment. Several

reviewers were of the opinion that if such issues were not discussed, a monograph on Operations in Financial Services would not be of any interest.

The following section discusses operational risk aspects of Financial Services. These topics are just as important as, for example, Total Quality Management (TQM) in micro-electronics manufacturing. Anyone working on TQM in manufacturing knows how important this field is. But it is only lately that people in the finance world have started to realize how important operational risk is. And operational risk in finance has not yet received the research attention that TQM has received in manufacturing.

Since Big Data and Machine Learning have, in many disciplines, become very much in vogue lately, it is more than appropriate to have one section on Data Analytics, which includes Machine Learning. It seems that Data Analytics will have a huge impact on financial operations in the near future and that it will become an important area of academic research.

In the final section we conclude with a discussion on research directions that may become of interest in the future.

We hope that this monograph will turn out to be useful for the operations management community from a teaching as well as from a research perspective. Hopefully, instructors will be able to use this monograph in a course on Service Operations (or maybe even for a more focused course on Operations in Financial Services). For researchers in this area, this monograph may be useful as well since it may provide an overview of the general area and some indication where a particular research problem would fit in within the overall framework.

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Michael Pinedo
Yuqian Xu

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