Introduction to the Minitrack on Service Analytics

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The Minitrack on Service Analytics is part of the Decision Analytics, Mobile Services and Service Science Track of the 51th Annual Hawaii International Conference on System Sciences (HICSS-51) on January 3-6, 2018.

Service Analytics describe all processes of capturing, processing, and analyzing data taken from a service system – in order to improve, extend, and personalize the service provided and to create new value for both the provider and the customer.

The modern view on services focuses on the co-creation of value between providers and customers—leveraging knowledge, skills, and resources of both partners from an overall system point of view. In most service systems, however, the service providers have no access to data related to the service usage by their customers. On the other hand, an increasing volume of data will be collected either by the users/customers themselves (e.g. through wearables or mobile/smart phones) or by technologies like smart metering in energy services, telematics in automotive and mobility services, RFID in logistics, machine condition sensors in manufacturing, or data capture solutions in healthcare.

Research topics addressed in this year's minitrack and in future installations of the minitrack include the applicability of basic and advanced analytics to different service systems, the state-of-the-art of service analytics methodologies and tool-support, and the investigation of benefits resulting from the application of service analytics.

This minitrack will serve as a forum for researchers and practitioners to share progress in the study of these and related themes. Submissions on, but not limited to, the following topics are encouraged:

- ·Web Usage Mining and Web Personalization
- ·Data Mining / Machine Learning applied to Services
- ·Recommender Systems for Services
- ·Social Network Analytics applied to Services
- ·Privacy Issues resulting from Service Analytics
- ·Fraud Analytics for Service Systems
- ·Analysis and Prediction of User Behavior in Mobile Phone Systems
- ·Analysis and Prediction of Driver Behavior in Traffic Situations
- ·Analysis and Exploitation of Floating Car Data
- ·Electricity Consumption Analysis using Smart Meter Data
- ·Analytics for Healthcare Services
- ·Analysis and Prediction of IT Service Demand Patterns
- ·Analysis of Service Problem Reports
- ·Industrial Service Analytics and Optimization
- ·Sports Analytics

The following research papers have been accepted for publication in the HICSS proceedings and will be presented at this year's Service Analytics Minitrack:

·*The Impact of Service Failure Controllability and Relationship Strength on Post-Complaint Consumer Behavior - An Empirical Analysis,* by Frederike von Aswege, Jan Kemper, and Malte Brettel

·*Influencing Operational Policing Strategy by Predictive Service Analytics,* by Lisa Jackson, Melanie-Jane Stoneman, Heather Callaghan, Hanjing Zhang, Christina Latsou, Sarah Dunnett, and Lei Mao

·*A Similarity-Based Approach for the All-Time Demand Prediction of New Automotive Spare Parts,* by Daniel Steuer, Verena Hutterer, Peter Korevaar, and Hansjörg Fromm

·*The Anchor and Adjustment Bandwidthmodel: Exploring Cognitive Biases in Simulated Forecast Series,* by Florian Knöll and David Roßbach

·*How to Improve Cloud Services Availability? Investigating the Impact of Power and IT Subsystems Failures,* by Daniel Rosendo, Guto Leoni, Demis

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Gomes, André Moreira, Glauco Gonçalves, Patricia Endo, Judith Kelner, Djamel Sadok, and Mozhgan Mahloo

·*Towards a Technician Marketplace using Capacity-Based Pricing*, by Clemens Wolff, Michael Vössing, Björn Schmitz, and Hansjörg Fromm

·*Stable Matrix Approximation for Top-N Recommendation on Implicit Feedback Data*, by Dongsheng Li, Changyu Miao, Stephen Chu, Jason Mallen, Tomomi Yoshioka, and Pankaj Srivastava

·*The Role of Semantic Technologies in Diagnostic and Decision Support for Service Systems*, by Eleni Tsalapati, Thomas Jackson, William Johnson, Lisa Jackson, Andrey Vasilyev, Andrew West, Lei Mao, and Ben Davies

·*On Predictability of Revisioning in Corporate Cash Flow Forecasting*, by Florian Knöll, Thomas Setzer, and Kevin Laubis