UNIVERSITY OF CAMBRIDGE
Cambridge Service Alliance

Cambridge Service Alliance Newsletter

December 2017 Newsletter

Welcome to the December 2017 edition of the Cambridge Service Alliance newsletter. In this edition we are delighted to share with you the outputs from what was an amazing Industry Day conference during Cambridge Service Week. We hope you enjoy the wealth of material available, as well as the other information and resources from the ongoing work of the Cambridge Service Alliance. Please forward this to any colleagues who may be interested using the link above. If you would like to hear more about the Alliance or find out how you can get involved please contact us.

Andy Neely, Director, Cambridge Service Alliance

Thank you from the Team!

All of us at the Cambridge Service Alliance would like to thank everyone who helped to make Cambridge Service Week a success. From the Academic Conference, to Industry Day and to Partners Day, we were delighted with the level of interaction, learning and sharing of insights into how organisations can successfully grow their service businesses in an age of digital disruption. Below are some of the

OUTPUTS/PRESENTATIONS AND EVENTS

Events

Cambridge Service Week 2017

Shift to Services 2-day programme
10-11 May 2018

Ecosystems 1-day programme
22 November 2017

outputs from the events, which we hope you can enjoy and share with you colleagues.

VIDEO Summary of Service Week 2017

Summary and Material from Service Week 2017! - Bridging to new service technology

This year's industry day conference focused on **'Bridging to "new" service technology'**, where we heard from Emirates Airline, Alibaba, IBM and Thales as well as the Alliance's research. **[more]**

Key Output from #SW2017:

Christoph Mueller, from The Emirates Group, spoke about the

Sean Perry-Evans, from Thales, spoke about the Thales' digital

vision of Emirates Airline, which aims to re-invent its processes using digital technology to enable a delightful travel experience. They are examining new technologies such as Artificial Intelligence and Real-time Analytics and ideas to identify the opportunities they represent for both incremental improvement and disruptive change in their business model.

Extract from Podcast: "*There's a long list of applications coming from the new technologies, and there are a lot of opportunities coming from new customer behaviours*".

[podcast] [transcript]

Dr Mohamed Zaki, from the Cambridge Service Alliance spoke about his recent research on how machine learning can be applied to customer experience analytics. This enables organisations to design and manage unique experiences for its customers and analyse feedback in a timely manner. The toolkit introduced allows utilization of existing qualitative and quantitative data and can result into specific actions being taken to increase customer satisfaction and reduce friction in doing business.

Extract from Podcast: "*you can capitalise on the data that you have in your business, the attitudinal data, and the behavioural data to allow you to understand your customer better*"

transformation vision, which they believe will transform the markets they serve (aerospace, transport, defence and security) and improve the digital future for their customers, by solving the challenges they face. Sean spoke about digital transformation and the newly established digital factory in a company guided by product policy, and illustrated with cases from the business portfolio.

Extract from Podcast: "*We recognise that digital transformation is something that if not grasped by Thales, we will become victim of it*".

[presentation]
[podcast] [transcript]

Martin Fleming, from IBM, spoke about how using machine learning, artificial intelligence, and deep learning can not only systematically inform decisions, it can enable greater innovation and creativity. Martin explained how IBM tackles these challenges as its enterprise transforms for the Cognitive Era. Martin shared its perspective on the art and science of powerful decision-making with data.

Extract from Podcast: "*The use of these tools has become increasingly important in transforming enterprises such as IBM to be able to deliver increased value and capability to our clients and improve our own performance.*"

[presentation]
[podcast] [transcript]

Torsten Steinbach, Carl Marcus Wallenburg and Florian Urmetzer

'Redistributed Manufacturing and the Impact of Big Data: A Consumer Goods Perspective', by Mohamed Zaki, Theodoulidis Babis , Philip Shapira, Andy Neely, Matthias Tepel in Journal of Production Planning & Control, Forthcoming (2017)

[presentation] [podcast] [transcript]

Dr Ye Meng, from Alibaba spoke on China's dynamics of digital transformation enabled by Alibaba and its ecosystem partners. He also gave an analytical framework and examples of digital transformation from the perspective of new information infrastructure, new factors of production and new division of labour. [material not currently available for distribution].

Full Podcast from Industry Day with all speakers

In this summary Podcast we include all the keynote speakers from our Service Week Industry Day conference - who discuss their presentations from our one-day conference. A **transcript** of this podcast is also available. **[compilation podcast]**

Poster Session from #SW2017

The Alliance researchers enjoyed the opportunity to present to the delegates the current research being conducted.
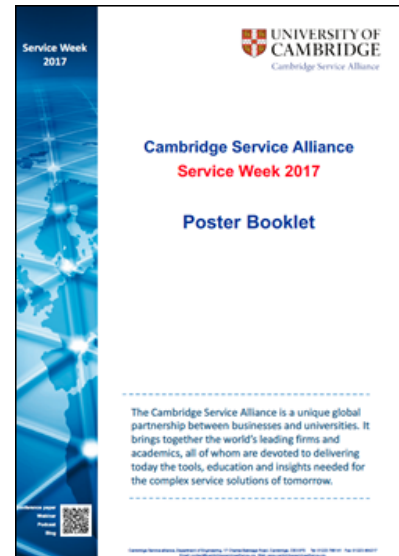
[poster booklet]

Service Week - Academic Conference

During the two day Academic Conference, experts and academics reported on their recent research developments in the field of Services, particularly on the Bridge to New Customers Experiences, Service Growth in Product Companies, Smart Service and Service Analytics, Customer Journeys and Service Research at the Base of the Pyramid. Our partner, Dav Bisessar from IBM, joined the conference in order to build strong bridge between industry and academia in this conference. Interesting debates and discussions from operations, marketing and strategy converge in support for building a better world with the support of services. The outputs of this conference are to be published in the INFORMS Journal of Service Science.

Government Launch Centre for Digital Built Britain

The **Government has recently announced** that a new Centre for Digital Built Britain, under the leadership of Professor Andy Neely, has been funded at the University of Cambridge. The Centre is going to work closely with

industry, government and academia to deliver the Government's Digital Built Britain strategy, which looks at how we can better capture, manage and share information to make decisions that lead to better societal outcomes. The Centre builds on the expertise and experience of faculty from the Cambridge Centre for Smart Infrastructure and Construction (CSIC), Cambridge Big Data, the Distributed Information and Automation Lab (DIAL), the Cambridge Service Alliance (CSA) and the Institute for Manufacturing to form a Research Bridgehead. The Digital Built Britain programme has been a key driver in industry uptake of Level 2 Building Information Management (L2 BIM), where detailed building models and managed information sharing have produced significant cost savings in construction projects. The Centre will drive forward research in this area, looking at what information is needed to make assets more productive across their lifecycle, improving productivity at an organisation level; and how this can inform decisions that ultimately improve cities and the built environment for citizens.

To find out more about the Centre and for further information please **sign up here**.

2 day executive programme - Making the shift to services

The ever popular executive programme on **'Making the Shift to Services',** was held in November at the IfM, Cambridge. Delegates were introduced to the idea of servitization in the manufacturing context, looking particularly at the role of technology and big data.

Webinar - Bridging the Co-Creation Gap
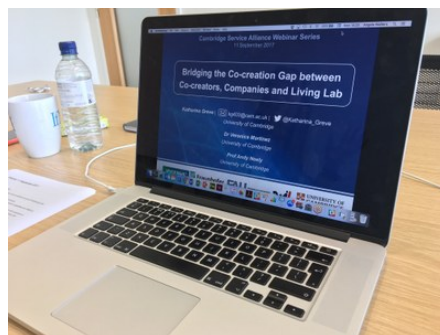
In this webinar Katharina Greve discusses the May Paper from the Alliance, on **'Bridging the Co-creation Gap between Co-creators, Companies and Living Lab'**. Living labs offer a new open innovation platform for companies to engage in co-creation. This study offers first insights into the operational activities, design structures and data collection approaches which are implemented to facilitate the co-creation process in living labs. **[more]**

Outcome-Oriented Contracts

Outcome-oriented contracts are used for an increasing range of private and public services. This paper looks at using these to foster performance improvements in logistics outsourcing relationships. In view of the importance to involve service providers in continuous improvement efforts, this paper helps managers to better understand how outcome-oriented contracts should be designed and managed to instigate proactive improvement. [paper]

Webinar - Incident Report in Servitized Manufacturers
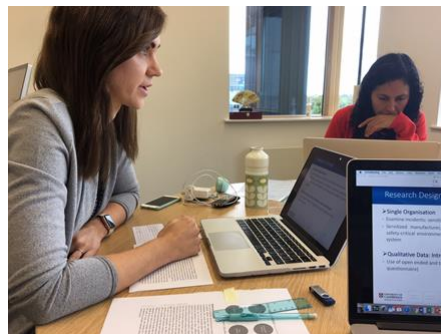
Chara Makri discusses her July paper on 'Barriers and Facilitators to Incident Reporting in Servitized Manufacturers', which looks at how the use of an incident reporting system can help communicate any lessons learnt from past failures to everyone involved. [webinar]

Thought Leadership Conference at the University of Queensland

Dr Mohamed Zaki was one of 65 international scholars that were invited to participate in the Thought Leadership Conference entitled 'Theorizing beyond the horizon: Service research in 2050' which took place in the University of Queensland, Brisbane, Australia from November 3-5, 2017. They set out to discuss eight themes to set service research priorities. Mohamed participated in the Customer Experience Challenges: Bringing Together Digital, Physical and Social Realms theme with Ruth Bolton, Janet R. McColl-Kennedy, Lily Cheung, Andrew Gallan, Chiara Orsingher and Lars Witell. Eight journal papers will be the outcome of this conference which will be submitted to the Journal of Service Management. [more]

London Standard article on Service Week 2017

Anthony Hilton, of the London Evening Standard, attended our Service Week 2017 Industry Day event, and wrote about one of the keynote speakers, from Alibaba, in a recent article. In his article Anthony Hilton reflects on the impact of technology will have on our lives and the difficulty of predicting its impact. **[read]**

Digital Business Transformation and Strategy

This paper examines what we know so far about digital business transformation. To help managers through the formulation and implementation of their firms' digital transformation strategies, this paper adds novel insights regarding the positioning of digital transformation and reveals the key characteristics that distinguish it from previous technology-enabled transformations. **[paper]**

Welcome to our new PhD student - Thayla Zomer

Thayla Zomer is a PhD student under the supervision of Professor Andy Neely. Her major research interests revolve around digital transformation in the construction sector. She is a fellow of the Faculty for the Future program of Schlumberger Foundation. [more]

Theme update - Data Analytics for Services

We developed a web-based application and a text mining methodology for understanding the service consumer's experience in real time, in order to use the generated insights to improve and design better service delivery. The outcomes of this research are: i) a real-time review application paired with an analytical text mining model; ii) an evaluation of the use of new text mining techniques (SVM and Naïve Bayes) in analysing qualitative data, and suggestions on their utilization in an industrial context; iii) a comparison between traditional survey vs. real-time for feedback collection and analysis; and iv) visualisation and a dashboard to monitor customer experience in real time. **[mehyz2@cam.ac.uk]**.

Webinar - Business Model Evolution

In this webinar Chander Velu discusses his paper on **'A Systems Perspective on Business Model Evolution: The Case of an Agricultural Information Service Provider in India.'** The paper identifies that three capabilities, namely balanced redundancy, requisite variety and cognitive discretion, are needed to enable a firm to achieve congruence between the components of the business model in order to deliver the customer value proposition. **[watch]**

Big Data Analytics Architecture for Businesses

Organisations suffer from a comprehensive architecture to manage and monitor the development of existing and new open-source big-data tools that are constantly growing. This paper looks at the shortcomings and strengths of developing a big-data architecture with open-source tools from technical and managerial perspectives. **[paper]**

EPSRC Research Grant - OMMS

Dr. Veronica Martinez and other colleagues from seven other universities will soon be kicking off a new research project founded by the EPSRC. This project will help our society in the fight against cancer. The new OMMS micro-factory could treat people in early cancer stages and mitigate the damage. Veronica will be focused on the analysis and modelling of the diverse service business models to implement in practice to maximize value and benefits for all partners of the service ecosystem.

Theme Update - Making and Sustaining the Shift to Services

This month, the shift to service team has been working on validation of the 'Digital Twins Business Innovation Model' framework developed from the research cases and field work. Veronica Martinez, Dav Bisessar (IBM), Caroline Burstall (Perkins) and Chris Weeks (CAT) hosted the successful 'Second Workshop in Digital Twins'. This took place on the 9 November 2017 and participants included BAE, Rolls-Royce, IBM, Caterpillar, Perkins, amongst others. Active discussions and scope for new ideas dominated the workshop. **[Veronica Martinez]**

EU SME Research

Dr Florian Urmetzer is studying the potential of servitisation and other forms of product-service provision for EU SMEs. The study is a research cooperation between the Cambridge Service Alliance (UK), Technopolis (Netherlands) and Dialogic (Belgium), and is funded by the European Commission. The study has reached its half way point and has had a successful review by the European commission in November. The team working on the study includes Marin Jovanovic, Dorothée Schulz-Budick and Glen Chua. The first outcomes will be published soon after their use to influence the policy making of the European economic area.

2nd Digital Twins Workshop - Identifying Best Practices and Future Service Business Models


Dr. Veronica Martinez from the Cambridge Service Alliance organised two successful workshops to debate 'The best practices in implementing and visualizing Digital Twins as basis for New Service Business Model Innovation'. We had a set of leading presentations, from Rolls Royce, IBM and the Cambridge University Construction Engineering. We discuss how digital twins are utilized in the heavy assets context, the design of digital twins for creating new services and the use of visualization technology to inform the full understanding the asset. The atmosphere of this event was energetic with the presentations and group discussions from participants such as IBM, Caterpillar, Perkins and BAE amongst others. Watch this space because the next Digital Twins Workshop is coming soon. If you want to read the **[Digital Twins Blog]**.

Alliance at The Manufacturer Leaders Conference

Representatives from the Alliance recently gave four workshop sessions at **The Manufacturer Leaders conference**, and exhibited alongside the IfM at

the **'Manufacturer Smart Factory Expo'** at the Exhibition Centre Liverpool.
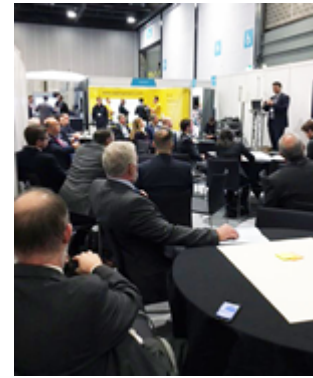
Ecosystems Strategy Executive Programme

Our new Ecosystems Strategy executive programme will be held in Cambridge on 27 February 2018. This programme builds on expertise developed in the Ecosystems, Value Mapping and Analysis Research Stream, and provides an opportunity for executives to learn first-hand some of the techniques developed by the Alliance. This course will show you how, through understanding your business' ecosystem and leveraging partnerships, you can deliver services quickly and effectively. **[exec programme]**