



Competitive Advantage in the Digital Economy Forum 2018

Palazzo Pesaro Papafava
Calle de la Racheda
Cannaregio 3764
30121 Venezia
Italy / Italia
18-20 June 2018



Welcome

The digital economy is causing unprecedented structural changes in society, business and the economy since the Industrial Revolution. Research and practice within the digital economy have been made a strategic priority in both developed countries and emerging economies.

It is now accepted that every business will be a digital one, and organisations are putting in place digital transformation plans to make sense of the possible disruptions as well as opportunities. With so many stakeholders within the digital economy, the academic community needs to understand and advise on actions to take that will improve societal well-being, as well as achieve competitive advantage for firms.

The 5th Competitive Advantage in the Digital Economy (CADE) Forum focuses on the Data Economy and its challenges in terms of research, practice and policy through the trans-disciplinary lens of *service*, informed by knowledge from technology and the social sciences.

CADE's unique format brings together multi-disciplinary thought leaders, researchers and practitioners to build capacity for cutting-edge research and innovative practice. The format include keynotes, plenaries and discussion in an intimate environment which helps the group generate valuable insights and identify future agenda for research, practice and policy.

Professor Irene Ng
Service Systems Group, WMG,
University of Warwick

Useful Information

Wireless Access

Connect to the 'Warwick Salone; Warwick Giardino; or Warwick Seminar' wireless networks and use the password 'university'.

Social Media

We encourage you to share the conversation on social media using #CADE2018 and please tag our sponsors: @SurreyCoDE and @hubofallthings

Accounts to follow:

@SSWMG
@WMGWarwick
@SurreyCoDE
@ireneclng
@PhilipMDavies
@hubofallthings

Programme

Monday, 18th June

09:00 – 09:30	Arrival and Registration
09:30 – 09:45	Opening Remarks
09:45 – 10:30	Keynote Presentation by Professor Irene Ng
10:30 – 11:00	Break
11:00 – 13:00	Participant Presentations: Session 1
13:15 – 15:00	Lunch at Trattoria Storica
15:00 – 17:00	Concurrent Workshops Workshop 1: Product Design in the Personal Data Economy Workshop 4: Behavioural Visibility in Data (BeVID)- Experiencing New Research Methods with Reality Mining
19:30	Dinner at Vecia Cavana

Tuesday 19th June

09:00 – 09:15	Arrival
09:15 – 10:00	Keynote Presentation by Professor Haluk Demirkan
10:00 – 10:30	Break
10:30 – 12:30	Participant Presentations (Parallel Sessions 2 & 3)
12:30 – 13:00	Break and Forum Photos
13:15 – 15:00	Lunch at Trattoria Storica
15:00 – 17:00	Concurrent Workshops Workshop 2: Student Experience and Teaching Workshop 3: Data-Driven Business Models
19:30	Dinner at Ogio

Wednesday, 20th June

09:00 – 09:15	Arrival
09:15 – 10:00	Keynote Presentation by Professor Ola Henfridsson
10:00 – 10:30	Break
10:30 – 12:00	Participant Presentations (Parallel Sessions 4 & 5)
12:00 – 12:30	Presentation of Awards and Closing Remarks

Participant Presentations

Monday, 18th June

Session 1 (11:00 – 13:00)

- 11.00am **The Value of Personal Data** Carsten Maple (University of Warwick), Sinong Ma (University of Warwick), Anya Skatova (University of Bristol) & Rebecca McDonald (University of Birmingham)
- 11.30am **Trust in the (Sharing) Economy: A Review of Trends and Directions for Future Research** Ana Babic-Rosario & Rosanna Garcia (University of Denver)
- 12.00pm **Participatory Design Fiction and the Wearable HAT: The Story So Far** Helen Oliver (The Alan Turing Institute/University of Cambridge)
- 12.30pm **Mobilizing Information Resources** Dominik Kalb (Schaeffler Technologies AG & Co.KG)

Tuesday, 19th June

Parallel Session 2 (10:30 – 12:30)

- 10.30am **The Impact of Digital Technology Affordances on Visitor Experience: A Pilot Study** P A Smart (University of Exeter), L A Phillips (University of Exeter), I E Smart (University of Bristol), L Blyth (Exeter Cathedral) & Jean-Baptiste Suquet (NEOMA Business School)
- 11.00am **Improving Customer Experience in Retail Banking: Modeling Contemporary Marketing with Ubiquitous Technology** Anna Margulis (Université du Québec en Outaouais) & Harold Boeck (ESG UQAM)
- 11.30am **The Impact of Same-Side Network Structure on Customers' Choice of Digital Service Platform** Kristina Maiksteniene (ISM University of Management and Economics)
- 12.00pm **Non-fungible Token as a New Type of Business Model in the Field of Tokenomics** Damian Zieba (University of Warsaw)

Parallel Session 3 (10:30 – 12:30)

- 10.30am **Digital Literacy and Datalockers: A Research Agenda** Beth Kewell & Phil Godsiff (University of Surrey)
- 11.00am **The Impact of Assessment on Student ICT Literacy** Mel Hudson Smith (University of the West of England)
- 11.30am **Leveraging The Land Grab: Threshold Concepts For Teaching The Digital Economy** Steve Pearce (University of Bristol)
- 12.00pm **The Use of Real Time Information to Allow Mass Bespoke Manufacturing** Zena Wood (University of Greenwich), M Koschate-Reis (University of Exeter), J Cinnamon (University of Exeter) & P Godsiff (University of Surrey)

Wednesday, 20th June

Parallel Session 4 (10:30 – 12:00)

- 10.30am **Using digital to understand the Physical Environment in the Digital Economy** Zena Wood (University of Greenwich)
- 11.00am **Virtual Managers' Perspective on Virtual Work – Challenges and New Practices in Service Organisations** Gerda Mihhailova (University of Tartu)
- 11.30am **Service Systems and the Topology of Digital Innovation** Albrecht Fritzsche (Friedrich-Alexander University Erlangen-Nürnberg)

Parallel Session 5 (10:30 – 12:00)

- 10.30am **An Empirical Analysis of the Number of Unique Browsers of the websites of UK Regional Newspapers** Michael Brightman (University of Central Lancashire)
- 11.00am **A Boardroom Perspective on Digital Transformation** Niko Karjalainen (TECOM Group)

Keynote Speakers



Haluk Demirkan

**Milgard Endowed Professor of Service Innovation & Business Analytics
Founder & Director of Master of Science & Center for Business Analytics**

An innovation and analytics evangelist, recognised leader, experienced practitioner, awarded consultant, active applied researcher and cross-disciplinary teacher, effective mentor, invited speaker, productive author and professional student. Haluk's achievements brought him a global leadership and reputation in analytics, service innovation and digital transformation with cognitive computing, and service-oriented technology and management. He has advised more than 40 Fortune 500 companies like IBM, GE, Cisco, HP, Intel, American Express and others in maximising the return on companies' resources by effectively implementing strategic data, analytics, cognitive and service transformation solutions. In 2014, Haluk was ranked 5th in Top-100 World-wide Researchers by the Association for Information Systems-sanctioned rankings.



Ola Henfridsson

Professor of Information Systems and Management

Ola's research interests relate to the transformative potential of digital technology as it pervades modern business and entrepreneurship. He is a visiting professor at the Swedish Center for Digital Innovation at University of Gothenburg, and is also an external expert for the Information Systems and Innovation Group, Department of Management at the London School of Economics. He was a runner-up for the Warwick University 2015 Outstanding Contribution to Research Excellence award, and received a Warwick Business School award for Outstanding Contribution to Research in 2016-2017. Ola's research has been published in world-elite journals such as Information Systems Research, MIS Quarterly, and Organization Science. He has worked and consulted with leading companies such as General Motors, Mecel, Volvo Cars and Volvo Trucks.



Irene Ng

**Professor of Marketing and Service Systems, WMG,
University of Warwick**

A business (IO) economist through her doctoral training, Irene's research lies in the transdisciplinary understanding of value and new business models. She has received global recognition for her work including several ESRC fellowship appointments, and is currently an ESRC/InnovateUK Innovation Caucus Thought Leader. Irene is currently Private Investigator (PI) on the £1m EPSRC-funded Dynamic, Real time, On-demand Personalisation for Scaling (DROPS) project and the HAT Living Labs (HALL)/CONTRIVE project. She was PI of the RCUK-funded HAT project, and a Co-Investigator (Co-I) on the RCUK NEMODE Network+ project. Irene has published numerous articles in the domain of management, marketing, engineering, economics, education and sociology and is the author of the highly-acclaimed *Value and Worth: Creating New Markets in the Digital Economy*, published by Cambridge University Press. An entrepreneur and academic, Irene is passionate about the link between practice and research, and advises digital business startups.

Workshop Leads



Andrius Aucinas

Dr Andrius Aucinas is a Co-founder and Chief Executive of HAT Data Exchange (HATDeX), where he has led the building of the HAT Person-owned Personal Data (PPD) exchange platform, creating new opportunities in the Personal Data Economy. His focus with HATDeX is on “making data move” – creating value for individuals and organisations by making rich personal data available in real-time and on-demand. Andrius previously co-founded the Cambridge Coding Academy for teaching young people digital skills through hands-on learning and outcome-driven projects. He holds a PhD in Computer Science from the University of Cambridge and has extensively collaborated with some of Europe’s largest telcos’ research labs including Deutsche Telekom Laboratories and Telefonica I&D.



Albrecht Fritzsche

Albrecht holds a doctoral degree in philosophy from TU Darmstadt and another in industrial management from Hohenheim University, Stuttgart. Albrecht can look back at 15 years of experience in the manufacturing industry as a systems designer and strategy consultant. Albrecht is currently affiliated with the Institute of Information Systems at Friedrich-Alexander University Erlangen-Nürnberg, where he teaches innovation strategy and various other topics concerning the organisational and technical conditions of socio-economic change. He is also involved in various industrial research projects concerning digital innovation, including the Service Manufactory JOSEPHS® project of the Fraunhofer Institute for Integrated Circuits.



Roger Maull

Roger is Professor of Management Systems, University of Surrey Business School and founder member of Surrey's Centre for the Digital Economy (CoDE). His current research is in the impact of digital technologies on future economic activity, including IoT, personal data, wearables and digital currencies. He has published widely in leading journals including the Journal of Operations Management and International Journal of Operations & Production Management. Roger is currently a Co-I on the DROPS and HALL/CONTRIVE projects, both funded by the EPSRC, and was PI on the £1.5m NEMODE project which is an RCUK DE-funded Network+, and PI on the CREDIT Cryptocurrency Effects in Digital Transformations project. He was also a Co-I on the RCUK-funded Hub-of-all-Things (HAT) project. Roger has a track record of working with industry and has been principal investigator on commercially funded projects with Vodafone, Microsoft, DSTL and the South- West Strategic Health Authority.



Glenn Parry

Glenn is Professor of Strategy and Operations Management at The University of the West of England. His work is characterised by an approach of partnering with organisations to develop creative solutions to challenges. He is interested in understanding what makes 'good' business. He undertakes both qualitative and quantitative studies with organisations, often with a focus upon process mapping and visualisation of data, to help them with business models, value capture, servitization, and supply chains. Glenn is a Co-I on the £1m EPSRC Dynamic, Real time, On-demand Personalisation for Scaling (DROPS) and the HALL/CONTRIVE project as well as the £1.47M EPSRC Platform grant "Resilient Trans-disciplinary Design Engineers and the £1.5M EPSRC "OMMS Optimising Me: Manufacturing System" project. He is also working on a British Academy project examining Blockchain for Good and has published and edited numerous international journals.

Organising Committee



Phil Davies

PhD Candidate, Service Systems Group, WMG, University of Warwick

Prior to joining Warwick, Phil was an industrial designer for a number of small and medium enterprises, most recently a 3D printing and 3D scanning company working with clients such as Jaguar Land Rover, SSE, Aston Martin and Pinewood Studios. Since joining WMG as a doctoral student, he has developed a keen interest in 3D printing, the Internet of Things and the digital economy. Phil is the recipient of an EPSRC iCase award with BAE Systems Land (UK). The focus of his research is 3D printing and modularity, investigating two main areas: the impact of designing for use and the impact reconfiguration for context has on product architecture; and how 3D printing can be used to provide an incomplete product platform for customers to tailor platforms to context. This is the third year Phil is organising the CADE Forum. As of September, Phil will be taking up the position of Lecturer in Operations Management at Henley Business School, University of Reading.



Max Green

PhD Candidate, Service Systems Group, WMG, University of Warwick

Originally trained as a chemical engineer, Max joined WMG in 2011 to pursue an MSc in Process Business Management. During this time he developed a keen interest in the future of energy markets and following a break to complete his Yachtmasters, re-joined WMG as a PhD candidate under the Warwick Chancellor's Scholarship. Having worked with Intelligent Energy on business model optimisation (for the application of hydrogen fuel cells to the Indian telecoms industry) and more recently with InnovateUK to develop a business model innovation tool, Max's research now focuses on the transformative impact of digitalisation on business models. Complementary to his studies, Max has organised various events including an ESRC-sponsored seminar on servitization – publishing on the same topic in the International Journal of Production Economics – as well as the 2016 Service System Forum in Venice and CADE2017.

Service Systems Group, WMG

The transdisciplinary research conducted by the Service Systems research group at WMG lies in the understanding and design of complex service systems, which come in many forms. Its work has ranged from multi-party outcome-based contracts for Rolls-Royce engines to the Ministry of Defence, complex service and logistics contracts to deliver a bank of flying hours for the Tornado or Typhoon jets, to designing multi-sided platforms and markets like the HAT for personal data, and knowledge-based collaborative networks of partners such as hospitals and universities.

Led by Professor Irene Ng, the Service Systems group cover a wide range of specialisms, including decision theory, ontology engineering, consumer culture theories, modularity & architectural innovation, information systems, economics, supply chain, monetization of digital services, consumer experience and loyalty. Its research has been funded by the UK government through the Research Councils UK. The group also works closely with industry and the public sector, with partners ranging from manufacturing organisations in the defence and aerospace sectors transitioning into outcome-based service environments, to public sector organisations.

The Service Systems group, building on its expertise in the digital economy, has now organised the CADE Forum for the fifth year running. **Website:** <https://go.warwick.ac.uk/sswmw> **Contact:** sswmw@warwick.ac.uk

Centre of the Digital Economy, Surrey

The University of Surrey's Centre for the Digital Economy (CoDE) investigates the emerging patterns of the digital economy through a process of Collaborative Discovery that blends research, education, problem-solving and brokering. CoDE engages in this process with enterprises large and small, and researchers and students in its Business Insights Lab.

CoDE explores topics such as digital platforms, emerging business models, distributed ledger technologies, and Agile innovation by combining cutting-edge business experimentation with classic methods of research. CoDE believes that Collaborative Discovery will help us navigate – together – a world that is uncertain, unpredictable and unrecognisable to traditional business models. **Website:** <https://surreycode.org> **Contact:** SurreyCoDE@surrey.ac.uk

Institute of Advanced Studies, Warwick

Established in 2007, the Warwick Institute of Advanced Study (IAS) is dedicated to enriching Warwick University's research environment by supporting its academics, hosting a number of international visitors and enhancing the experience of postgraduate students and early career scholars. Over the past nine years, the IAS has become an important part of the university, representing all faculties and departments, supporting collaboration across disciplines and representing Warwick both nationally and internationally.

IAS has supported innovative research at Warwick and interdisciplinary collaborations across all its faculties. In the past few years, the IAS has expanded its postdoctoral community and widened engagement with a number of Warwick's strategically important projects. **Contact:** ias@warwick.ac.uk

Hub-of-all-Things (HAT)

The HAT (Hub-of-All-Things) is a personal data micro server – a cloud-based evolution of the smartphone, the laptop before it, and the desktop PC. HATs give the average Internet user legal ownership over their personal data, and a micro server that gives them the benefit of a new generation of apps; apps draw from all of their personal information, no matter where it's created. They effectively decentralise personal data storage, allowing for data exchange and private AI, so that the use data by people, by companies, and by governments can be improved across the economy.

Organisations and governments need a better technological, legal and economic model for the combination and use of personal data if they want to take advantage of the opportunities in machine learning, preventative medicine and personalisation. As the business models of the Internet change in response to the ongoing evolutions in our societal and regulatory attitudes to personal data, HATDeX technology will take the lead in its decentralisation. So much of the Internet is today built by companies, which means that over 99% of the personal data that we create online is at least co-owned and co-produced by a corporation of some kind. De-centralising all of that data will massively increase its value. Current transactors will exchange data more easily, new transactors will start to exchange data now that it's decentralised, and a new category of data – made possible only by decentralisation – will emerge.

HATDeX, the technology startup charged with managing the HAT technology platform, is proud to be raising an £850,000 equity crowdfunding campaign. Learn more by visiting www.hubofallthings.com.

Getting in touch

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