Stafford Beer Medal – Previous Winners

- 2022 - Andre Hanelt, Sebastian Firk, Bjoern Hilebrant; Lutz M. Kolbe
- 2021 - Abayomi Baiyere, Hannu Salmela, Tommi Tapanainen
- 2020 - Bjoern Ross, Laura Pilz, Benjamin Cabrera, Florian Brachten, German Neubaum and Stefan Stieglitz
- 2019 - Anol Bhattacherjee, Christopher J. Davis, Amy J. Connolly, Neset Hikmet
- 2018 - Rachida Parks, Heng Xu, Chao-Hsien Chu, and Paul Benjamin Lowry
- 2016 - Anastasia Utesheva, Jason R Simpson
- 2015 - Jennifer E Gerow, Jason Bennett Thatcher, Varum Grover
- 2014 - P Tallon
- 2013 - E Kutsch, D Denyer, M Hall and L Lee-Kelley
- 2012 - H Koch, E Gonzalez, D Leidner
- 2011 - R Lederman and R Johnston
- 2010 - P O'Reilly, P Flanegan
- 2009 - F Thiesse, J Al-Kassab, E Fleisch
- 2008 - C Ashurst, N Doherty, J Peppard
- 2007 - S Kien Sia, C Soh
- 2006 - C Middleton, W Cukier
- 2005 - S Madon
- 2004 - S Sarker, S Sahay
- 2003 - Rikard Lindgren, Dick Stenmark, Jan Ljungberg
- 2002 - JJ Jahng, H Jain, K Ramamurthy

Citations

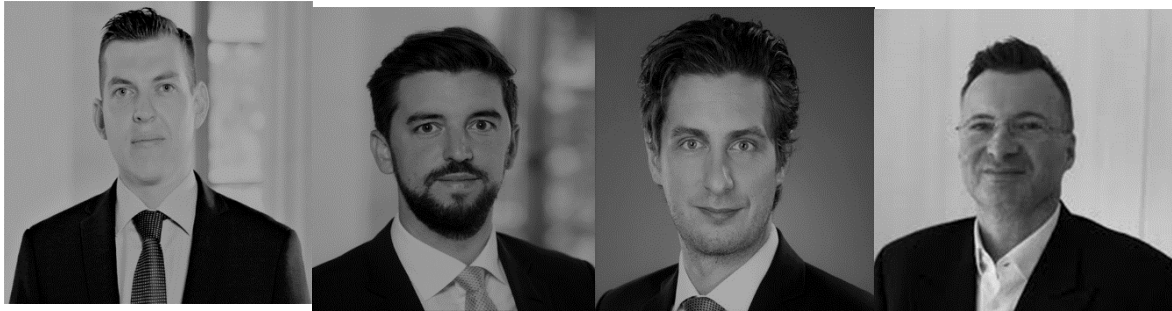## Citation for Stafford Beer Medal 2022

Andre Hanelt, Sebastian Firk, Bjoern Hilebrant; Lutz M. Kolbe

Digital M&A, digital innovation, and firm performance: an empirical investigation

European Journal of Information Systems 30 (1), 3-26.

The paper investigates the impact of mergers and acquisitions of digital companies and their capabilities by Industrial Age companies. Using a sample domain of companies operating in the automotive manufacturing sector, the study took an extremely rigorous approach to data acquisition and in-depth statistical analysis to establish the links between digital company acquisitions and the consequential impact on innovation, product development and business performance for Industrial Age companies. The judges considered this work an exemplary application of scientific methods deployed by Information Systems investigators and are delighted to recognize this through the award of the Stafford Beer medal.

Citation for Stafford Beer Medal 2021

Abayomi Baiyere, Hannu Salmela, Tommi Tapanainen

Digital transformation and the new logics of business process management

Digital transformation, which is top of mind for many organisations, requires a rethinking of many business process management (BPM) principles. This paper explains three important logics of BPM that need to be re-examined, i.e., process modelling, infrastructural alignment, and procedural actor (agency) logics. For example, the shift to agile ways of working as required by digital transformation necessitates a rethinking of process modelling in BPM. The judges thought this was a well-executed ethnographic study that provides valuable counter-intuitive findings to challenge existing logics of BPM. Furthermore, this article is relevant for many organisations because the focus is broad, and the insights are actionable.

From left to right: Abayomi Baiyere, Hannu Salmela, Tommi Tapanainen

Citation for Stafford Beer Medal 2020

Bjoern Ross, Laura Pilz, Benjamin Cabrera, Florian Brachten, German Neubaum and Stefan Stieglitz

Are social bots a real threat? An agent-based model of the spiral of silence to analyse the impact of manipulative actors in social networks

This year's medal is awarded to Bjoern Ross, Laura Pilz, Benjamin Cabrera, Florian Brachten, German Neubaum, and Stefan Stieglitz, all of whom were based in Germany when the paper was submitted (Bjoern Ross has since moved to the University of Edinburgh).

There are growing worries that malicious actors might spread misinformation online to manipulate the public by using automated bots. Research has already found evidence of social bots being used in regard to voting for the US presidential election and the outcome of the "Brexit" referendum in 2016 on membership of the United Kingdom in the European Union. This study considers the role of social bots in influencing public opinion expressed on social media and thereby addresses a highly significant and important issue for global society. The paper has theoretical novelty by introducing the spiral of silence theory to the information systems domain. The paper uses agent-based modelling to investigate the possible influence of social bots on public opinion. The study reveals that it only takes 2−4% of human-like social bots to sway the opinion climate in two out of three cases. The judges particularly liked the contemporary real-world focus on a critically important social issue, the use of novel theory to address the research problem, and the breakthrough insights regarding the power of social bots in shaping public opinion.

Citation for Stafford Beer Medal 2019

Anol Bhattacherjee, Christopher J. Davis, Amy J. Connolly, Neset Hikmet

User response to mandatory IT use: a coping theory perspective.

European Journal of Information Systems, 27 (4): 395-414

This year's medal is awarded to Anol Bhattacherjee, Christopher J. Davis, Amy J. Connolly, Neset Hikmet all of which are based in the USA. Many prior studies have focused on IT adoption from a voluntary use perspective. However, in many organisations the use of IT systems is not a choice, but a mandatory requirement for fulfilling the work task. This paper advances IT adoption theory through investigating how users respond to IT systems in mandatory use environments. The paper provides a new taxonomy of user response's to mandatory IT use considering emotional and behavioural responses. The taxonomy is applied to empirical data to demonstrate the new insights it can provide illustrating how users may transition between different response types. The judges particularly liked the fact that the findings were applicable for a wide range of IT adoption situations and explained using interesting user stories making the paper appealing to both academics and practitioners.

Citation for Stafford Beer Medal 2018

Rachida Parks, Quinnipiac University, CT USA; Heng Xu, Pennsylvania State University, PA USA; Chao-Hsien Chu, Pennsylvania State University, PA USA; Paul Benjamin Lowry, University of Hong Kong, China.

Examining the intended and unintended consequences of organisational privacy safeguards.

European Journal of Information Systems, 26 (1): 37-65

The authors address the highly significant challenge of organisational privacy breaches. While many organisations have attempted to achieve privacy compliance through a combination of technical and human controls, these controls may also have unintended consequences such as impeding workflow. The authors explore this tension using grounded theory to investigate the consequences of enacting privacy safeguards in medical practices. They present a new theoretical framework that explains the unintended consequences of privacy safeguard enactment and highlight an imbalance challenge that occurs when unintended consequences outweigh the intended consequences of enacting privacy safeguards. The study also has practical contributions for healthcare executives explaining how they could alleviate the imbalance challenge to reduce workarounds and potential negative effects on privacy compliance.

The judges were impressed with the novel focus of the paper and its readability. The judges particularly liked the way the paper provided a valuable theoretical contribution to academia and clear guidance to practitioners, exemplifying how the theory - practice divide may be bridged. For these reasons they commend the paper to the IS community and congratulate the authors on being selected for the award.

Rachida Parks receives the medal from OR Society President John Hopes on behalf of the rest of the team: Heng Xu, Chao-Hsien Chu and Paul Benjamin Lowry

Citation for Stafford Beer Medal 2016

Anastasia Utesheva, University of New South Wales, Australia; Jason R Simpson, University of Canberra, Australia

Identity metamorphoses in digital disruption: a relational theory of identity

This paper takes as its case study material the disruptive impact of Information Technology digital technology on a newspaper company. IT has hugely changed the processes of news gathering, collation and dissemination. The old certainties of "print" have changed from deadlines to rolling publication and re-publication. In today's world, where the political domain is challenging the role of the media in the dissemination of information, this study is of great relevance. The authors focus their study on IT's impact on Identity. This encompasses the identity of the medium itself, that of the actors involved, and the relationships between them.

The paper was chosen for its chosen academic lens and approach, its topicality, relevance to both practitioners and to academics alike and finally its style and readability. For these reasons we commend the paper to the IS community and we congratulate the authors on being selected for the award.

Citation for Stafford Beer Medal 2015

(Major) Jennifer E Gerow, Virginia Military Institute, USA; Jason Bennett Thatcher, Clemson University, South Carolina, USA; Varum Grover, Clemson University, South Carolina, USA

Six types of IT-business strategic alignment: An investigation of the constructs and their measurement

The OR Society is pleased to award the Stafford Beer award to a paper that is of key relevance to both IT/IS practitioners and researchers. The phrase "Business IT Alignment" refers to a key goal in optimising the value of IT in the Enterprise. But how can it be rigorously and meaningfully defined in practice? The paper addresses this fundamental question, building upon and validating the model proposed by Henderson and Venkatraman. The model describes how firms can seek to align four fundamental strategic components – Business strategy, IT strategy, and Business and IT infrastructure and processes, and the relationships between these factors. Using survey data collected from 140 Chief Information Officers, the six distinct alignment types delineated through this model were then rigorously tested, using a variety of statistical analyses, to determine how each type related to the dependent variable, namely 'Business Financial Performance'. The rigour and relevance of this approach are highly commended, as it both delivers important new theoretical insights and it provides a practical tool that can be applied by IT strategists within the organisational environment. We therefore have pleasure in commending this paper for the award.

Citation for Stafford Beer Medal 2014

Paul Tallon, Loyola University, Maryland, USA

Do you see what I see? The search for consensus among executives' perceptions of IT business value

The OR Society is pleased to award the Stafford Beer award to Paul Tallon for his paper entitled "Do you see what I see? The search for consensus among executives' perceptions of IT business value". Firms rarely collect data on the precise economic or financial impacts of Information technology (IT), and as such perceptions play a key role in assessing IT impacts. To the extent that if executives in the same firm evaluate IT impacts similarly, it can be easier to approve future IT investments or to initiate corrective action for failing IT investments. The study uses distributed sense-making theory to investigate the conditions under which executives will reach a consensus as to the extent and locus of firm and process-level IT impacts in their firm. Using data from surveys of top-level business executives the author shows that consensus is a function of CIO-led sense-giving in the form of IT promotion, CIO leadership, information systems (IS) engagement with end users, and IS-business communications. In so doing, this manuscript delivers a number of significant, new theoretical contributions, as well as many important practical insights. We congratulate Paul on this award.

Citation for Stafford Beer Medal 2013

Elmar Kutsch, David Denyer, Mark Hall and Liz Lee-Kelley

Does risk matter? Disengagement from risk management practices in information systems projects

Risk management is considered fundamental to project performance. However the authors' paper describes a study, undertaken across a wide range of organisations in which they found in practice, many project managers disengage from prescribed risk management before executing risk responses. Their analysis found five key underlying beliefs that governed project managers' risk management attitudes and actions. The aims of The OR Society are to bring logical analysis to improve management and decision making. We consider that this paper could make a valuable contribution to project management practice and we commend it to Information Management professionals. The society is pleased to award the authors with the Stafford Beer medal for 2013.

Elmar Kutsch, David Denyer and Mark Hall with Stewart Robinson (President of The OR Society)

Citation for Stafford Beer Medal 2012

Hope Koch, Ester Gonzalez and Dorothy Leidner

Bridging the work / social divide: the emotional response to organisational social networking sites

The OR Society wish to congratulate Hope Koch, Ester Gonzalez and Dorothy Leidner on being awarded the Stafford Beer medal for their paper "Bridging the work/social divide: the emotional response to organisational social networking sites". Many organizations are split on their policies governing social networking sites (SNSs) in the workplace, though often recognising the value of incorporating such tools into their business and marketing models. Though many organizations severely restrict or ban SNSs at work, a large majority are actively using, or evaluating their potential. The paper describes a study into the implementation of an internal SNS designed to help a large financial institution's IT new hire programme. Based on the theory of positive emotions, the research describes the uses and impact of Social Networking on the employees and the organization. Thus while some of the non-users of the system, the IT middle managers, experienced isolation, frustration and resentment, the executives overseeing this SNS attribute improved morale, better employee engagement and even reduced employee turnover to the internal SNS.

In awarding the medal the society recognises the innovative approach taken in their research blending theory to current issues in the application of information systems and their successful adoption. Their research provided valuable and relevant insights into the impact of adopting SNS within an organisation. And the society recognises and values its relevance to many organisations addressing this important topic.

Hope Koch with Geoff Royston (President of The OR Society)

Citation for Stafford Beer Medal 2011

Reeva Lederman and Robert Johnston

Decision support or support for situated choice: lessons for system design from effective manual systems

This paper identifies the practical and theoretical aspects of effective manual systems in highly skilled, time-constrained (but routine and structured) environments such as air-traffic control, ambulance despatch or hospital wards. Here, manual systems have often resisted digitisation and provide physical, shared systems, that offer multiple users valuable cues for action. Using a hospital case study the authors have identified features of these situated choice support systems and showed how they differ from traditional models of Decision Support. This research makes a distinctive contribution to understanding effective manual systems and the information systems design implications raised for both manual and digital systems. We therefore have great pleasure in awarding the authors this year's Stafford Beer Award.

Reeva Lederman and Robert Johnston

Citation for Stafford Beer Medal 2010

Philip O'Reilly and Patrick Finnegan

Intermediaries in inter-organisational networks: building a theory of electronic marketplace performance

The OR Society would like to congratulate Philip O'Reilly and Patrick Finnegan for their work on intermediaries in inter-organisational networks published in the European Journal of Information Systems.

Intermediaries (such as e-Bay and Amazon) arise when market system knowledge is dispersed amongst participants, e.g. buyers and suppliers. These electronic marketplaces play a vital role in facilitating exchanges in networks. However, there is a high failure rate associated with electronic marketplaces. The paper draws from several disciplines and presents a study of 8 electronic marketplaces. It identifies key performance measures for electronic marketplaces as well as the strategic, structural and contextual factors that impact performance.

This research makes a distinctive contribution both to the practice (and performance measurement) of electronic marketplaces and to building *new theory* about the performance and long-term sustainability of these marketplaces. We therefore have great pleasure in awarding the authors this year's Stafford Beer Award.

Philip O'Reilly with Richard Eglese (President of The OR Society)

Citation for Stafford Beer Medal 2009

Frédéric Thiesse, Jasser Al-Kassab and Elgar Fleisch

Understanding the value of integrated RFID systems: a case study from apparel retail

There is wide interest in the use of Radio Frequency Identification (RFID) in the retail industry in terms of the benefits that its use may deliver. By tagging items at the item level, as opposed to logistical units such as containers and palettes, RFID allows rather novel item-level tracking from the distribution centre to the point of sale using a fine-meshed and integrated RFID data collection infrastructure.

Retail giants in the US and Europe have made many efforts to convince suppliers, logistics service providers, and companies from other industries of the positive impact of RFID on supply chain performance. The overall adoption rate for RFID is still rather slow, although retailers such as Wal-Mart and Target have decided to issue mandates to major suppliers regarding their adoption. Other retailers, such as Metro Group in Germany have undertaken experiments with pilot implementations and a test lab. The complexity and uncertainty derives from the presence of well embedded existing solutions such as Bar Coding and hence the unclear additional benefits, technology costs, and questions about cost-sharing among supply chain partners.

This paper describes a case study of an RFID project at Galeria Kaufhof, a subsidiary of Metro Group and one of the largest department store chains in Europe. The project encompassed a variety of RFID applications at the intersection of store logistics and customer service.

The study describes this innovative large-scale trial, that allowed full integration of RFID event data with point-of-sale (POS) and master data, enabling the retailer to directly observe and analyse physical in-store processes. The paper then provides a theory about the effects that RFID may have on business processes from an IT value perspective. It develops a conceptual model to explain the different cause-and-effect chains between RFID investments and their impact on firm performance. Finally the authors compare the case to a previous trial conducted by Kaufhof about 5 years earlier and the new learnings it provides.

This paper provides a valuable practical overview of the issues in respect of realizing tangible benefits from adopting new technologies, in particular where such technology requires adoption along a complete supply chain. The study also presents a valuable theoretical framework for assessing the potential game-changing benefits from information and its use. We consider this a valuable contribution to the Information Systems literature that will benefit business managers, IT professionals and the IS academic community. It is a worthy winner of the Stafford Beer medal and we congratulate the authors.

Citation for Stafford Beer Medal 2008

Colin Ashurst, Neil F. Doherty and Joe Peppard

Improving the impact of IT development projects: the benefits realization capability model

The British Computer Society has estimated that 'the cost of failed IS/IT projects, in the UK alone, is many billions of pounds annually. The cost of missed opportunities is probably a great deal more'. Yet the study described in this paper has found 'no evidence of benefits realization practices being adopted in any consistent, comprehensive or coherent manner'.

Thus, in seeking to explore how more systems development projects might result in the delivery of benefits rather than end in failure, this study has tackled a major issue. The research has produced a conceptual model of a benefits realization capability that has been rooted in a rigorous approach including both an analysis and synthesis of literature and an exploration of practice in 25 projects. The resulting model has identified 4 distinct competences for Benefits Realization and has encouraged us to focus on wider issues than purely technological concerns.

In producing a paper that is accessible and valuable to practitioners and academics alike The OR Society congratulates the authors, Colin Ashurst, Neil Doherty and Joe Peppard, on their being awarded with the Stafford Beer Medal 2008.

Neil Doherty and Colin Ashurst with Sue Merchant (President of The OR Society)

Citation for Stafford Beer Medal 2007

Siew Kien Sia and Christina Soh

An assessment of package–organisation misalignment: institutional and ontological structures

In their abstract the authors write "(software) package–organisation fit has long been recognised as a major issue in the implementation of package software. Despite the embedded 'best practice' processes and the large number of configurable parameters, many organisations still find there are important needs or expectations that are not met by these packages." The paper then describes a model for distinguishing between the different types of mismatch between requirements and delivery. They then identify the types of action that can or cannot be taken to mitigate these discrepancies and validate their hypotheses with analyses of a number of case studies. In the view of the awarding panel we find that the paper combines a rigorous and well-developed analysis with an insight that addresses an issue of significant relevance to practitioners in the field. We consider that the authors have produced an analytical framework that will be of considerable interest and value to the practitioner community as well as developing the theoretical understanding and discussion of these issues. We believe that the conclusions drawn by the authors are of practical benefit to those charged with making often difficult, and usually expensive, selection decisions. Few, if any, organisations can implement complex software packages without recourse to customisation or changes in organisational practice, the success of which is critical to the success or otherwise of the implementation. The paper provides a useful framework through which such requirements can be assessed and hence the likely consequences of success. Consequently we consider that this work is very much in keeping with the spirit of the work of Stafford Beer, in whose name this award is given, applying theory and modelling to the practical resolution of complex organisational problems. The OR Society congratulates the authors, Siew Kien Sia and Christina Soh, on their being awarded with the Stafford Beer Medal 2007.

Citation for Stafford Beer Medal 2006

C Middleton and W Cukier

Is mobile email functional or dysfunctional? Two perspectives on mobile email usage

This paper adopts a critical perspective and challenges the assumptions that encourage a positive view of current mobile email adoption patterns - demonstrating how the technology can be viewed as both functional and dysfunctional. It shows how the same interview data can provide two contrasting interpretations, highlighting some frightening behaviours (e.g. emailing when driving) in the name of 'functional usage' and 'organisational efficiency'.

Whilst the paper looks at a specific form of technology – mobile email – the conclusions are much wider, calling into review our current norms of working and how our cultural and organisation norms are shaped by technology. They show how current mobile email usage patterns can become embedded in their users lives in dysfunctional ways. Indeed as the guest editors reflected this is 'arguably one of the first studies in the IS field that tackles the problems of overadoption, that is, the usage of an information system to the extent of addiction' (p.250).

The award of the Stafford Beer Medal recognises this paper's innovative presentation and contribution to a current and highly relevant debate on the choices we make that enhance (or infringe on) our work-life boundaries.

Catherine Middleton with Jeff Griffiths (President of The OR Society)

Citation for Stafford Beer Medal 2005

Shirin Madon

Governance lessons from the experience of telecentres in Kerala

This work takes a critically reflective look at the expectations placed on telecentres in rural areas of developing countries as drivers for socio-economic development and governance reform. The paper reflects on extensive empirical evidence gathered over a number of years about the impact of creating physical centres providing public access to long distance communication and information systems. It challenges some accepted assumptions about sustainability and the management of complex interactions between a variety of stakeholders. It also provides rich insights into the reality of the research process and the problems and achievements of a particular project in rural India.

As well as detailing specific issues in relation to developing countries this paper also presents many wider issues of sustainability and evaluation familiar to anyone involved in the provision of IT services for the aim of socio-economic development.

The award of the Stafford Beer Medal recognises this paper's careful exploration of the interplay of IS issues within wider political, governmental, corporate and community contexts and for the careful way that this account has been grounded through a detailed case-study and theoretical framework.

Citation for Stafford Beer Medal 2004

Suprateek Sarker, Sundeep Sahay

Implications of space and time for distributed work: an interpretive study of US-Norwegian systems development teams

In the introduction to their paper the authors state " while popular press continues to extol the virtues of virtual teams, researchers in the field have noted that not much is known regarding how virtual teamwork is carried out in practice". This highly relevant piece of research goes a long way to making good that shortfall. The paper describes an investigation into how a virtual software development project split across two continents worked in practice. In fact their findings are generic and can be extended to most virtual teams. As such they are relevant not only to those working in information systems and services, but anyone involved in what is becoming an increasingly common workplace paradigm. We commend this paper for the Stafford Beer award and congratulate its authors for bringing the rigour of IS research to current business and organisational issues. Beer himself focused his energies on facilitating the introduction of new ways of working and thinking. This paper fits in that mould and recognises that harnessing technology is dependent on understanding how people behave and interact with each other.