

# Cork University Business School Postgraduate Research Symposium 1 Lapp's Quay, Centre for Executive Education, UCC 9am-5.30pm 13 May 2019 #CUBSresearch @CUBSucc

(Organising committee: Dr Seán Lucey, Stephen Brosnan, Conor Drummond, Ruth Gibbs, Mara van Twuijver, Resego Morakanyane)

9.00-9.30am Registration & Tea and Coffee Banking Hall

9.30-9.35am
Opening Address and Welcome by Prof Stavroula Leka
(CUBS Director for Postgraduate Research)
Banking Hall

9.40-11.00am
Early Career Researchers and Next Steps on your Career
Banking Hall

Dr Seán Lucey (College of Business & Law) 'Postdoc Opportunities after your PhD'

Prof Fred Adam (Business Information Systems) 'The PhD as a first step in the academic career'

Mary Kate O'Regan (Dept. of Human Resources – HR Research) 'Skills for roles beyond academia'

11.00-12.20pm: Parallel Sessions

Session 1
Entrepreneurism, Growth & Development
Banking Hall

Richael Connolly (Food Business and Development)
'How do artisan food entrepreneurs develop their business? Reframing the concept of business growth within a post-growth context through a habitus perspective of Penrose's 'Theory of Firm Growth'.



# Molly Garvey (Food Business & Development) 'Business Growth and the Artisan Food Entrepreneur: A Case Study of Irish Farmhouse Cheesemakers'

Daragh O'Leary (Economics)

'An industry and regional analysis of the extent to which firm deaths cause firm births through competition, multiplier, and marshall effects in Ireland'

Lucas Olmedo & Mara van Twuijver (Food Business & Development)
'Empirical evidence from rural social enterprises in a European context – A
systematic literature review and case study'

# Session 2 Doing Research: Methodologies & Theories Room 3

Conor Drummond (Management and Marketing)
'Analysing case study data in the IMP tradition: Using Ethnographic Content
Analysis for social media data analysis'

Stephen Brosnan (Economics)

'Measuring and Evaluating the Economic Impact of Publicly Funded Research
Centres: An IMPACTS Framework Approach'

Charles Amayo (Business Information Systems)
'Exploring the Business Value of Private Cloud Infrastructure-as-a-Service (IaaS)
Using Resource Based View (RBV) Theory - A Study of Tertiary Institutions in UK
and Ireland'

Jake McCarthy, Ruben O'Callaghan, Chris Stanley (Business Information Systems)
'A Framework for Digital Asset Classification'

#### 12.20-1.00pm Lunch Banking Hall

1.00-2.20pm: Parallel Sessions

#### Session 1 Technology, People & Workplace Behaviour Banking Hall

Arif Wibisono (Business Information Systems)

'The impacts of workarounds on data governance initiatives'

Lorraine Dillon (Management and Marketing) 'Workplace Resilience: A Multilevel Perspective'



# Amna Shifia Nisafani (Business Information Systems) 'Understanding worker technostress in sharing economy'

Sarah Greeley (Management & Marketing)
'Individual Antecedents of Participation in Leadership Development:
A Model of Role Identity

#### Session 2 Agriculture, Food & Sustainability Room 3

Judith Ann Colgan (Food Business & Development)

'Towards sustainable production and consumption – understanding barriers and behavioural gaps'

Abdessemi Boulbadaoui (Food Business and Development) 'Food Supply Chain Integrity – a cross disciplinary review'

Tracy Bradfield (Economics/ Food Business and Development/ Teagasc)

'The Factors Influencing the Profitability of Rented Land amongst Dairy Farmers
in Ireland'

Mary Brennan (Food Business and Development/ Teagasc)
'Measuring Farm Animal Wellbeing; assessing indicators to better inform sustainable food production'

2.20-3.40pm: Parallel Sessions

#### Session 1 Technology and Digitalisation Banking Hall

Bayan Alqurashi (Management and Marketing)

'The Trait versus State Debate in the Engagement Literature: Essence, Dynamics, and Implications for Management'

James Duggan (Management and Marketing)
'Gigs, Jobs, or Careers? Career Motivations and Development Opportunities for
App-Workers in the Emerging Gig Economy'

Oluchi Emeka Odoemene (Business Information Systems)
'Open and Distance Learning (ODL) process for Teacher- Student Engagement in Developing Countries: A case study of National Open University of Nigeria'

Sophie Emerson, Ruairi Kennedy & Luke O'Shea (Accounting & Finance/ BIS) 'Trends and Applications of Machine Learning in Quantitative Finance'



#### Session 2 Health, Well-Being & Economy Room 3

Conor Loughnane (Accounting & Finance) 'How did the 2008 financial crisis affect unmet healthcare needs in Ireland?'

Gary L O'Brien (Accounting & Finance/ School of Pharmacy)
'Cost Minimisation Analysis of Intravenous or Subcutaneous Trastuzumab
Treatment in Patients with HER2-Positive Breast Cancer in Ireland'

Ruixue Feng (Economics) 'What are the Factors Affecting Well-Being in China?'

Michael Twomey (Business Information Systems)
"Turning challenges into design principles: A Check List for Cystic Fibrosis patients or carers'

3.40-4.00pm: Coffee Banking Hall

4.00-5.20pm Roundtable: Publishing for Early Career Researchers Banking Hall

Prof Stavroula Leka (Management & Marketing) & Dr Eoin McLaughlin (Economics)

**Closing Remarks** 



# The Trait versus State Debate in the Engagement Literature: Essence, Dynamics, and Implications for Management

Bayan Alqurashi
Department of Management and Marketing
118221412@umail.ucc.ie

#### Abstract

Since the beginning of this century, increased attention has been paid to positive psychology, human's strengths, and optimal functioning (Seligman & Csikszentmihaly, 2000). The concept of engagement has emerged as an outcome of this movement. Although debates in relation to the construct's validity and distinctiveness has been long established, ambiguity and inconsistencies in its conceptualizations and subsequent implications are still found in the literature.

**Aim** – The aim of this review is to address the trait vs. state debate found in the engagement literature that is not always clearly delineated, and discuss its implication for management's role in organizations. The review follows from the inquiry of whether people are born with a predisposition to be engaged or is engagement a construct that can be cultivated and promoted.

Approach – The three prominent conceptualizations of engagement to date, personal engagement (Kahn, 1990), employee engagement (Harter et al., 2002), and work engagement (Schaufeli et al., 2002), will be reviewed along three themes: construct's essence, dynamics, and susceptibility to influence. Engagement essence refers to the core component of the construct. Engagement dynamics refer to the stability and variation of the psychological state over time. Susceptibility to influence refers to the potential of the construct to be influence by external factors in the environment. Furthermore, implications of the two perspectives (trait/state) for the appropriate type of investigation and measurement of engagement, as well as the role of context in the construct will be explained. Lastly, a discussion of the implications the debate has for management research will be included.

# Exploring the Business Value of Private Cloud Infrastructure-as-a-Service (IaaS) Using Resource Based View (RBV) Theory - A Study of Tertiary Institutions in UK and Ireland

Charles Amayo

Department of Accounting, Finance and Information Systems

<a href="mailto:charlesamayo@yahoo.co.uk">charlesamayo@yahoo.co.uk</a>

#### **Abstract**

Private cloud IaaS is a constituent of cloud computing that enables the provisioning and use of IT infrastructure hosted in private virtualised environments known as data centres. With the growing investments and attractiveness of private cloud IaaS to large organisations including tertiary institutions, there is an increased impetus to



empirically investigate the business value of IT infrastructure in the cloud computing era. However, private cloud IaaS like any type of IT is a commodity equally available to any organisation and thus cannot produce business value in isolation, but has to be combined or complemented with other organisational resources, such as human IT resources and complementary organisational resources. The research model extends resource based view (RBV) theory, by incorporating Activity Competency Model (ACM), RBV of IT business value inspired organisational factors, and process-oriented approach of IT business value, to investigate the link between organisational resources and organisational performance. To enhance the depth of qualitative analysis, multiple case study design as well as multiple methods of data collection and analysis was employed.

Using qualitative data gathered from tertiary institutions in UK and Ireland, this study found that private cloud IaaS offers great potentials and viable alternative to the use of IT for educational purposes. The study also found that private cloud IaaS provides flexible, agile and cost-effective means of meeting tertiary institutions ever-increasing IT needs and requirements. However, the findings emphasize internally, externally, and dual focused perspective to deriving business value from private cloud IaaS. The findings indicate that the synergistic interaction or combination of the 3 organisational resources creates differential organisational IT capability including internally, externally, and dual focused organisational IT capabilities. This study also found that private cloud IaaS creates differential business value including internally, externally, and dual focused business value. The findings imply that the type of organisational IT capabilities created determine the type of business value tertiary institutions derived from private cloud IaaS. Collectively, the findings provide insights on how private cloud IaaS generates business value for tertiary institutions.

#### Food Supply Chain Integrity – a cross disciplinary review

Abdessemi Boulbadaoui Dept. of Food Business and Development Supervisors:

- 1. Dr Seamus O'Reilly, Department of Food Business & Development 2. Prof. Maeve Henchion, Teagasc Ashtown Food Research Centre
- 3. Prof. Thia Hennessy, Department of Food Business & Development a.boulbadaoui@umail.ucc.ie

#### **Abstract**

Although increasing globalisation of food supply provides greater food choice, it also presents an evolving challenge to food businesses, regulators, and policy makers to provide safe and nutritious food that is sourced, processed and distributed legally, with the desired quality attributes. Increased reporting of intentional food supply chain (SC) integrity issues, mainly through food fraud, and growing awareness of associated negative consequences for the economy and human health, has brought attention to new opportunities to address the food integrity problem from disciplines other than food science.

The present research explores how various stakeholders can maintain and strengthen food SC integrity in Ireland. Work to date has consisted of a review of the recent



literature on food supply chain integrity from a disciplinary perspective

(SC management, social science, food science, engineering and technology). The interconnections between these disciplines provide a new perspective to help improve understanding of the root causes of food integrity breaches and thus design of preventative measures.

This literature review has informed the design of an interdisciplinary framework and identified gaps in the literature, in particular in the area of process and supply chain management. This framework will guide use of SC mapping techniques to identify specific food SCs susceptible to different fraudulent behaviours and the development of a vulnerability assessment tool.

Application of this tool in these SCs will aim to identify vulnerable points and potential preventative measures for deployment at different levels of the food system.

This research is funded under the Teagasc Walsh Fellowship programme with support from the Musgrave Group.

## The Factors Influencing the Profitability of Rented Land Amongst Dairy Farmers in Ireland

Tracy Bradfield

Dept. of Economics/Food Business and Development and Teagasc

<u>t.bradfield@umail.ucc.ie</u>

#### **Abstract**

Land is an essential factor of production within agriculture. The Republic of Ireland possesses a land market that is constrained by minimal sales each year, due to high degrees of sentiment towards family land. A suite of tax incentives has recently been introduced to encourage land mobility and long-term leasing, following the abolishment of the milk quota. In economic terms, land must transfer to productive and profitable farmers in order to achieve allocative efficiency.

Using Farm Accountancy Database Network (FADN) data from 2011 to 2017, this research explores two aspects; (i) the question of whether owned or leased land is more profitable and (ii) the factors that influence a farmer's decision to rent land. The characteristics studied include aspects relating to land, labour, farm inputs and fixed productive assets such as household characteristics. It is found that allocative efficiency is not occurring. However, rental agreements are assisting in increasing profits for farmers constrained by their land resources.



## Measuring Farm Animal Wellbeing; Assessing indicators to better inform sustainable food production

Mary Brennan

Dept. of Food Business and Development/ Agricultural Economics and Farm Surveys Department, Teagasc (Prof. Thia Hennessy, Dr. Emma Dillon)

117222128@umail.ucc.ie

#### **Abstract**

As societal interest in ethically sourced food grows, so do consumer concerns surrounding farm animal welfare and food production standards along the whole supply chain. The abolition of EU milk quota in 2015 has resulted in an increase in average dairy herd size and milk output, with many consumers querying the impact of such intensification on animal welfare standards. In order to effectively measure animal wellbeing (welfare and health), it is imperative that valid, robust and feasible indicators are set in place. While indicators commonly reflect and report upon one dimension of sustainable agriculture, many can serve in a multi-use role, relaying additional data which can inform another aspect of sustainability.

This paper sets out to establish an index of animal wellbeing indicators which complement the current suite of sustainability metrics collated through the Teagasc National Farm Survey (NFS). A review of the various farm animal welfare measures implemented by different agricultural agencies within Europe assisted in determining suitable indicators present within the Teagasc NFS dataset to effectively assess Irish farm animal wellbeing, with a focus upon the dairy system. These indicators include 'good health' metrics, such as somatic cell count and dairy calf mortality rates, as well as measuring days at grass, good feeding of the herd through fat and protein ratios in milk and a number of variables relating to farm buildings. An additional advantage of applying the multi-use approach to establish indicators is the ability to observe trends over time. This permitted the observation of indicators on dairy farms with differing intensification strategies, allowing a comparison of indicators to be ascertained. Overall, this analysis is expected to advance the knowledge base within the Teagasc NFS regarding farm animal wellbeing measures, particularly in consideration of Common Agricultural Policy sustainability targets regarding socially responsible food production, and consumer concerns in matters regarding agri-food quality standards.

# Measuring and Evaluating the Economic Impact of Publicly Funded Research Centres: An IMPACTS Framework Approach

Stephen Brosnan Dept. of Economics stephen.brosnan@ucc.ie

#### **Abstract**

In recent years, the research impact agenda has gained considerable traction amongst academics and policymakers across the Irish research system. However, measuring and evaluating the impacts generated by research activities is complicated by conceptual and methodological issues. The contribution of this paper is twofold.



Firstly, this paper develops a multidimensional framework to measure the economic impact of publicly funded research centres. The Impact Measurement and Performance Assessment of Centres for Technology and Science (IMPACTS) framework adopts a holistic approach to assessment, viewing research centres as an important cogs within an innovation system. As such, a centre's ability to deliver impacts will be influenced by both the absorptive capacity of their collaboration partners and the strength of the innovation system. Secondly, the framework is operationalised through the development of the Research Impact Index (RII). The RII was tested and implemented at an SFI-funded research centre Irish Photonic Integration Centre (IPIC), hosted by Tyndall National Institute, University College Cork and used to benchmark IPIC against national comparators.

**Funding:** This work was supported by Irish Research Council and Science Foundation Ireland [GOIPG/2015/3746]

How do artisan food entrepreneurs develop their business? Reframing the concept of business growth within a post-growth context through a habitus perspective of Penrose's 'Theory of Firm Growth'.

Richael Connolly and Joe Bogue
Dept. of Food Business and Development
<u>richaelconnolly@gmail.com</u>

#### **Abstract**

**Introduction**: This conceptual paper explores the role of business growth in the context of a 'post-growth' economy. Within the current economic paradigm there are systemic pressures to grow and scale a business. Yet, this seemingly limitless growth is predicated on limited resources. The artisan food entrepreneur provides rich context when addressing these questions, as they are perceived as the embodiment of the ideals of sustainability, placing passion and purpose over profit.

Research Aim: Growth is a vastly complex, heterogenous, social phenomenon. Penrose's seminal work 'The Theory of the Growth of the Firm', is the foundation of growth theory literature (Penrose, 2009). However, the current prevailing paradigm of extant literature utilises this theory to address questions of 'how much' and 'what'. By shifting the question to 'how' business develops, facilitates a more interpretivist, contextual understanding of growth. This is further achieved by utilising Bourdieu's concepts of "habitus", "field" and "capital". This paper posits that these concepts enrich and further extend Penrose's 'theory of the growth of the firm' and adapt it to the post-growth context of current society, for which strategic management and small business literature have largely ignored.

**Findings**: The theoretical framework developed in this paper provides for an understanding of small business growth for the artisan food entrepreneur, as not only economically driven, but deeply social. Thus, business growth needs to be reframed to support entrepreneurial purpose, rather than output, and better support the entrepreneurs' livelihood and business.



#### **Workplace Resilience: A Multilevel Perspective**

Lorraine Dillon
Dept. of Management & Marketing
118225264@umail.ucc.ie

#### **Abstract**

Resilience refers to the ability of an individual to bounce back from adversity, risk, uncertainty or failure, and adapt to stressful and changing life demands (Tugade and Fredrickson, 2004). Within an organisational context the need for resilience has never been more crucial as work environments are becoming increasingly stressful and turbulent (Lyons et al., 2015; Tonkin et al., 2018). However, while resilience has gained significant attention across different fields including Psychology (Windle, 2011) and Ecology (Ungar, 2011), in the domains of HRM and Organisational Behaviour resilience is under-researched (King et al., 2016) and our understanding of resilience in the workplace is limited (Fisher et al., 2018; Hartmann et al., 2019). Research efforts in the workplace domain have tended to focus on how best to develop individual resilience (Kossek and Perrigino, 2016; McEwen and Boyd, 2018) but there is still a specific requirement for conceptual clarity regarding resilience at work (Robertson et al., 2015; King, 2016). Furthermore, workplace resilience research has tended to give an individualised account (Britt et al., 2016) ignoring how resilience can be built at the individual, team and organisational level (King et al, 2016; Kuntz et al., 2017). As such there is scarce research examining resilience across employee, team and organisational levels (King et al., 2016; Linneluecke, 2017) despite evidence of resilience occurring at multiple levels (Sutcliffe and Vogus, 2003). This paper will address these gaps and add to the literature by providing a multilevel view of resilience within the workplace.

# Analysing case study data in the IMP tradition: Using Ethnographic Content Analysis for social media data analysis

Conor Drummond
Dept. of Management and Marketing
<a href="mailto:c.m.drummond@umail.ucc.ie">c.m.drummond@umail.ucc.ie</a>

#### **Abstract**

Social media (SM) platforms are increasingly being employed by business-to-business (B2B) marketing practitioners. Although in its infancy, this is reflected by the recent surge in B2B social media research publications. Given the novelty of this research space, the purpose of this paper is to review the wide ranging methodological approaches currently adopted by publications in SM B2B research to date, highlighting those most commonly used and their potential advantages and limitations. The author proposes the use of an emerging form of data analysis, Ethnographic Content Analysis (ECA), as an approach that adds the necessary reflexivity and flexibility required to study social media business-to-business phenomena. The author demonstrates its



applicability when coupled with an Industrial Marketing and Purchasing (IMP) perspective, highlighting the appropriateness of the two in situ for the progression of the industrial marketing field.

# Gigs, Jobs, or Careers? Career Motivations and Development Opportunities for App-Workers in the Emerging Gig Economy

James Duggan\*, Ultan Sherman, Ronan Carbery & Anthony McDonnell
Dept. of Management & Marketing
jamesduggan@umail.ucc.ie

#### **Abstract**

Today's increasingly fissured workplace, saturated with contingent arrangements, is leaving many workers without a career path and developmental opportunities (Weil, 2017). One of the most widely-debated trends in this domain is the emerging gig economy, defined as an economic system that uses online platforms to digitally connect workers with consumers (Todolí-Signes, 2017). While examples of popular gig organisations, such as Uber and Deliveroo, emphasise the undoubtedly innovative nature of the gig economy, the hyper-flexibility of roles in this domain leaves many workers isolated and insecure, thereby challenging our understandings of work, careers, and the human resource management function (Taylor, Marsh, Nicol & Broadbent, 2017). This paper calls for a specific focus on career motivations and the provision of training and development opportunities for workers participating in a specific form of work in the gig economy, namely 'app-work'. Accordingly, this paper considers the factors likely to motivate app-workers in pursuing and remaining in these precarious roles, as well as the potential unsustainability of these roles in the context of app-workers' long-term careers. Drawing on preliminary findings from ongoing qualitative interviews with app-workers across a variety of organisations, emerging themes and trends are presented and described. Finally, in combining theory with preliminary empirical evidence, this paper considers some of the wider theoretical and practical implications of these emergent trends within the gig economy for the future of work.

#### Trends and Applications of Machine Learning in Quantitative Finance

Sophie Emerson, Ruairi Kennedy & Luke O'Shea
Dept. of Accounting & Finance/ BIS
SE: <a href="mailto:114560897@umail.ucc.ie">114560897@umail.ucc.ie</a> /RK: <a href="mailto:115140151@umail.ucc.ie">115140151@umail.ucc.ie</a> /
LoS <a href="mailto:114326196@umail.ucc.ie">114326196@umail.ucc.ie</a>

#### **Abstract**

Machine learning (ML) technologies are finding commercial applications across many industries, not least the financial industry. There is a growing interest in the application of the latest ML technologies in the area of investing. This study seeks to evaluate the current state of the art within this area. The main techniques used in



current research are identified through a literature review. This allows the classification of the main technologies available to the financial industry and popular use cases for these technologies. In particular, we identify stock market forecasting and portfolio management as a particular focus for the application of new technologies. These areas have traditionally lead the way in adopting quantitative techniques and are currently the most common source of use cases discussed in the literature.

#### What are the Factors Affecting Well-Being in China?

Ruixue Feng
Dept. of Economics
115107736@umail.ucc.ie

#### Abstract

The analysis of 'subjective well-being', also referred to as 'satisfaction with life' or 'happiness', is a relatively new but rapidly growing topic for economists (Knight, Lina, and Gunatilaka, 2009). There are important reasons for economists to consider happiness research (Frey and Stutzer, 2002). Future research on happiness in economics has a lot of potential, but that it needs to be guided more by theory, subjective well-being can contribute towards a new understanding of utility in economics (Frey and Stutzer, 2003).

The aim of this paper is to explore the possible factors effecting subjective well-being in China by using the data of Chinese General Social Survey 2015. The aim of this paper is achieved under the utility theory by analysing the relationships between factors and happiness. When measuring individual well-being levels, the self-reported happiness indicators are adopted. The methodology of this analysis in this paper is using ordered probit technique. For ordinal dependent variables, using ordered probit model could avoids the use of a subjectively chosen scores assigned to the categories (Hanushek and Jackson 1977).

The results show these factors: gender, age, health status, religion, education level, income, political status, marital status, social frequency and social fairness, significantly effecting individual's well- being in China.

## Business Growth and the Artisan Food Entrepreneur: A Case Study of Irish Farmhouse Cheesemakers.

Molly Garvey
Dept. of Food Business and Development
<a href="mollgarv@gmail.com">mollgarv@gmail.com</a>

#### **Abstract**

The assumption that all businesses should grow dominates small business research (Wiklund et al. 2003). Yet micro businesses are characterised by their low financial and employment growth rates (Anderson and Ullah 2014). The aim of this thesis was to explore how a productivist Irish agri-food policy environment influences Irish artisan



food entrepreneurs (AFEs) in the management of their businesses. Three research questions were proposed: A) how do AFEs understand and feel about business growth? B) What motivates AFEs to start a business? C) What kinds of business growth strategies are employed by AFEs? A case-study was built of ten Irish farmhouse cheesemakers. Qualitative data was gathered through mixed sources. The analysis employed was both inductive and deductive: thematic analysis followed an open coding of the raw data and a theoretical framework built from the literature review was used to define potential AFE motivation. The findings were as follows: all businesses within the case study demonstrated a wariness at growing the business beyond a certain "ideal size". There was low interest in developing managerial roles. Cooperation as well as competition was a common business growth strategy. Overall, it was found that the Irish AFE is not growth-averse but pursues more-thancommercial growth. These findings have implications for the design of future artisan and micro food business support programmes and contribute to the wider debate about how business growth is and should be measured. It is acknowledged that these findings are based on qualitative data and would benefit from a complementary quantitative study.

# Individual Antecedents of Participation in Leadership Development: A Model of Role Identity

Sarah Greeley
Dept. of Management & Marketing
sarah.greeley@umail.ucc.ie

#### Abstract

The dynamic nature of today's markets has sparked renewed interest in understanding how to develop effective leaders. Recent theoretical trends have suggested leader role identity as an initial motivating force in seeking out leadership development opportunities. In addition, the study of individual leader traits and the influence of context have also seen greater academic attention. The current conceptual paper incorporates these three areas of research into the development of a model of participation in leadership development. The model posits that one's level of current or potential leader role identity is an initial motivator toward seeking development activities. Combined with the motivational individual traits of selfefficacy and learning goal orientation, the inclination to participate in development can be further enhanced or hindered. A unique contribution of the model is the incorporation of the situational characteristics of feedback, perceived organizational support and learning context. The consideration of these variables as boundary conditions in developmental participation will serve to clarify the complex process of leadership development. Future empirical research is well-suited to contextually assess and revise the proposed model.



#### How did the 2008 financial crisis affect unmet healthcare needs in Ireland?

Conor Loughnane, MSc\*, Dr. Aileen Murphy, Dr. Michelle Carr, Prof. Mark Mulcahy Depart. of Accounting & Finance/ Economics;

conor.loughnane@umail.ucc.ie

#### **Abstract**

**Background/Introduction:** All individuals should have access to adequate care according to their health need, regardless of socioeconomic factors. However, unmet needs for healthcare exist and are an undesirable feature of modern health and social care systems and can be further exasperated by economic shocks. This paper assesses the impact the 2008 financial crisis on unmet healthcare need in Ireland.

**Methods:** Pooled cross-sectional data, from the European Union Survey of Income and Living Conditions (EU-SILC) years 2009 to 2016, was analysed using multivariate logistic regression to determine the predictors of unmet need in Ireland during and after the financial crisis.

**Results:** The analysis found that levels of unmet need increased throughout the study period from 2.5% in 2009 to 3.2% in 2016. Preliminary results suggest that males were significantly less likely to experience an unmet healthcare need compared to females. Individuals without private health insurance or a medical card were significantly more likely to report experiencing an unmet healthcare need compared to medical card holders. The results also suggest that the probability of experiencing unmet healthcare needs is significantly associated with socioeconomic status: with lower incomes associated with greater likelihood of experiencing unmet healthcare needs.

**Conclusions**: Unmet healthcare needs were significantly higher after the financial crisis. Individuals without private health insurance or a medical card experienced the highest levels of unmet need in this study. One of the fundamental principles of Sláintecare is timely access, to all health and social care according to medical need. Our results highlight the demographics where levels of unmet need are highest, providing Sláintecare with the information required to reduce the levels of unmet healthcare needs overall and provide access to adequate care for all regardless of their socioeconomic status.

#### A Framework for Digital Asset Classification

Jake McCarthy, Ruben O'Callaghan, Chris Stanley
Dept. of Business Information Systems

JMcC <u>jakemccarthy@gmail.com</u> /ROC <u>114448838@umail.ucc.ie</u>
/CS <u>chrisaidanstanley@hotmail.com</u>

#### **Abstract**

As a distributed network propagates and a method of consensus is layered on top, parties don't need to trust any individual node just the system as a whole. Once trust is established a transformation from a transfer of data to one of value can ensue. Digital assets are the encapsulation of this value transfer; defined as a data structure implemented using Distributed Ledger Technology (DLT) which can be assigned an



owner. This study reviews the existing body of knowledge, highlights the ambiguity surrounding digital assets and proposes a framework for further analysis. This opacity has made it difficult for organisations to leverage the advantages of DLT. The proposed framework outlines the composition of a digital asset with six primary fields: asset owner (identity), store of data, contract, state (representational or native), composability (composable or non-composable) and fungibility (fungible or non-fungible). This paper aims to contribute knowledge by providing a framework to categorise digital assets and supplement further research.

# Cost Minimisation Analysis of Intravenous or Subcutaneous Trastuzumab Treatment in Patients with HER2-Positive Breast Cancer in Ireland

DOI: <a href="https://doi.org/10.1016/j.clbc.2019.01.011">https://doi.org/10.1016/j.clbc.2019.01.011</a>

Gary L O'Brien1 with

Cian O'Mahony1, Katie Cooke2, Ada Kinneally3, Sarah-Jo Sinnott4, Valerie Walshe5, Mark Mulcahy6, Stephen Byrne1

1Pharmaceutical Care Research Group, School of Pharmacy, UCC
2Pharmacy Department, South Infirmary Victoria University Hospital
3Oncology Department, University Hospital Waterford
4Department of Non-Communicable Disease Epidemiology, LSHTM
5National Finance Division, Health Service Executive
6Department of Accounting and Finance
gary.obrien@ucc.ie

**Keywords**: Cost analysis, Oncology, Micro-costing, Trastuzumab, Outpatient care, Administration routes, HER2/neu

#### Abstract

Background: Two large acute Irish University teaching hospitals changed the manner in which they treated human epidermal growth factor receptor (HER) 2-positive breast cancer patients by implementing the administration of trastuzumab via the subcutaneous (SC) route into their clinical practice. The study objective is to compare the trastuzumab SC and trastuzuamb intravenous (IV) treatment pathways in both hospitals and assess which route is more cost-effective and time saving in relation to active healthcare professional (HCP) time.

**Methods:** A prospective observational study in the form of cost minimisation analysis constituted study design. Active HCP time for trastuzumab SC and IV-related tasks were recorded. Staff costs were calculated using fully loaded salary costs. Loss of productivity costs for patients were calculated using the human capital method.

Results: On average, the total HCP time saved per trastuzumab SC treatment cycle relative to trastuzumab IV treatment cycle was 59.21 minutes. Time savings in favour of trastuzumab SC resulted from quicker drug reconstitution, no IV catheter installation/removal, and less HCP monitoring. Over a full treatment course of 17 cycles, average HCP time saved accumulates to 16.78 hours with an estimated direct cost saving of €1,609.99. Loss of productivity for patients receiving trastuzumab IV



(2.15 days) was greater than that of trastuzumab SC (0.60 days) for a full treatment course.

**Conclusion:** Trastuzumab SC treatment has proven to be a more cost-effective option than trastuzumab IV treatment that generated greater HCP time savings in both study sites. Healthcare policymakers should consider replacing trastuzumab IV with trastuzumab SC treatment in all eligible patients.

An industry and regional analysis of the extent to which firm deaths cause firm births through competition, multiplier, and marshall effects in Ireland.

Daragh O'Leary Dept. of Economics daragh.oleary@ucc.ie

#### **Abstract**

This paper tests for the presence of a seedbed role function in Irish industry by estimating the relationship between firm deaths and future firm births at regional and industry level using a zero inflated Poisson fixed effects model. Conceptually this paper draws from the work of Dejardin (2004) who discusses the multiplier, competition, and marshall effect with regard to the firm dynamics process. This study uses CSO data on Irish firms to test all three of these effects and the extent to which firm deaths cause firm births in Ireland.

Dejardin MJTAoRS. (2004) Sectoral and cross-sectoral effects of retailing firm demographies. *The Annals of Regional Science* 38: 311-334.

# Empirical evidence from rural social enterprises in a European context – A systematic literature review and case study

Lucas Olmedo, Mara van Twuijver & Mary O'Shaughnessy Dept. of Food Business & Development lucas.olmedo@ucc.ie mara.van.twuijver@umail.ucc.ie

#### **Abstract**

Social enterprises (SEs) have attracted attention due to their ability to combine social and economic goals through entrepreneurial and innovative strategies (Defourny and Nyssens, 2013). Despite the growing political and academic interest in rural SEs, it is acknowledged that the sector is under-researched (Steiner and Teasdale, 2017). In response to this gap in knowledge, this paper presents a Systematic Literature Review (SLR) based on 50 peer reviewed articles of rural SEs within Europe. Furthermore, two exploratory case studies of rural SEs operating in Ireland and Portugal were conducted to empirically assess some of the conclusions from the SLR.

The findings from the SLR and the two case studies show that rural SEs implement tailor made solutions that address economic, social and/or environmental local needs, usually combining these dimensions. Moreover, rural SEs are characterised by the



involvement of the local communities in which they operate. Therefore. rural SEs often seem to represent a collective form of social entrepreneurship, namely Community (Based) SEs (Peredo and Chrisman, 2006). In addition, rural SEs show a great ability to combine a wide range of resources (local and external; public and private) to achieve their goals. Finally, the findings show the need for (context) specific and long-term policy support. Overall, these collective agents have the potential to contribute to an integrated rural development if combined with supportive institutional frameworks (Bock, 2016).

# Open and Distance Learning (ODL) process for Teacher- Student Engagement in Developing Countries: A case study of National Open University of Nigeria

Oluchi Emeka Odoemene
Dept. of Business Information Systems
oluchiemekaodoemene@gmail.com

#### **Abstract**

The fundamental goal of open and distance education is to provide an education that will be accessible anytime/anywhere for all categories of persons. The open and distance learning is a technology-based learning and educators' pedagogical practice when using technology could be influenced by their knowledge about their curriculum as well as their capabilities to integrate ICT into teaching. It is obvious that technologies are being developed at an ever-increasing rate and researches have shown that 90% of universities with more than 10,000 students offer some form of distance learning and nearly all uses the internet (Clerk and Mayer 2003). Open and distance learning use have been the key priority in developing countries as it is an all-inclusive education process which caters for all and sundry.

**Keywords**: Open and Distance learning, Strategies and Engagement

# Towards sustainable production and consumption – understanding barriers and behavioural gaps

Judith Ann Colgan, Stephen Onakuse, Gideon Fadiran Dept. of Food Business & Development S.Onakuse@ucc.ie

#### **Abstract**

Responsible production and consumption are one of the areas Ireland and several other countries lag in their strategy to achieve sustainable development goals (SDG12). Consumer behaviour is understood to be influenced by social norms, a keyfactor that influences the direction of responsible production and consumption. Social norms affect consumer decision making through social expectations, reference groups and social influences such as communities actions/activities. These three elements drives behavioural preference, which can be measured through surveys. This study employed both qualitative and empirical approaches to guide both the development



and implementation of the survey to generate key indicators of social norms that influence sustainable production and consumption (SPAC). Using Ireland as a case study, a systematic literature guide based on Grounded theory was used to (i) identify and compare SPAC policies, recommendations and approaches; (ii) observe and compare methodologies and behavioural theories; (iii) identify questionnaire use by type, sample size, target group and product/technology. The study result contributes to the theoretical suggestions of barriers to SPAC, while providing a social view on consumption through indicators of consumer behaviour, linked through socio-economic characters, shopping practice, food consumption habit, waste management habit, environmental awareness and sensitivity to policy instruments that impact these behaviours. This study expose the way government policies on SPAC uptake among consumers are determined.

**Keywords:** sustainable consumption; research and behaviour gap; barriers to SPAC; attitude; behaviour; consumer

Acknowledgements: This material is based upon works supported by Environmental Protection Agency Ireland under Grant No. (Ref: 2018-SE-MS-11).

#### Understanding worker technostress in sharing economy

Amna Shifia Nisafani
Dept. of Business Information Systems
<a href="mailto:amna.shifia@gmail.com">amna.shifia@gmail.com</a>

#### **Abstract**

Sharing economy is a new phenomenon that has created vast opportunities for both short-term and long-term employment. Despite its advantages, existing research has highlighted the potential implications that the sharing economy has on gig workers. One such implication is due to the high reliance on technology that imposes technostress on gig workers. Technostress is technology-driven and negatively impacts on human beings. Earlier studies in technostress have emphasized the existence of technostress and its impact on a workers' life. However, these studies focus on full employment workers in traditional organisations, which is a different environment than that of gig workers in the sharing economy. In the sharing economy, the development and impact of technostress in gig workers is unknown.

Therefore, this study aims to understand gig worker technostress in the sharing economy. This study is grounded on Transactional Model of Stress and Coping, which perceives technostress as a transactional process to adjust and reduce discrepancies between the worker and the technology. This study takes an interpretive stance and will carry out case study research. The potential contributions of this study are as follows. For theoretical contribution, this study is the first study that aims to understand technostress in the sharing economy. It will provide new knowledge and insight on how sharing economy platforms can induce technostress. This will enrich technostress and sharing economy literature. For practical contribution, this study helps to supply more information and knowledge to design and develop strategies and policies to improve gig worker well-being.



**Keywords:** sharing economy, technostress, workers, coping mechanism

## Turning challenges into design principles: A Check List for Cystic Fibrosis patients or carers

Michael Twomey
Dept. of Business Information Systems
<a href="mailto:mbtwomey7@gmail.com">mbtwomey7@gmail.com</a>

#### **Abstract**

This paper takes a People, Process, Technology, Data view of two critical information phases within a medical appointment to understand the complexities that exist, and the need for memory recall/information retrieval by patients/carers. Our practice inspired investigation is driven by the following motivation: how might we augment Cystic Fibrosis (CF) patient/carer memory recall/ information retrieval within the elicitation and elucidation phases of the medical appointment?

Building on extant literature on check list creation and memory recall, the paper presents a representative set of 10 design principles for the design of a check list for use by patients/carers. These design principles have emerged from an ongoing Action Design Research (ADR) study where the artefact went through an iterative design, build and evaluate process.

The artefact has a number of design elements of value to practice and IS research, of which the most novel is the unpacking of declarative memory into its subcomponents, where the check list design maps to "aid" the memory type drawn upon by the patient/carer within the medical appointment. The outcome is a check list that enriches patient/carer memory recall/information retrieval, reduces stress, improves data quality and the doctor's ability to make an effective diagnosis. More recently the research has led to the production of a check list booklet which has been distributed to all 1,245 CF patients/carers within the Republic of Ireland by CF Ireland.

These findings are both transportable and adaptable to the medical appointments of other disease states. The check list is a particular contribution to memory recall/information retrieval as a class of problem.

This research was supported by The Irish Research Council's Enterprise Partnership Scheme (Project ID: EPSPG/2017/354) and Cystic Fibrosis Ireland (Enterprise partner).

#### The impacts of workarounds on data governance initiatives

Arif Wibisono
Dept. of Business Information Systems

116220705@umail.ucc.ie

#### **Abstract**

Workaround is a deviant behaviour as a user innovates the way to perform a task beyond prescribed organisational procedures. Workarounds happen when a user expects that there are misfits between system capabilities and real-world situations. These perceived misfits are harmful to the achievement of operational goals in organisations. This research aims at understanding workarounds impacts on six



dimensions of data governance. That is, data quality, data lifecycle, metadata, data access, data ownership, and the organisational structure that governs post-workaround data. Here, Actor-Network theory will be useful as a theoretical lens to conceptualise workaround impacts on data governance initiatives.

Moreover, this research would use two case studies in organisations where the General Data Protection Regulation (GDPR) is imperative. For example, those of heavily regulated industries such as health care, banking, and telecommunications. A robust data governance initiative is essential to establish organisational data visibility for GDPR compliance. However, this initiative success is obstructed by workarounds for the sake of the attainment of pragmatic operational goals.

In our best knowledge, this is the first study to investigate workaround impacts on data governance initiatives. It is expected that the study results could be leveraged as inputs for operational managers. In particular, to ensure that the quality information is constantly available, irrespective to workarounds presence. This research contributes to business process management (BPM) studies as to the understanding of the nature of business process deviations. Also, it contributes to data governance (DG) research and practice to identify effective policies and procedures in this domain.

**Keywords**: workarounds, data governance, data management, shadow IT, feral system, feral information system, business process management, enterprise information systems