

---

## **A framework for the transformation of the incumbent creative industries in a digital age**

---

Hannah Rudman\*

School of Computing  
Edinburgh Napier University  
Merchiston Campus, 10 Colinton Road, Edinburgh, EH10 5DT, UK.  
h.rudman@napier.ac.uk

David Benyon

School of Computing  
Edinburgh Napier University  
Merchiston Campus, 10 Colinton Road, Edinburgh, EH10 5DT, UK.  
d.benyon@napier.ac.uk

Hazel Hall

School of Computing  
Edinburgh Napier University  
Merchiston Campus, 10 Colinton Road, Edinburgh, EH10 5DT, UK.  
h.hall@napier.ac.uk

*\* Corresponding author*

## **Abstract**

**Purpose** – New business models emerged within the creative industries when advances in information and communication technologies (ICTs) altered the patterns of cultural consumption worldwide. Digital technologies altered the way creative products were created, produced, reproduced, distributed, and commercialised at national and international levels. In the face of the continual emergence of digital disruptions, the traditional, existing sector is failing to rapidly enough adapt. The purpose of the paper is to provide a better understanding of an emerging framework for the transformation of incumbent cultural and creative enterprises in a digital age, called *The AmbITion Approach*.

**Design/methodology/approach** – Empirical work developed *The AmbITion Approach* into a framework for business transformation in a digital age: blending participatory action research methods with modern management consultancy tools and design and creative practices. Digital research tools for inquiry were designed and prototyped, tested by a pilot study, and then embedded in a longitudinal study over two years of twenty-one participant organisations from Scotland’s creative sector. Detailed grounded thematic analysis of the data corpus was undertaken, along with analysis of rich media case studies produced by enterprises about their change journeys. Empirical work also introduced to the framework Coghlan and Rashford’s change categories.

**Originality/value** – These enabled the description of the extent to which organisations developed: whether they experienced first order (change), second order (adaptation) or third order (transformation) change. The results of studies on participants, and validation criteria applied to the results, have demonstrated the approach triggers second and third

order change. It is suitable for incumbent creative businesses to apply within the continuing landscape of digital disruption. However, all sectors face ongoing digital disruption.

**Practical implications** – Management consultancy practices, and business strategy academics have called for new, empirically tried and tested, strategy development frameworks and toolkits, fit for a digital age. The concepts, methods, toolkits, and processes of *The AmbITion Approach* have been validated in the field as a new framework for business transformation for creative industries in a digital age. The findings justify provocations on current UK government creative economy policies. Governments must improve digital/economic development policy to better support incumbent, traditional creative enterprises providing cultural value, if they are to survive.

**Keywords** – creative industries, incumbents, digital disruption, digital transformation.

**Paper type** – Academic Research Paper on practice

## 1 Introduction

The creative industries sector faces a constantly changing context characterised by the speed of the development and deployment of digital information systems (IS) and Information Communications Technologies (ICT) on a global scale. This continuous digital disruption has had significant impact on the whole value chain of the sector: creation and production; discovery and distribution; and consumption of cultural goods and services. As a result, creative enterprises must evolve business and operational models and practices to be sustainable. Digital disruptions and developments require of creative sector organisations new products, operational practices, and business models. Creative organisations have struggled to maximise the opportunities of digital technologies because of a piecemeal approach to their operational integration. This situation developed over the long-term due to a fragmented funding and investment landscape, and an external context of rapid change. Creative organisations also suffer a reticent reaction to digital technologies' importance and impact, especially on:

- audience behaviours (e.g. altering perceptions of proximity and intimacy);
- artistic practices (e.g. on conventions and practices which are socially embedded rituals of experience); and
- business models and practices (e.g. ownership, IP and contracts, new digital production methods, and digital distribution channels and consumption mechanisms) (Department for Culture Media & Sport, 2010).

The *Digital Content Snapshot* of 2009 reported on the digital developments of all of Arts Council England's regularly funded organisations, and concluded that whilst most had some kind of online offering that transmitted information, the best interactive experiences and content were produced by a very small number of organisations. "There is considerable scope for improvement" the report concluded (MTM London, 2009). Similarly, the Minister for Culture and Tourism at the time, the Rt Hon Margaret Hodge, said "there is a real gap between those institutions who do fantastically well and others who are finding it difficult to catch up" (Department for Culture Media & Sport, 2010, p. 19). However, throughout the current age of austerity that started in 2009, support and funds for the digital development of traditional businesses dwindled across the UK's

creative sector and internal and external finance for business model development or organisational development is now scarce. Validated cheaper mechanisms for delivering organisational and digital development for the creative industries' traditional businesses are required.

## **2 Background**

The UK's creative sector became world-class and world-renowned in an analogue era by understanding how to control its assets. It was the gatekeeper of how assets were distributed, and was the guardian of quality as it influenced how assets were presented and described. It might therefore have been expected that the historical strengths of the UK's creative industries would support a comfortable transition to digital markets. The period since 1990 has seen the consistent emergence of new disruptive digital technologies. This has brought the previously "analogue" creative industries to a point of great challenge - for example, the newspaper industry has been threatened, the music industry has been hugely disrupted (Naughton, 2012). Cultural, arts, heritage and creative organisations are under pressure to adapt to digitisation rapidly, so that they are fit for business in a digital economy (MTM London, 2013, p. 7). Increasing numbers of audiences consume the arts through digital channels and devices, and while this presents nascent possibilities for creative organisations, it also has significant impact on current practices for the production, distribution, and the creation of meaning for audiences. The penetration of digitisation into some of these relationships has fundamentally altered them. Recent research by Thomson, Purcell and Rainie suggests that the culture of culture in the United States has "gone digital": increasing numbers of arts audiences are consuming performing arts through live or recorded digital broadcasts (Thomson et al., 2013, p. 5). Digital technologies have caused disruption: to the way that content is created, produced, discovered, distributed, and consumed. Digital technologies have also disrupted creative services and experiences, through introducing an audience expectation of participation and collaboration. Business uncertainty and disruption in the creative sector has been caused by the impact of digital technologies, and this is set to continue.

The *Digital Britain* report (Carter, 2009) was the government's strategic vision for ensuring the UK's place in a global digital economy and stated that digital media was an

expected part of modern life, and organisations defined as public service providers (in receipt of public funds) were required to recognise digital technology driven services and offerings as core, not optional. This meant the publicly funded traditional cultural, arts, and heritage sector must digitise relationships with their audiences and adapt their products, operations, and business models for delivery online. At the same time, they must remain true to core missions of developing community-embedded relationships, and delivering live, analogue experiences (MTM London, 2012). However, supporting this is not necessarily the focus of public funding. The report of a 2014 survey of 947 English arts organisations stated that 70 per cent of arts and cultural organisations cited lack of funding and time, and over a third still felt that they did not have the in-house skills, IT systems, or the necessary expert advice to meet their digital aspirations (MTM London, 2014). The best funded approaches to help the creative sector digitalise focussed on funding new digital innovations and products, rather than supporting digital adaptation across all areas of an enterprise. Whilst this created the potential for brand new digital products and services, only a few organisations received the funding.

Practitioners and academics have recently considered the impact of continuous changes in markets, technologies, and external risk. They have questioned the relevance of existing frameworks and tools for developing and implementing successful business strategies. Management techniques focused on emerging or disruptive technologies are immature, and are often under-appreciated by managers (Linton and Walsh, 2008). Groen and Walsh discussed how managing emerging technologies is critical, but recognised that “better techniques are needed: for their management, to create policy and educate professionals to commercialise and govern them” (Groen and Walsh, 2013, p. 1). The Sir Donald Gordon Chair of Entrepreneurship and Innovation, at London Business School, Professor Michael G. Jacobides, acknowledged that academic research should account for and try to address at least some of the practitioners’ concerns and needs, reflecting: “Let’s rethink these frameworks together with people who use them in their professional practice, and revise the strategy canon” (Webb, 2014). The academic community in the field of business and management has recognised the need for new frameworks for business transformation.

### **3 Studying an approach for business transformation for the creative industries in a digital age**

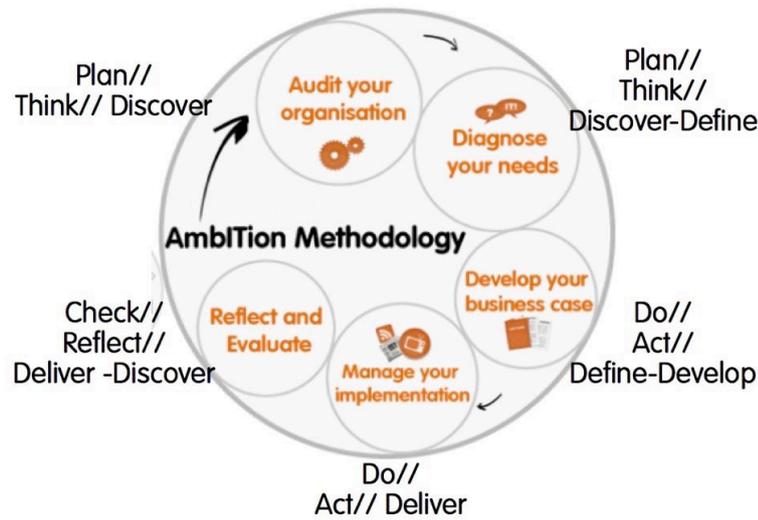
A novel approach to organisational change appropriate to the digital age was created in the context of the creative sector in Scotland to support incumbent enterprises to undertake change journeys and digitally adapt. A set of concepts, methods, tools, and processes to generate theoretical learning and practical knowing was created to support enterprises to digitally adapt through undertaking journeys of change and organisational development. The framework is called *The AmbITion Approach* (Rudman, 2015).

#### ***3.1 Developing the approach***

*The AmbITion Approach* takes organisations through a novel cross-disciplinary approach that blends the traditional methods of strategic change management consultancy (Deming, 1993) with action research. Action research methods seek to create action, and knowledge or theory about that action through iterative cycles of gathering data, feeding it back, jointly analysing the data, jointly planning action and implementing it, evaluating jointly, and so on (Reason & Bradbury, 2008). Action oriented research design demands that research takes place concurrently, whilst action is ongoing, with research and actions undertaken by the participants from the organisation. The research is *in* action, rather than *about* action. (Shani and Pasmore, 1985, p. 439). Participatory action research (PAR) has been extensively discussed as an appropriate framework to apply in the field. PAR is especially appropriate for sectors where experiential learning and reflective practice are norms in organisations, such as the creative industries (Coghlan, 2010). PAR was a suitable addition to the framework of *The AmbITion Approach* (and therefore the research design) because it recognised the researcher (and the research tools) as a part of the enquiry and development, as well as the actively engaged organisation. Both (staff and facilitator/consultant/co-researcher) acted to shape the research and action project (Elden and Chisholm, 1993) - in this case, the digital development journey of creative organisations. The methodology uses a social science approach to study the resolution of important organisational issues, working together with those who experience the issues directly (Lewin, 1946/1997). Within *The AmbITion Approach's* toolkit modern management consultancy tools such as the business model canvas (Osterwalder and Pigneur, 2010) were included. Also included were some of the tools, principles, and techniques of design thinking (Design Council, 2005), for example stakeholder maps,

engagement blueprints, user journey touchpoint diagrams, etc. Creative practices such as brainstorming and storytelling and creating rich media assets were also included. Figure 1 below shows the blend of PAR methods and modern management consultancy, design, and creative practices that make up *The AmbITion Approach*:

**Change Management//Action Research//Design Thinking**



*Figure 1: blend of cross-discipline methods making up The AmbITion Approach*

Empirical work also introduced to the framework Coghlan and Rashford’s change categories as table 1 below shows:

Type of change	Definition	Example evidence of change and learning (themes)
First order	Specific change occurs within existing ways of thinking.	Improvements in products or services.
Second order	Change requires lateral thinking and questioning of core assumptions.	System-wide change in ways of thinking and acting - can lead to new business, operational models
Third order	Organisation learns how to question own assumptions and points of view, and develop and implement new ones	Organisational transformation

***Table 1 - Coghlan & Rashford's change categories***

These enabled the definition and description of the extent to which organisations developed: whether they experienced first order (change), second order (adaptation), or third order (transformation) change (Coghlan and Rashford, 2006). This aspect of the research design meant that the study assessed levels of change across a number of organisations, without a single researcher needing to facilitate all the cases. The responsibility for theorising and solving issues did not rest solely with the researcher. This was because of another general characteristic of action research: it is collaborative - participants of the system studied were actively engaged in the cyclical process (Lewin, 1946).

### ***3.2 Investigating the approach***

*The AmbITion Approach's* effectiveness as a framework for business transformation in a digital age was investigated through a study of twenty one Scottish creative organisations and practices that engaged with it. The enterprises were of differing focus, scale, and operational model. The author applied and investigated the novel approach in a

national digital development programme for Scotland's creative industries (the AmbITion Scotland<sup>1</sup> programme was designed and delivered by the first author of this paper, and ran nationally between 2012-14). The information system enabled the aggregation of data for prompting more action and for research. The information system collected data from the creative enterprises in Scotland by research tools embedded in the online mechanisms. A Wordpress powered social network website<sup>2</sup> and linked social media channels were the information system used by the participant organisations of the AmbITion Scotland programme. All data from the businesses that participated was therefore collected digitally through online forms via the website. Online research tools gathered documentary and numerical data from the enterprises including: thinking and planning processes; implementation and action frameworks; and reflective and evaluative documentation of each organisation's journey through *The AmbITion Approach*. The tools were designed as a core part of the programme's online infrastructure. They were developed to explicitly deal with the ethics of using the material for research, and to automatically create numerical forms and digital analytics, as well as organising a great deal of digitised reflective text (c. 30,000 words from over twenty businesses). The data gathered by the tools was qualitative and quantitative, to capture both the experience of organisations going through *The AmbITion Approach*, as well the facts about the change journeys. The strategy for the evaluation of the data was tested by initial empirical work in a pilot study, and was implemented in the main research through two studies that looked at organisations before and after their engagement with *The AmbITion Approach* (a benchmark and a comparison).

Digital technology has shaped the development of action research based processes in the past (Koch, 2006), and IT played a major role gathering and processing data in the study. All the data collected by the study was digital in its native form, therefore it was in the right format already for analysis using software. Analysis of the large data corpus of narrative texts, surveys, and rich media reports in video, Powerpoint, and Prezi formats was undertaken through mixed methods, supported by Computer Assisted Qualitative Data Analysis Software (CAQDAS), NVivo 10<sup>3</sup>. Manual analysis of large amounts of

---

<sup>1</sup> <http://getambition.com/> last accessed 17.04.15.

<sup>2</sup> See <http://getambition.com/members> last accessed 17.04.15.

<sup>3</sup> See [http://www.qsrinternational.com/products\\_nvivo.aspx?utm\\_source=NVivo+10+for+Mac](http://www.qsrinternational.com/products_nvivo.aspx?utm_source=NVivo+10+for+Mac)

digital data would have been extremely time-consuming and difficult, if not impossible, and efficiencies were brought to the qualitative research, such as being able to return to a big data set with different questions and receive new results in real time. Snap<sup>1</sup> online survey analysis software was also utilised, as it offered a multi-mode approach to distributing surveys, and ensured data was collected reliably over a long period of time. Google Analytics software was used to validate results. A thematic analysis was applied to the data corpus through the framework of grounded theory (Glaser, 1998, p. 141) to establish the themes and concepts. At the beginning of their digital development change journeys, organisations expressed practical and theoretical knowledge needs as well as hopes, aspirations, worries, and issues around digital development. The thematic analysis generated a fully structured coding scheme which was deductively applied to all data sets. The benchmark study established a baseline which enabled the comparison study of data gathered at the end of change journeys. Analysis also revealed what practical and theoretical knowledge was generated when organisations adapted, and whether the concepts, methodologies, and toolkits of *The AmbITion Approach* could be a framework for business transformation in a digital age.

#### **4 Results of the study**

The mixed methods analysis of the *before* and *after* datasets and the comparison between them, proved that through undertaking *The AmbITion Approach*, enterprises built skills in adaptation to deal with disruptive digital technologies. The codes generated by the thematic analysis allowed a grounded analysis of the organisations' qualitative data, which showed increases in the notions of digital Capability, Capacity, Confidence, and Adaptability and Legibility. Establishing the different levels of categorisation of change through applying Coghlan and Rashford's definitions facilitated more nuanced conclusions about the type and extent of change organisations achieved. Organisations being prepared to completely change and transform what/how they do things to become a digitally enabled business, can be described as having experienced third order change, or transformation.

---

<sup>1</sup> <http://www.snapsurveys.com/survey-software/> last accessed 17.04.15.

#### ***4.1 To what extent did enterprises undertaking The AmbITion Approach adapted to deal with disruptive digital technologies?***

Almost half the organisations (nine or 47.36%) that undertook *The AmbITion Approach* experienced second order change, seeing their businesses building the criteria to become adaptive to digital disruption. Three of the organisations (15.78%) experienced first order change, as they were at the beginning of a period of implementing change, having spent their *AmbITion Approach* journey planning, rather than acting.

An unexpected and significant result was that over a third of the organisations (seven or 36.86%) that undertook *The AmbITion Approach*, experienced third order change, seeing the transformation of their enterprise into a digital business. The significant majority of organisations engaging with *The AmbITion Approach* adapted, but over a third experienced not just adaptation but transformation. The percentage statistics have provided an interesting measure, but the sample size is too small to justify conclusive statements.

#### ***4.2 What practical and theoretical knowledge was generated by organisations undertaking The AmbITion Approach?***

The implication of PAR methods embedded in *The AmbITion Approach* was that organisations would see two types of impact: actions (outputs) and research/theoretical learning outcomes. The rich media case studies and business plan data was analysed, to investigate the extent to which new practical and theoretical knowledge was generated. Sixty six actions were achieved in total by sixteen organisations, and sixty nine research/learning outcomes were also achieved. Actions achieved by organisations for example were digital developments such as online ticketing systems, or social media enabled websites. Examples of research outcomes achieved were digital strategies, customer engagement and market analysis, or implementation plans. Organisations achieving lower than 7.43 action outputs and research outcomes, achieved just adaptation. Organisations achieving over 9.11 action outputs and research outcomes were more likely to achieve transformation. The review of rich media case studies and business plans revealed that organisations which utilised two or less of the modern management consultancy tools and creative and design practices achieved adaptation, and generated

new practical and theoretical knowledge. However, organisations utilising over 3.56 tools and practices achieved transformation.

#### ***4.3 Could the concepts, methodologies and toolkits of The AmbITion Approach could be a framework for business transformation in a digital age?***

A final tally of totals - of action and research outcomes added to the totals of modern management consultancy tools, design and creative practices utilised - proved that the total number overall impacted the likelihood of transformation. Organisations achieving transformation had a higher average total number of action and research outcomes, modern management consultancy tools, design and creative practices achieved (11.67) than organisations achieving adaptation only (an average of 9.43 total). Achieving more action outputs, research outcomes, and utilising more modern management consultancy tools, and design and creative practices was more likely to result in the organisation experiencing transformation. The 47.36% of organisations using less concepts, tools, and methods still achieved digital adaptation. The 36.86% of organisations that achieved transformation embraced more of the concepts, tools, and methods of *The AmbITion Approach*, as already discussed above. This proves the concepts, methodologies, and toolkits suitability as a framework for business transformation in a digital age.

## **5 Discussion**

As an interpretive study, the enquiry did not measure whether organisations without contact with *The AmbITion Approach* would have adapted or transformed anyway. However, recent surveys of the wider sector in England provide some comparable data to give insight into this. The *Digital Culture 2014* survey looked at 947 English cultural organisations. 55% of cultural organisations were reportedly undertaking activities that this study would have described as change, but of the first order. They were making improvements in products and services they were already engaged in: the survey reported organisations optimising their existing web presence for mobile, and enhancing their use of social media to engage audiences. *Digital Culture 2014* reported increasing numbers of cultural enterprises enhancing their data capabilities (36% up from 30% in 2013). This

study would have defined this as a second order change, or an adaptation that could lead to new business models, and which required lateral thinking (it was not a traditional activity). The report also notes the percentage of organisations engaging with the digital innovation opportunities (the 10% described in the report as the 'cultural digirati'). This study would have classified this group as experiencing third order change, implementing new business models to transform the business (MTM London, 2014). The *Digital Culture 2014* report had a far higher base of 947 respondents, compared to the twenty one cases this study reviewed. However, as an arbitrary comparison, the digital development performance of English cultural organisations, as measured by the *Digital Culture 2014* report, can be compared against the digital development performance of Scottish creative organisations that participated in *AmbITion Approach* change journeys. Table 2 below shows the levels of change achieved amongst a large group of organisations, compared to a small group of organisations that undertook *The AmbITion Approach*:

<b>Level of change achieved</b>	<b>% English cultural organisations with no engagement with change or organisational development programmes</b>	<b>% Scottish creative organisations that have undertaken <i>The AmbITion Approach</i></b>	<b>Notes</b>
First order change	55	15.78	
Second order change (adaptation)	36	47.36	
Third order change (transformation)	10	36.86	The 10% 'cultural digirati', were beneficiaries of digital innovation support and funding
Total	101	100	<i>Digital Culture 2014</i> report rounded all percentages up to round figures, giving a 101% total
Sample size	947	19	

**Table 2: Comparison of levels of change achieved by different digital development approaches**

Indicatively, 10% of English organisations achieved third order change. This group did receive digital innovation support, and third order change was achieved, but by a much smaller percentage than organisations undertaking *The AmbITion Approach*. The remaining 90% of English organisations received no support, and a significant percentage of organisations (36%) achieved second order change, and adapted anyway. A larger percentage (47.36%) of organisations that had received support to undertake *The AmbITion Approach* achieved second order change. 55% of those receiving no support achieved first order changes, developing digital products or services ad hoc, a much higher percentage than the 15.78% *AmbITion Approach* organisations that only achieved first order change. Indicatively, the approach of no support results in a majority of

organisations making first order changes anyway, and over a third of organisations making second order changes anyway. The 10% of English organisations achieving third order change were financially supported. Scottish organisations undertaking *The AmbITion Approach* were also supported, but a much higher percentage, over a third, 36.86%, achieved transformational, third order change. It indicatively appears that comparatively, *The AmbITion Approach* is three-fold more likely to achieve transformation and third order change in creative businesses, than development approaches supporting only digital innovations.

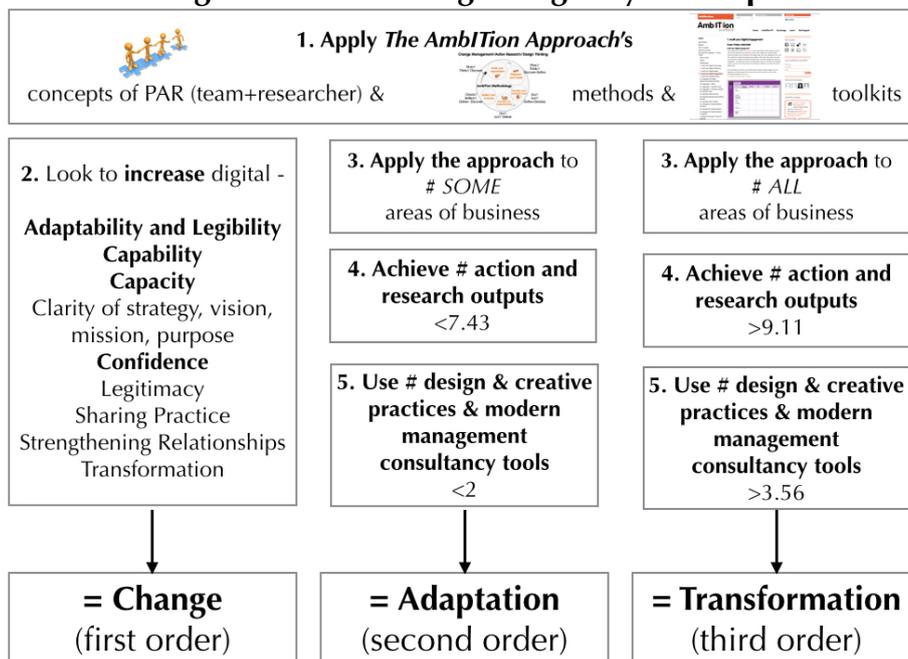
The concept of a change journey, as encapsulated in *The AmbITion Approach* with its methodology of participatory action research, and toolkits of modern management consultancy, creative, and design practices, set within a single information system, could be established as a framework for enterprises in other sectors seeking adaptation and transformation in the face of digital disruption. The website of the information system is still live online<sup>1</sup>, sharing all the practical knowledge of the participants. The social media channels of the information system are also still live<sup>2</sup>. The work contributes to knowledge a specific set of constructs and criteria that define first, second, and third order change in creative enterprises looking to digitally develop, and methods, concepts, and tools that support the achievement of the change. Figure 2 below offers an overview of the conceptual framework in diagram form:

---

<sup>1</sup> See <http://getambition.com/learn/toolkit> last accessed 16.04.15.

<sup>2</sup> The @getambition handle on Twitter has 3567 followers and the GetAmbITion Facebook Page has 567 likes at 16.04.15.

## Organisations looking to digitally develop...



*Figure 2: The conceptual framework of The AmbITion Approach in diagram form*

## 6 Conclusions

As they enable third (transformation) and second (adaptation) order change in a significant majority of participant organisations, the concepts, methodologies, and toolkits of *The AmbITion Approach* have been validated through the study as a new framework for business transformation. The study proved that traditional creative industries can achieve transformation and third order change, with the right tools and support. Within the creative industries currently though, support is focused on developing new digital innovations. This creates a vicious cycle of funding the ‘cultural digirati’, rather than the incumbent, traditional businesses that are struggling to adapt to digital disruption. Whilst there is no explicit call to suggest alternative methods, mechanisms, nor policies to support any business in the sector adapt to digital disruption, the work of this study has validated *The AmbITion Approach* as an alternative.

In the US and UK, the cultural value debate is currently a hot one - the discussion of 'value' has been inextricably linked to the challenge of 'making the case' for the arts and for public cultural funding. Prevailing evidence-based policy making for the creative sector is still taking the direction of economic instrumentalism (Belfiore, 2015). The findings of this study justify provocations on current UK government creative economy policies. The UK government believes that including the digital lions, the IT, telecommunications, and software companies in the creative economy sector will put the UK at the top of the innovation and economic impact curve. However, governments must improve digital/economic development policy to better support the digital lambs, incumbent, traditional creative enterprises providing cultural value, if they are to survive in the digital fold. Provocation is needed, as support currently funds digital innovation, which mainly benefits the 'cultural digirati'. New digital products innovated for digital markets gives creative enterprises new business models and income streams, and this is essential to encourage, but only alongside providing appropriate support to build resilience to digital disruption. Incumbent organisations need help to establish business models which guarantee that their message - the cultural and creative content - does not get eaten by the medium (McLuhan, 1964) - the ever fattening digital publishing platforms, telecommunications companies providing broadband, and social media enterprises re-sharing through their networks. This can be achieved: *The Ambition Approach*'s framework is now validated to work with the traditional creative sector.

## References

- Belfiore, E. (2015) 'Impact', 'Value' And 'Bad Economics': Making Sense Of The Problem Of Value In The Arts And Humanities', *Arts & Humanities in Higher Education*, 14(1), pp. 95-110.
- Carter, S., Department for Culture Media and Sport & Department for Business Enterprise and Regulatory Reform (2009) *Digital Britain*. London.
- Coghlan, D. and Rashford, N. S. (2006) *Organization change and strategy: An interlevels dynamics approach*. Abingdon: Routledge.
- Department for Culture Media & Sport (2010) *Encouraging Digital Access to Culture*.
- Elden, M. and Chisholm, R. F. (1993) 'Emerging Varieties of Action Research: Introduction to the Special Issue', *Human Relations*, 46(2), pp. 121-142.
- Glaser, B. G. (1998) *Doing grounded theory: Issues and discussions*. Sociology Press.
- Groen, A. J. and Walsh, S. T. (2013) 'Introduction to the Field of Emerging Technology Management', *Creativity and Innovation Management*, 22(1), pp. 1-4.

- Lewin, K. (1946) 'Action research and minority problems', in Lewin, K. (ed.) *Resolving Social Conflicts: Selected Papers on Group Dynamics*. 1997 ed. Washington, DC: American Psychological Association.
- Linton, J. D. and Walsh, S. (2008) 'A Theory of Innovation for Process-Based Innovations such as Nanotechnology', *Technological Forecasting and Social Change*, (75), pp. 583-94.
- McLuhan, M. (1964) 'The Medium is the Message', *Understanding media: The extensions of man*. New York: Signet.
- MTM London (2009) *Digital Content Snapshot*. Available at: <http://www.artscouncil.org.uk/media/uploads/downloads/MTM-snapshot.pdf> (Accessed: 04.12.2012).
- MTM London (2012) *Creative Industries Trends*, London: Nesta.
- MTM London (2013) *Digital Culture: How Arts And Cultural Organisations In England Use Technology*, London: Arts Council England & Nesta & Arts & Humanities Research Council.
- MTM London (2014) *Digital Culture 2014*: Arts Council England & Nesta & Arts & Humanities Research Council.
- Naughton, J. (2012) 'Disruptive Innovation Is What The Internet Was Designed To Foster', *From Gutenberg to Zuckerberg: What you really need to know about the internet*. London: Quercus.
- Osterwalder, A. and Pigneur, I. (2010) *Business model generation*. Hoboken, New Jersey.: John Wiley & Sons Inc.
- Rudman, H. (2015) *A framework for the transformation of the creative industries in a digital age*. Ph.D., Edinburgh Napier University, Edinburgh.
- Shani, A. B. and Pasmore, W. A. (1985) 'Organization Enquiry: Towards A New Model Of The Action Research Process', in Warrick, D.D. (ed.) *Contemporary organisation development: Current thinking and applications*. Glenview, IL: Scott, Foresman, pp. 438-48.
- Thomson, K., Purcell, K. and Rainie, L. (2013) *Arts Organizations and Digital Technologies*, Washington: Pew Research Center.
- Webb, A. (2014) 'What Strategists Need: A Meeting Of The Minds', *McKinsey Quarterly*, 50(September 2014).