

BOOST BUSINESS BY DESIGN

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ABSTRACT

'Creating Cultures of Innovation' is a unique design intervention project that works with Scottish Industry to explore how creativity can be embedded as a collective skill within organisations. Supported by the Scottish Funding Council and in partnership with the Institute of Directors, The Glasgow School of Art (GSA) has been working collaboratively with organisations across key sectors in Scotland to establish how creative thinking and design process can be integrated into business in order to grow and secure future success.

This paper will discuss the process and outcomes thus far of a project conducted with Scott & Fyfe, exploring and explaining the methodology and approach. Through this action research case study, this paper will give a general insight into the overall 'Creating Cultures of Innovation' project and the ways in which it relates to organisational culture with regard to exploring design methods as a vehicle for effective use of employee core capabilities and enabling innovation within such organisations.

Keywords: Organisational culture, design process, effective use of skills, leadership, innovation, SMEs

1 INTRODUCTION

This project addresses the effective use of skills through transformational learning with employees in applying creativity through design. The focus is on training employees, who are key to organisational functions, as creative leaders. In tandem, these employees will learn how to use the knowledge and expertise of the wider workforce in applied creative projects, which are intended to generate future innovations for the business. This approach has several advantages: it places high value on employees and their potential; it uses leadership creatively and effectively in an explicitly non-hierarchical sense; it is highly suited to explore how an innovative workplace is created within the constraints of the current economic context.

To achieve this, the project is working collaboratively with industry leaders, via links with the partner organisation the Institute of Directors, in pilot projects with Scottish SMEs. The goal is to enable organisations to better understand and deploy existing skills, creativity and talent in their workforce. This approach addresses the challenge identified in the 'New Horizons' report from the Joint Future Thinking Taskforce on Universities [1] which states that 'the nature of skills that are needed in a knowledge economy is changing: a premium is being placed on creativity, flexibility, adaptive capacity and the ability to work in complex teams across disciplines'. The issue of the application of creativity to drive innovation is addressed in the Scottish Government's 'Innovation Framework' [2] and the 'Cox Review of Creativity in Business' [3].

The process map shown in Figure 1 illustrates the phases of the 'Creating Cultures of Innovation' project. After initial analysis of resources and groundwork research the planning of the pilot projects with the respective clients could be initiated. This involves the determination of strategic objectives for the organisation in order that the workshop series can be designed and delivered. The primary aim of the workshop series thereafter is the co-design of solutions to the organisational objectives and the use and embedding of design innovation methods, techniques and 'tools', such as insight gathering, mind mapping, user journeys and prototyping, that harness existing skills in an effective way to meet these objectives.

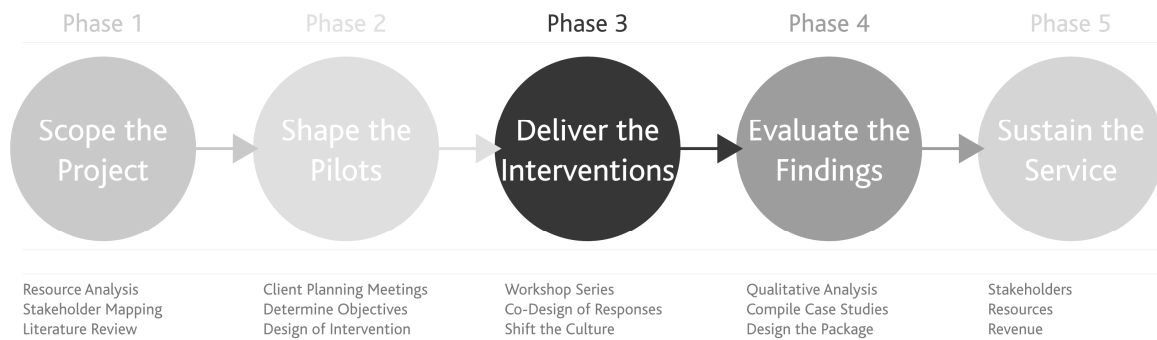


Figure 1. Process map of the 'Creating Cultures of Innovation' project with details of the main focus of each phase.

2 KEY INFORMATION

There are parallels between learning in the workplace and design. Both are cyclical in nature and can be described as being a process whereby experience is translated into concepts, which in turn are used as guides in the choice of new experiences (i.e. new products and new markets) [4]. By using the design process as the research tool it is possible to create a 'learning space'. In this space, content (i.e. a strategic objective) that is pertinent to the partner organisation is used as the driver for change and innovation. The project is therefore applying learning activities (i.e. use of skills) that are relevant to the organisation and, as such, the performance of the organisation.

Critical to this element is the co-design of measures to determine progress and success. Co-design sessions are intended to encourage the sharing of experiences and expertise, to engage with other parts of the organisation, and to develop creative responses to strategic objectives via design 'tools', activities and methodology. They provide a forum for this in the form of interactive tasks and creative activities specific to the organisation's objectives. These 'tools' and activities explore both team and individual learning processes in relation to the strategic objective of the partner organisation. Key to the evaluation of the project is how and why the techniques that are deployed have been successful in helping develop skills utilisation and assist a culture shift within an organisation. The experiential workshops are designed to explore the key enablers of effective skills use, ambitious, progressive and innovative leadership and management as well as effective employee engagement. The project defines leadership as collective skill across the organisation.

The example that this paper will discuss is a family owned SME based in Tayport near Dundee in the Scottish 'Central Belt'. Scott & Fyfe were founded in 1869 and early success in the textile markets came via the manufacture and export of jute, a soft and natural fibre, as underlay. Today the organisation employs around 100 staff at their Tayport headquarters and a further 60-70 in a production base in and China. Their highly skilled technical staff are able to print and crepe material as one process at a rate of 150m/min that is then stitched to provide texture and strength and have the capability to build and adapt their own machinery to suit specific projects. Clients include John Lewis, Duralay, Allied Carpets, Airtred among others.

Today's organisations face complex and regularly shifting operating environments and innovation is identified as a means to provide a sustained competitive advantage and deliver products and services with greater value to customers [5][6]. In May 2010 a study released by IBM [7] based on over 1500 interviews with CEOs in over 30 industries and across 60 countries indicated that 79% of CEOs expect the business environment to become more difficult in coming years. In addition, the majority of CEOs stated that creativity was the most important leadership quality required to cope with this increased complexity. In the case of Scott and Fyfe, these conditions have been magnified by the shift in demand for a well-established core product. A stitch-based paper product known as Textron, introduced in 1971 to replace jute as an underlay, has been the organisation's main source of revenue. However, with the Textron patent expired and shifts in demand from the market, Scott and Fyfe's core product is in decline and, thus, the long-term competitiveness of the business is threatened.

The business needs to enable a sustained capacity for innovation to ensure its long-term competitiveness. At present the highly skilled technical staff are product focused, however the expert ability to produce high quality components in response to a specific brief, is not mirrored in the ability of the company to spot new opportunities. In recent years, Scott & Fyfe have also operated a new

product idea (NPI) process, in which there has been little in the way of feasibility analysis and marketing/sales. The organisation has generally responded to enquiries to generate new ideas. In the past, the organisation has persevered with products that weren't viable and has produced bespoke products, i.e. one product per customer, with little scope for further work and, with most customers at capacity, there are few opportunities to sell more products/higher quantities to the existing customer base. In short, the company requires new products, new markets and new clients in order to survive. The strategic aims of the organisation within the 'Cultures of Innovation' project is to evolve a process for idea generation based on insight gathering and the identification of opportunities therein.

3 THE INTERVENTION PROJECT

The way in which 'Creating Cultures of Innovation' delivers its interventions is through employee engagement, viewed as the essential ingredient in creating a culture of innovation [8]. In the case of Scott & Fyfe, an innovation team of 12 employees, from across all business functions, spend 2 days a month working together with the 'Creating Cultures of Innovation' team and one day per week back at HQ to continue their project work. The project team are working on what is referred to as 'The Ripple Effect', which describes how the workshop participants engage as a team of 12 back at HQ and how they consequently engage their colleagues, who are not direct workshop participants, in inter-workshop tasks, thus 'rippling' and sharing the knowledge, methods, techniques and general culture shift throughout the organisation. The team have taken ownership of their project and created an identity for it by naming it NOW, an acronym for 'New Opportunities Within' as well as a word that conveys the immediacy of their situation and the imminent need for a change in organisational culture. Design methodology is the vehicle for these workshops as design is the process that links the catalyst of a 'need for action' to innovation, which is described as the successful exploitation of an idea [3]. Key to the intervention is the concept that 'insights' generate 'opportunities' that can then be responded to in the form of 'ideas'. This is crucial to explaining the bespoke nature of this particular intervention in the sense that Scott & Fyfe have struggled to identify new opportunities and have been heavily reliant on fully formed ideas from customers for them to develop and deliver products. The 'Creating Cultures of Innovation' team have defined these terms, in a design context, as follows:

- **Insight** - An awareness and understanding, through acute perception, of a potentially valuable unmet need based on observation / primary sourcing and revealing the underlying 'truth' of an issue within a given context.
- **Opportunity** - The circumstances that make action worthwhile and way of leveraging an element of insight for potential impact and / or value.
- **Idea** - The proposal of a course or courses of action in response to the opportunity presented and the discovery of an unmet need therein.

Through the content delivered in the workshops the NOW team have begun to identify opportunities and respond to those in a previously untried creative approach. In using design methodology and innovation 'tools' in this way the existing skills of the workforce are being harnessed in an effective and efficient way. This is embedding in the practises and processes at Scott & Fyfe.

4 IMPACT

The impact of the engagement with Scott & Fyfe can be measured qualitatively in the reflections and evaluations of both the NOW team, the Chief Executive of the organisation and the 'Creating Cultures of Innovation' team at GSA. The NOW team clearly understand the need for the organisation to innovate and have responded positively to the larger task at hand.

Furthermore, the NOW team have a clear understanding of an innovation process with design methods and techniques at the core and have grasped the concept that the 'front-load' of that process in the research and insight gathering stage is highly productive and decidedly worthwhile. It is acknowledged by the NOW team that the information gathered from quality research can lead to valuable insights that can, in turn, identify opportunities that would previously not have been taken account of.

It has been said that the real skill in gathering insights is in seeing the basic truth of a matter and revealing an underlying truth to which people can relate [9]. As an example of this, Scott & Fyfe are considering previously unexplored product opportunities in market areas that had never before been considered viable or potential avenues for growth within their core capabilities. Through the

intervention with the ‘Creating Cultures of Innovation’ team they have realised a previously untapped value in markets areas that were hitherto neglected or not in the organisational consciousness. In this way, the project has allowed them to reassess their capabilities and broach new areas of opportunity.

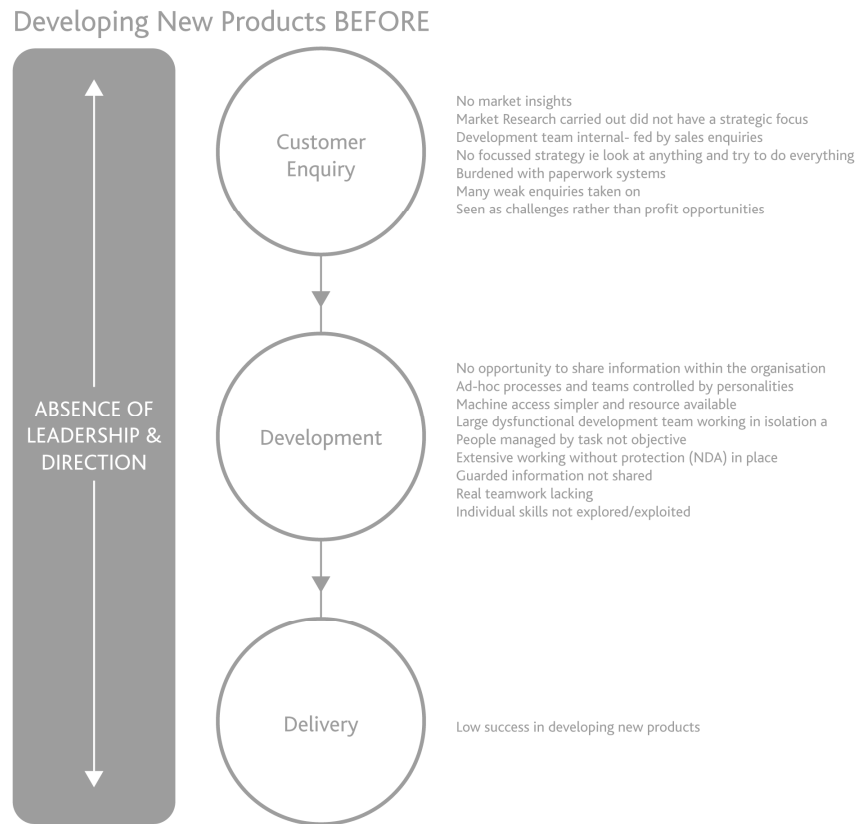


Figure 2. The process used at Scott & Fyfe for new product development prior to participation.

The team has also embraced the methods, techniques and ‘tools’ for new working practices introduced in the workshop series and have developed a new modus operandi in tackling the issue of finding new products for new markets. As a result, old habits and previous ways of approaching tasks are being phased out by the NOW team and ‘rippling’ throughout the organisation in favour of the innovation methods which have been introduced by the ‘Creating Cultures of Innovation’ team. This has been exemplified in process models created by the organisation which show the process used before (Figure 2) and after (Figure 3) the design intervention with GSA.

In an educational sense, the ‘Creating Cultures of Innovation’ project as a whole has impacted on learning and teaching by producing ‘spin-off’ student projects at both undergraduate and postgraduate level as well having members within the team who contribute to undergraduate teaching and assessment. In addition, the project has led to the development of a new joint Masters programme between GSA and Glasgow University that will commence in the 2011/12 academic session.

Developing New Products AFTER

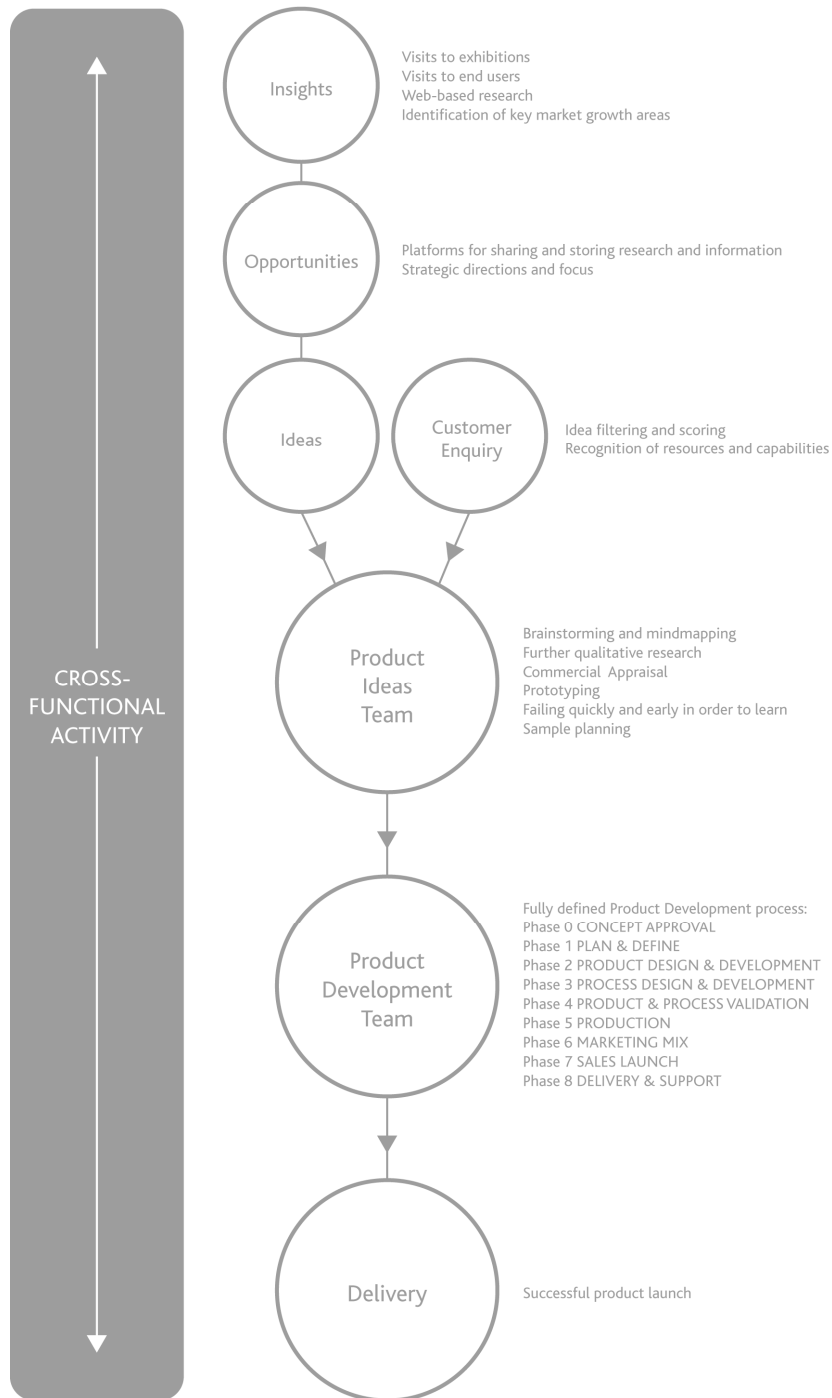


Figure 3. The process used at Scott & Fyfe for new product development as a result of participation.

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