

Understanding, Using and Creating Futures

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Introduction

Each of us thinks about the future. Thinking about the future is a 'natural' activity for humans. Research by some neuro-biologists suggests that people are natural scenario-builders – the capacity to tell stories about themselves in the future is an in-built function of the human brain, closely linked to the capacity to speak and construct language. In the same way that individuals project themselves into the future – with new or changed environments – organisations (companies, governments etc) can also think collectively about their futures.

Futures (futures studies) is a multi-disciplinary field that draws on concepts and methods derived from socio-economic and natural sciences. The application of futures work by governments has sometimes taken the form of 'Foresight' programmes. Futures is an academic pursuit, a framework for practical application and a way of thinking. This article will summarise some key principles for futures thinking and action. Some of the contemporary, international futures work will be discussed and the article will reflect on the advancement of practice in Wales.

Can we understand or know the future?

There is an argument that our epistemological grasp of the present (and past) is so questionable and contested that we cannot possibly understand or know the future. Complexity, uncertainty and ambiguity are foundational principles of futures. The future is not predetermined and futurists, who adhere to the foundational principles of the field, do not deign to utter prophecies, or to delineate one particular future that will occur at a given point. This is a (common) misunderstanding of futures. Futures is not about prediction per se. It is not even about forecasting – although forecasts provide raw materials for futures work. Rather, it is about understanding the range of possible futures that might emerge – given the interplay between drivers of change, trends and other critical variables. The future is uncertain and there are epistemological limits in any discussion on 'the future'. Futures is a process that makes sense of complexity and ambiguity.

One cannot know the future – in the sense of a determined, linear projection. There are a number of possible futures that may come into being or be created. There is emergent potential in the present. Futures is concerned with understanding how different futures can be shaped by the present context and decisions. This removes (perceived) remoteness from futures-based discussions as a key aim is to understand the linkages between the context of today and the possible situations of tomorrow.

Images of the future: possible, probable and preferred

Within a framework that acknowledges both uncertainty and the emergent potential of the present, there is a multiplicity of possible futures. There is a basic distinction between exploratory

and normative futures work. The term 'exploratory' is used to denote an approach that surveys or explores the ways in which futures might emerge, given our knowledge of trends, prospects for change and stability and so on. Exploratory futures activity is not laden with the prescribed preferences of the individual or organisation carrying out the work. Each of the images or futures generated – 'possible' and 'probable' – represents a way in which those chosen variables might interact given the parameters of our knowledge and understanding. 'Preferred' futures are those that are (most) desirable for the subject (individual, organisation or territory). Preferred futures are described as normative, as they contain a particular set of values (preferences / desires). Normative futures work can be effective in setting a desired vision of the future, built into which is an understanding of the actions required to realise that vision.

Futures scoping

Futures is a purposefully synthetic and holistic endeavour that harnesses multiple perspectives and concepts. The contents of futures exercises necessarily reflect the specificities of the particular objectives but, regardless of the organisational typology (public, private, NGO), there are some common and fundamental elements within the framework. These include the PESTLE categories (Political, Economic, Social, Technological, Legislative and Environmental). Governance, globalisation, individualism, demography, ICT and climate change are all important contemporary trends and drivers of change. Understanding the implications – individually and in combination – can be crucial for all sorts of organisations, whether public or private.

Scenario building

Scenario building is one of the most common futures tools. It is 'a tool for ordering one's perceptions about

alternative future environments in which one's decisions might be played out' (Schwartz, 1996:4). In most cases, scenario building synthesises several individual futures techniques, such as Delphi, trends analysis and Expert Panels. Scenarios can be very powerful tools to contemplate the range of possible futures that could develop from the influence of key drivers, events and issues. Although scenarios can take advantage of quantitative forecasts and projections, scenarios are not designed primarily to predict the future per se, but rather to develop capacity to consider a range of possible futures, developed from the interactions between important variables.

Scenario building is different from other analytical methods in its focus on plausible futures. Methodologically, it digresses from some of the quantitative methods of analysis that seek to understand the future. Information on trends is a very important input in developing scenarios. However, scenarios are not merely extrapolations of current trends. To understand how the future might develop, it is important to note that '*most if not all trends eventually change direction and speed as time passes'*' (Cornish, 2004: 99). Inherent within scenario building is an acceptance of complexity and non-linear thinking. Scenarios can use the same essential set of variables or issues but construct different futures based on how they might interact differently.

Horizon scanning is a tool that is used to promote the future-orientation of an organisation. It has been described as '*a kind of radar to scan the world systematically and signal the new, the unexpected, the major and the minor'*' (Brown and Weiner, 1985: ix). It is a method of identifying and capturing information on trends, events and issues, often; through published literature, the internet and other media. Horizon scanning provides a mechanism

for detecting factors that could have a significant impact on organisations or society.

Uses of Futures

Futures has been used methodically by Government since (at least) the beginning of the Cold War. It is an example where innovation in military applications has had positive effects for the civilian arm of Government. Since the 1970s, scenarios have become more mainstream in the corporate world, with Shell as a pioneer in their use. Since then, futures tools have become more widely practised in government, businesses and in NGOs. Although the pressures and environment vary between companies, government and NGOs, each is faced with demanding organisational challenges which often means navigating through periods of change and uncertainty.

rationale for using futures. A business in the healthcare sector will need to be aware of the same set of issues to retain and enhance its market position and share over the same time period.

As well as delivering the desired output (a strategy or policy i.e. a tangible document), using scenarios and related tools helps people to rehearse the implications of decisions taken. It has been described as the 'art' of constructing 'strategic conversations' (van der Heijden, 1996) within organisations. In the healthcare illustration, the health board or healthcare company might develop a number of scenarios (usually 3 or 4) that delineate how critical uncertainties might unfold over a given time period. Although it is usual to ascribe a rating of likelihood for each scenario, the key task for the health board will be to

in using scenarios. It recently produced a report on global scenarios to 2025 (Shell, 2005). In the introduction to the report, its Chief Executive, Jeroen van der Veer, emphasised the importance of using scenarios to guide decision-making:

Within Shell, I think the imperative is to use this tool to gain deeper insights into our global business environment and to achieve the cultural change that is at the heart of our Group strategy. We face real challenges in the future, we will all need to be able to respond to changing circumstances and make informed and rigorous judgements about our decisions: these scenarios and methodology will help us to do that better.

Table 1: Illustrative Uses of Futures.

	Public	Private	NGO
New policy or strategy	●	●	●
Entering new market, developing new product		●	
Making an investment decision	●	●	●
Facilitating social or economic change	●		
Challenging mindsets – stimulate some fresh thinking	●	●	●

Every organisation periodically undergoes a process in which it needs to develop a new policy or strategy. Where organisations need to take the long view, futures offers a range of techniques that consider both the external environment (socio-economic and environmental trends etc) and the internal situation. It is important to note that futures will often be a complementary approach to 'conventional' planning and business tools, and not a substitute. An organisational strategy needs to take account of how its context might be affected by a range of drivers of change. For example, a health authority that is developing a 10 year strategy would need to take account of a wide range of factors that might include overall health trends (for diseases etc), demographic trends (e.g. ageing population), costs of new technologies and drugs, supply of labour, lifestyle and value trends (e.g. more autonomous and consumerist), transport and planning issues, regulatory and legislative issues (in the pipeline and possible) and so on. This illustration points to a complex set of factors. A bureaucratic, command and control model will neglect key elements of the overall picture. If one takes the role of another interested party, a company, there remains a strong

ensure that its strategy is proofed against all scenarios (whether 'probable' or not). Scenarios also help organisations address 'wild cards', which are low probability/high impact events.

'What if?' And 'So What?'

At the core of futures work are the implications of change for individuals and organisations. Asking 'What if...?' questions is a simple process that challenges organisations to think beyond current assumptions and to initiate strategic conversations on opportunities and threats presented by possible futures. If futures is full of 'What if' questions, there is also the inevitable challenge, 'So What?' Companies and governments need solid information in order to make decisions. For companies, the business case for any decision, for example, in investing resource to develop a new product, needs to be robust and quantified. Futures tools provide part of the solution – in conjunction with conventional business practices. It should be reiterated that futures tools provide assistance in areas where there cannot be absolute certainty. The value of futures tools for companies is in improving understanding of the possible influence of a broad range of factors. In the business world, Shell is an exemplar

In the public sector, managers face challenges that are similar in scale and content to those in the commercial world. Public sector practitioners must take decisions in a complex policy space where economic, environmental, political and social issues collide. In the public sector, one of the main uses of scenarios is to deal with 'new structural challenges...to create a common language and vision in a city, country or on environmental issues' (Ringland, 2002: 6). Moreover, futures can assist the public sector in a change management process designed to transform the way public services are designed and delivered. Futures provides a structured approach to deal with complex policy goals, such as sustainability and regional development (Rhisiart, 2005).

Futures Activity – international comparisons and benchmarks

Every country in the EU has undertaken some form of futures (or Foresight) exercise. While there is a breadth of experience across Europe, some countries are leaders in terms of depth and intensity of activities undertaken. Finland is a very interesting example, especially – in a Welsh comparative context – as it is one of the small EU Member States. The Finns have gained

a leading position in futures work, through its application in all parts of society – within companies, businesses and NGOs. There have been some important milestones in the development of futures capacity in Finland over the last two decades, notably the establishment of several bodies: the Finnish Future Society (1980), the Finland Futures Research Centre, Turku School of Economics (supported by the Ministry of Education) (1992), the Parliamentary Committee for the Future (1993) and the Finland Futures Academy (1998). During a period of economic recession in the early 1990s, a majority of Finnish MPs passed a motion that called on the Government to provide Parliament with a report concerning long-term trends and options for Finland. The Committee for the Future was subsequently founded to evaluate and respond to the Government's decisions. Through the work of the Committee, the Finnish Parliament decided that the Government should present a Futures Report to Parliament at least once during each term of office. The Committee for the Future has reinforced the institutional dimension of futures within Finnish parliamentary and Government culture. The Finnish experience of futures is not confined to the public sector as companies have become increasingly active in applying futures to their own business environments.

At a national level, the Republic of Ireland continues to invest in futures-based work, evidenced by current and recent projects by Forfás (the national policy and advisory board for enterprise, trade, science, technology and innovation) and the National Economic and Social Development Office. The Scottish Executive is exploring the long-term implications of trends and key issues through its flagship Futures Project.

Futures (and Foresight) activity in UK Central Government has evolved significantly over the last decade or so. Whereas the first UK *Foresight* programme, in the early to mid-1990s, was strongly oriented to industrial sectors and technologies, its current projects address broader social and environmental challenges (as well economic ones). The current, flagship projects include *Mental Capital and Wellbeing* and *Tackling Obesities: Future Choices*. The UK *Science and Innovation Investment Framework 2004-14* included a commitment to establish a Centre of Excellence in Horizon Scanning, based at the Office of Science and Innovation. This is designed to input directly into cross-government priority-setting and strategy formation.

The Welsh Assembly Government has recently funded two important reports with a futures orientation. In January 2007, it published a report, *Futures: some trends, implications and uncertainties*, with a thematic focus on transport, technology, society, international migration, health and lifestyles, governance, environment, energy, economics and demography. This followed a piece of work produced in June 2006 by the Economic Research Advisory Panel for the Welsh Assembly Government, *Economic Futures for Wales*. Again, this took the form of a review of important trends for the Welsh economy, with an initial look at implications. Over the last few years, there have been some other, notable futures exercises done at an all-Wales and at a local level, including the scenarios work funded by the Wales Tourist Board and Gwynedd Council and the *Future Technologies* project carried out by the Welsh Development Agency. While these examples are encouraging, it is important to refer to some international benchmarks (especially Finland) in order to build futures capacity within the public and private sector.

Applying Futures: the FUTURREG Project

The Observatory of Innovation at Cardiff Business School is currently leading a European consortium of organisations in applying futures tools within public organisations. The project, Futures for Regional Development or FUTURREG, has strengthened the futures capacity of the partner regions. FUTURREG is part-financed by the INTERREG IIIC Programme and has partners in Finland, Ireland, Belgium, Spain, Greece and Malta. The project has developed a toolkit to assist organisations to implement futures within their organisations. The toolkit is designed to inform users on the design and application of futures tools, from understanding the context, setting the objectives and diagnosing combinations of tools that are appropriate for the objectives of the exercise. Although most users will not have the time to carry out an exercise autonomously – without external support – the toolkit is facilitative in raising key issues and asking the right questions.

Through the FUTURREG project, the Observatory of Innovation and its partners are carrying out 14 futures exercises, with a wide range of themes and objectives:

- Strategy and policy development
- Innovation, research and technology
- Sector-based work/clusters
- Rural development and sustainability

- Futures club/networks
- Knowledge transfer from higher education and further education to companies

In Wales, the project has been involved in two futures exercises. The first is being led by the Countryside Council for Wales (CCW). CCW has been involved in several aspects of the project, with the aim of using futures as a method to help inform the development of the Corporate Plan for 2008-12 and to underpin planning and budgeting for the 2008-09 cycle. The second, undertaken with the support of Menter a Busnes and the Welsh Language and Economy Discussion Group (sponsored by the Welsh Assembly Government), is using a scenario process to consider the possible economic value of language and culture in the future. There are several interesting futures applications being carried out by the other partners. In Finland, a future club has been set up in the Loimaa area, bringing together actors from business and the public sector. In Ireland, Sligo Institute of Technology has used a futures approach to assess the implications of important trends and identify strategic priorities, which have informed the preparation of its new strategic plan. The Spanish region of La Rioja has been supporting futures work in economic sectors of strategic importance: food and footwear.

Wales Futures Network

In February 2007, the Observatory of Innovation launched the Wales Futures Network at an international futures conference in Cardiff. The Network provides a mechanism for exploring ideas and generating dialogue about a range of trends and drivers of change that might impact on society, the economy and the environment. It is open to all and is intended to be both conceptually challenging and relevant for practice. The conference programme was designed to present some of the state-of-the art in futures work. A range of presentations was given, distilling futures experiences from different perspectives – geographic, business, public and NGOs. A programme of events is in place for 2007 and discussions have started on the programme for 2008 and beyond.

Conclusion

All organisations should be interested in exploring the implications of emerging issues and longer term trends. For companies – especially small companies – the demands of delivering products and services to a competitive market in time mean that it is often very difficult to think beyond the immediate future. Futures projects have been undertaken by industry associations or sector groups – as a way of reducing the

investment for individual companies and to assist in shared learning amongst networks. An enterprising and innovative economy will require companies to have, amongst other attributes, a strong futures culture. One of the challenges for economic development policy in Wales is to support this futures culture within businesses.

Futures can provide a range of additional methods and perspectives for organisations. It is used to facilitate the creation of tangible products, for example a new strategy or a report. Equally as important is the contribution that futures tools can make in developing the human capital of organisations. By engaging people in 'strategic conversation' about the emergence of important issues and the types of options that organisations face, futures is an important part of any

strategy to create an agile and responsive workforce. This applies both to those who manage the delivery of public services and to those that operate within a purely commercial environment. By adopting these approaches, organisations will be able to deal more effectively with possible, probable and preferred futures.

Internet links

The Observatory of Innovation:
www.observ.cf.ac.uk
 Wales Futures Network:
www.futures.cf.ac.uk
 The FUTURREG Project:
www.futurreg.net

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