

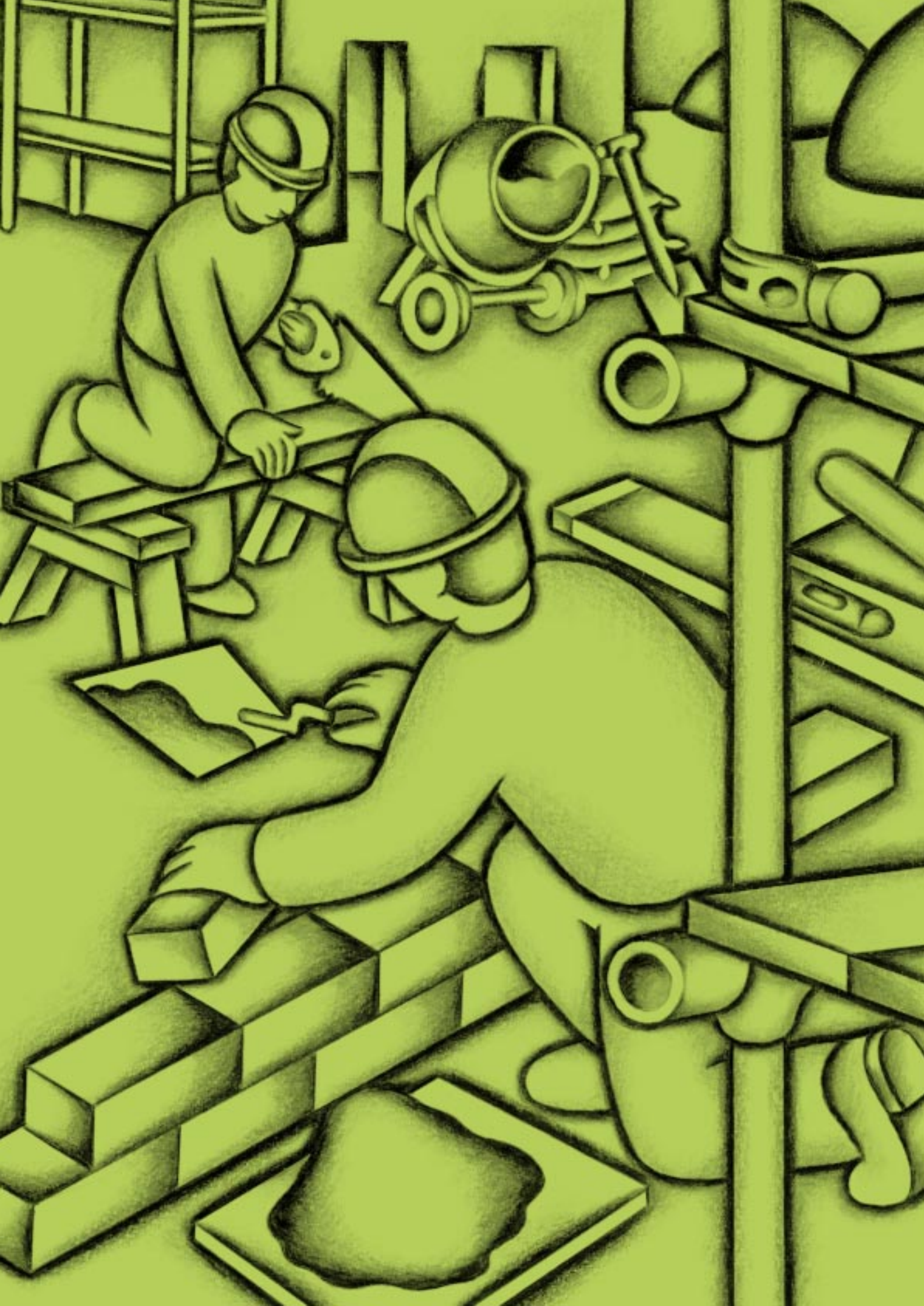


Leading into the Future

Foresight Perspectives from the Construction Industry
Research and Information Association (CIRIA)

Foresight

Making the future work for you



Leading into the Future

Foresight Perspectives from Trade, Professional and Member Organisations

No-one can predict the future but it can be anticipated. Making sense of the future is not an intuitive art; it can be done by the rigorous methods, techniques and skills used in foresighting. As we move from the Industrial to the Information Age, flux and uncertainty continue to be dominant features of the business environment. Making sense of change, shaping strategic responses and having the leadership to create new ways of doing business are keys to success (or even survival).

Trade, professional, research or other member based organisations can play an important role in helping their members adapt to a world in which business processes and models are being revolutionised. Foresight can be used in a business or industry context through collaboration, creativity, research, debate and communication. As a prominent organisation in your sector, you are in a position to spearhead those activities.

This case study is one of a series giving perspectives from various organisations like yours who have already used foresight. It aims to help you assess the ways in which foresighting can be used in your industry, trade or profession to anticipate and prepare for the future by:

- Looking at some of the benefits to trade associations, professional bodies and research organisations in being at the heart of foresighting activities.
- Hearing from Owen Jenkins, the Operations Director of CIRIA (Construction Industry Research and Information Association) about how they led a recent successful foresighting activity.

- Helping you design your own programme of activity. *Not all organisations will wish (or have the resources) to carry out the full range of foresighting activities but it is wiser to do some rather than none.*
- Highlighting further sources of help, advice and information including details of the Foresight Programme run by the Office of Science and Technology (OST) together with how you, your organisation and member firms can become part of this important national initiative.

We hope these insights into the foresighting activities of another organisation similar to yours will help you to lead your member firms into the future with confidence and increased competitiveness.

Ted Fuller and Lindsay Travis, University of Durham Business School.



Important Questions

for your member firms if they want to ensure their future survival....

Are they aware of:

The future prospects for their sector?

How markets might change?

How emerging technologies might affect products, services and competitors?

Where the new market opportunities will be?

How technology can help access new markets?

How the company structure, management and skills base needs to change to maximise the opportunities?

What future they would like to make happen?

How to turn that future into reality?

Foresight helps you lead your sector into the future by giving you and your members the tools, methods and processes to think about these questions in a structured but creative way.

Foresight will have advantages for your members but also provides strategic and marketing benefits for **your** organisation through:

- Strengthening membership ties and, potentially, bringing in new members by being a tangible demonstration of your vision for, and commitment to, your sector.
- Positioning yourself strongly in the minds of your members by providing an opportunity for you to demonstrate leadership.
- Helping members where it means most - the 'bottom line' - by proving your usefulness and ability to add value to their operations.
- Helping to ensure your own longer term future by increasing the overall competitiveness of your sector or industry.
- Allaying criticisms that it is often larger firms that have more attention paid to them by providing a mechanism to reach all your member firms - both large and small.
- Showing, by using foresighting processes and techniques, that you understand your membership and their concerns - an excellent marketing communications message.
- Acting as the hub of a valuable network by using Foresight to build effective and beneficial bridges between your members and people who know about future technology, future consumers and future government policy.
- Improving strategic planning by giving good marketing intelligence and information on present and future needs of your members.
- Promoting a positive and robust image by demonstrating that you are an integral part of the future for the sector/industry.



Owen Jenkins

Operations Director of the Construction Industry Research and Information Association (CIRIA) now takes up the story of his organisation and the foresighting activity (Adopting Foresight in Construction) they recently carried out...

Who we are and what we do

'CIRIA works with people and groups across the construction industry to develop and improve practice so as to give better performance. We're a not-for-profit organisation that began in 1960 and now have a wide membership base but no vested interests. The core programme is at the heart of our association and gives the fullest, and earliest, access to a wide range of activities including collaborative projects, networking, publishing, workshops, seminars and conferences. At any one time, we'll be running about 70 projects as well as publishing four to five titles a month and organising up to 100 events in a year. We've got over 60 core members - some are smaller specialist companies but mostly they are the larger companies in the industry - and a further 450 in other membership categories.

The original aim for CIRIA was to carry out research and provide guidance on best practice for the construction industry. **More recently, though, we've been putting greater emphasis on helping to implement good practice. Over the next five years, we'd like to see the practical impact of what we do increase further so that we are effecting real change in the construction industry.'**

Our reasons for doing foresight

'All businesses and industries have seen many changes but in construction these have been particularly radical - current issues include technology transfer and innovation, cultural shifts and mergers and acquisitions. By using foresighting methods to think about the impact of these and other issues over, ideally, the next five to ten years, we hoped to help our members consider how to respond and adapt. Necessarily, we could only work with a few companies this first time. But, by producing a report including both emerging future issues for the industry and our experiences of using foresight processes, we hoped to encourage other members to try foresighting for themselves.

We also felt that there would be benefits for CIRIA as it would give us an opportunity to get even closer to our members and to meet people from all divisions of their companies. Importantly, we would have access to board members and be able to speak candidly to them about the threats and opportunities for construction - useful information for CIRIA on future needs of our members. **Overall, the foresight project was an important opportunity to demonstrate that we could work with our membership in new ways and gave us a chance to show we can make a real difference.'**

Getting started

'We'd seen some of the literature produced by the national Foresight Programme and were aware of its aims as our Chief Executive had taken part in the first round of Construction Foresight. It seemed though, from discussions with members, that although Foresight had reached board level it had not really permeated to the active professionals or middle managers. A couple of our core members had already carried out some foresighting 'in-house' with the help of the DTI and we felt that there might be benefits in bringing together a larger group of companies to try it.

We floated the idea through our core programme management committee - they are elected members who know us well and are aware of what we can do. **Eight companies 'signed up' and, crucially, they trusted us enough to take what one called 'a leap of faith' by committing staff time and resources to the project. Trust is really important in getting 'buy in' to this sort of process - member-based organisations are able to have a 'head start' here as we've all had the opportunity to build relationships over a period of time.** We took responsibility for organising and communicating with the 140 participants from the eight companies and that did take longer than expected but any organisation should be able to do something similar.

Designing and doing our foresighting

'The structure and mechanics of *what* we did is detailed in the following chart and I hope this will be helpful to other organisations thinking about doing foresighting. Just as important, though, is *why* we did it this way and I try to explain this briefly below. Overall, we wanted to have a mixture of group and individual work and use a variety of methods. The eight participating companies, the DETR and the DTI Office of Science and Technology all worked with us on the development and design of the process. **We were operating on the basis that the more involved the companies were at the early stages, the more likely they were to take away something of real value.**

The aim was to help the groups think about future issues and how their own company might respond so it was vital to come up with a design which maximised the time for company specific matters. Plus, our emphasis was very much on including middle managers - the board members of the future. To avoid the duplication of effort involved by each group starting from first principles, we commissioned a briefing report giving an overview of the industry. This encouraged a common understanding of the main issues both present and future and a joint workshop for two middle manager representatives from each company then explored and added to these.

The next step broadened the picture further by interviewing the senior partner, chief executive or managing director in each of the companies. **CIRIA's Chief Executive did this personally which gave us a valuable opportunity to network at a senior level and find out the issues of real concern which we, as an association, might be able to address.**

From each of the three methods, statements about the future were derived and included in a questionnaire sent to all the participants. This meant, for example, that the senior managers could float 'innovative' ideas anonymously and receive feedback from the middle management tier.

The results of this questionnaire were presented at individually tailored workshops in each of the companies so that participants from across the company could be brought together without problems of commercial sensitivity or confidentiality. A number of common themes or emerging issues were selected for discussion and, after identifying the present strengths and weaknesses of their company, responses and actions were identified which might be needed. A valuable aspect of these workshops was *intended* to be the exchange of information and views between people from various parts of the company. In the event, this *was* a major benefit and cross-working groups have subsequently been taken forward by some of the companies.

The last step for us (at least for the moment) was to seek feedback from all those who had taken part, produce reports for each of the companies and also a report for more general readership. Time and resources did not allow the creation of a set of scenarios from the issues identified as important to the construction industry. Nevertheless, we hope that, with the impetus we have provided, some of the companies will go on to create such visions of possible futures and generate more actions to take now in order to influence the future of their company for the better.'

CIRIA's approach

1. Set up a steering group for project

Comprising representatives from the 8 participating companies, Foresight Programme & DETR to advise on design of the project.

2. Briefing Document

'UK Construction 2010 - Future Trends and Issues' commissioned from independent consultants circulated to all participants. Wide ranging report using previously published material (especially from Foresight Programme) & STEEP (social, technological, environmental, economical, political) analysis as a foundation then examination of how customers/markets, projects and processes might change over the next 10 to 12 years.

3. Inter-Company Workshop

Half day event attended by 2 young middle managers from each participating company. Through brainstorming sessions and group studies, views on various issues (technology, markets, clients etc) were brought out and recorded as future statements.

4. Senior Management Interviews

Interviews at Director/Partner level in all 8 companies to discuss their company's approach to long-term planning, future issues, likely changes within the industry and potential impacts on their company etc. Again a set of statements reflecting their views was produced.

5. Questionnaire Survey

Up to 20 nominated middle managers per 8 companies completed a questionnaire asking them to agree/disagree/show uncertainty with the 50 future statements collected. A separate variant for each company was developed to allow for company specific views to be 'tested'. The categories for grouping statements were - *Socio-economics, Environment and Sustainability, Technology and IT, Global Markets and Competition, The UK Market, Clients and Relationships, Staff, Skills, Training and Development, Knowledge Management, Industry Structure.*

A typical form of statement was 'Future investment in IT will carry a high risk.' 'Progress will be incremental rather than revolutionary.'

6. In-Company workshops

Results of the questionnaire were given to participants who identified emerging themes and their own company's strengths and weaknesses. Themes for further development were then selected and proposals developed on ways the company might address the issues.

7. Feedback/Final Reports

Once feedback from participants was received 2 sets of final reports were published. The findings and recommendations were reported in detail to the participating companies and in a more generic form for a wider readership. (www.ciria.org.uk).

Foresight elements

(CIRIA incorporated three of the five foresight elements shown later in this booklet into their foresight activity)

Developing commitment: engaging stakeholders and making the purpose clear and relevant.

The Context: sharing the stakeholders' understanding of the present situation, trends and opportunities and threats.

Making choices: commitment to create preferred futures.



Some lessons learnt...

'Overall, the process worked reasonably well but, inevitably, there were lessons learnt and some things to watch out for if you are considering following in our steps:

- The initial briefing document was a vital part of the design of our activity. Accordingly, we used a consultancy (Technopolis) with previous experience of foresighting work with the DTI.
- Composition of the workshop groups is important to ensure creativity. The level of consensus reached in our foresighting activity was quite high but most participants were male, of a similar age and with an engineering or scientific background. If time and resources had been available, an extra workshop including people from the supply chain would have introduced more varied views. Alternatively, some of the 'group think' could have been challenged by introducing scenarios to test the consensus.
- Try to make the process as 'open' as possible. Some participants wanted to discuss the findings of the briefing document more thoroughly, to challenge some of its assumptions and to have a more critical discussion of the future statements contained in the questionnaire. Availability of time is a key issue though - our workshops were only half-day sessions but, conversely, this is a large chunk of time for a company to release 20 middle managers.
- It is important to focus on the intended outcomes of the workshops and achieve these by skilled facilitation and flexibility rather than rigidly following a set of pre-determined processes.
- Facilitation of the workshops is a key issue. Our steering group decided on external facilitation and, as CIRIA has built up a degree of trust with core members and we have staff members with formal training in facilitation, we took on this role. But, we managed to get part funding for the project from the DETR's Partners in Innovation Scheme which enabled us to offer our services free. Clearly, if such funding is not available, the cost of external facilitation by consultants would need to be borne by either the association or members.
- Setting the time horizons for 'the future' is a sensitive task. Ideally, we wanted to look ten to fifteen years ahead. Most of the participating companies, however, worked on a strategic planning cycle of less than five years - accordingly, we aimed for a 'middle ground' of five to ten years. As we discovered, though, whatever the time period chosen, it is difficult to get people to think beyond the 'here and now' issues which concern them every day of their working lives.'

Notes - Foresighting issues for my organisation

Benefits for CIRIA

'We learnt much about possible future directions for the construction industry and the issues confronting us. For example,

- **Technological innovation** - *the need to develop a culture of innovation through communication and liaison.*
- **Sustainable construction** - *the need to monitor and respond to these issues proactively not reactively.*
- **Improving clients' business** - *the need to shift from a product focus to helping clients to develop their business.*
- **Client relationships** - *take short-term steps to respond to future changes in client requirements.*
- **Knowledge management** - *the importance of the use of knowledge to differentiate one firm from another.*

The final report from the foresighting activity is too detailed to give a short overview but it contains much of relevance to organisations from other sectors and can be found on our web-site (www.ciria.org.uk).

Although it is difficult to quantify the impact, I'm sure that the foresight activity has contributed to our strategy of being proactive and effecting change in the industry. Additionally, it has given us an important opportunity to work closely with some of our members and has assisted us in shaping our future services.

Overall, CIRIA believe that this has been a valuable contribution to the future of the construction industry and assisted in positioning us as a forward looking, innovative organisation. We are now encouraging more of our members to carry out foresighting activities for themselves and use the extensive resources of the OST Foresight Programme.'



The CIRIA foresight experience

- external perspectives

Owen has outlined some of the benefits to CIRIA from doing foresight with their member companies but our discussions with some of the participants¹, indicate they have also found the exercise useful and valuable.

'We do this sort of thing at director level but we haven't really involved this level of management before. We got together an interesting cross-section of people from all parts of the UK and it proved very stimulating for them. The way they communicated and shared ideas with each other is likely to have some lasting benefit for our company. We are now building on this.' **David Wood formerly Director and now Consultant to Gibb Ltd, Consulting Engineers.**

'The process that CIRIA facilitated of internal consultation at all levels in our organisation coupled with external discussions and comparisons has enabled us to identify a number of vital business issues that will affect us in the future. We commend their efforts in helping members remain leaders in industry performance.'

David Curtis, Managing Director of Laing Technology Group Ltd.

'Involving middle layers of management and trying to get them to think ahead more than they usually would was helpful. Particularly valuable was the work with other companies. With engineers more than most I think you do need to spark it off - once they really get going they can be quite productive. It is hard though to get people freed up enough to come up with something really different especially when time is limited because of budget restraints.'

David Gutteridge, Engineering Director, Charles Haswell and Partners, Consulting Engineers.

'The process gave us a set of materials in the briefing and final reports which have been useful. The initial briefing was used as a prompt and got people thinking. The process helped raise issues and make connections that would not necessarily be at the forefront of the minds of mid-career professionals. Our internal seminar was good although you have to be very careful not to raise false expectations. When you set something up like this, you have to follow it through otherwise you generate disappointment. We now have our own internal foresighting group for young managers although this is not directly as a result of the CIRIA initiative.'

Jim Meikle, Partner at Davis Langdon, Quantity Surveyors and Management Consultants.

Other benefits identified by participants are:

- An opportunity for staff development.
- Brought people together from different locations across the company.
- Introduced a way of seeking feedback on CEO and other senior managers' views.
- Yielded information of use to various functional departments - for example, human resources.
- Involved staff in considering issues outside their immediate area of responsibility.
- Insight into colleagues views on issues.
- Understanding of other departments.
- Exploring 'out of the box' thoughts and ideas in a safe environment.
- Opportunity to think more strategically.
- Chance to share views with other companies in a mediated environment which protected commercial confidentiality.

The CIRIA foresighting process was comprehensive and well managed. Remember though that, even if time and resources prevent you from doing everything you wish to, some thoughtful foresighting is preferable to none.

CIRIA is an example of foresight in action led by a membership organisation. In the next pages, we look more generally at the benefits of foresight, the elements involved in foresighting activities and examples of some of the methods and techniques available to you for your own foresighting activities.

Further sources of help (listed at the back of this booklet) are available to help you plan and carry out your own activity. Of particular relevance to CIRIA are the Panel Reports and 'Your Future Business! - the Foresight Training Toolkit' both of which are part of the OST Foresight Programme (www.foresight.gov.uk).

¹ In addition to the four companies featured here, other participants were: Hyder Consulting Ltd, Mott MacDonald Ltd, Buro Happold and WS Atkins Ltd.

Foresight

leading into the future

The need for Foresight

Markets are becoming more complex, customers more demanding, technology development more rapid and businesses more specialised. The rate of change has been accelerating fast and shows no signs of slowing. The following used to take **a year** but now only take **a day**:

- All of US growth in 1830.
- All of world trade in 1949.
- All science done in 1960.
- All the foreign exchange dealings around the world in 1979.
- All global telephone calls in 1984.
- All e-mails sent around the world in 1989.¹

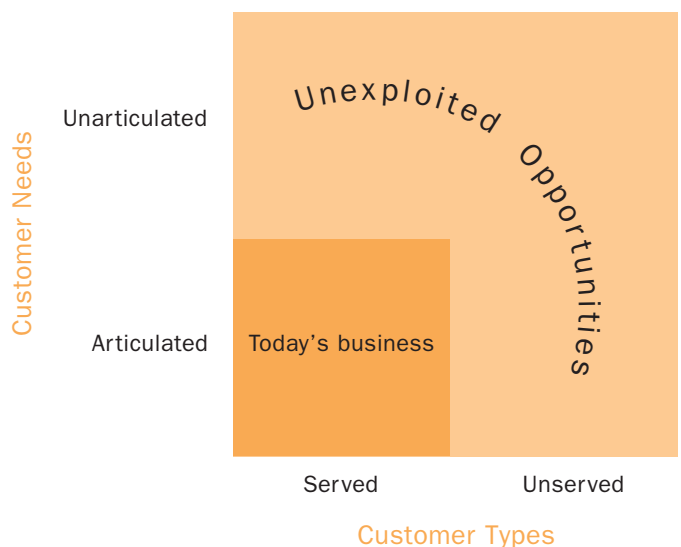
Often, the companies and firms who make up your membership, are too busy dealing with today's problems to think about the day after tomorrow. Any thought that *is* given may be based on the assumption that the future will, more or less, be a straight-line extrapolation from the past.

This may prove to be dangerously short-sighted:

- *This 'telephone' has too many shortcomings to be seriously considered as a means of communication.*
(Western Union internal memo, 1876)
- *Heavier than air flying machines are not possible.*
(Lord Kelvin, 1895)
- *Space flight is hokum.*
(Astronomer Royal, 1956)
- *There is no reason anyone would want a computer in their home.*
(Ken Olson, founder of Digital Equipment Corp., 1977)

The dangers of not anticipating future needs

Being customer led and setting a strategy for the future by listening to what they say they want may also be risky in the longer term. 'Customers are notoriously lacking in foresight.....meeting only the articulated needs of the customers you already serve cedes vast opportunities to more far-sighted competitors². This leads to many unexploited opportunities which, if you are not future oriented, might be reached by your competitors first:



The dangers of being customer - led²

Many opportunities, particularly in the technological field, have remained unexploited because they were thought to be 'ahead of their time.' Like the individual companies that you serve, your organisation needs to be customer-led in its *operations*. But, it is likely to be most successful when your *strategy* is to anticipate **future** needs of members rather than merely reacting to what they say they want now.

Foresight can help you anticipate the future and make the quality of your decision making better. The business environment governs which ideas succeed and which fail - understanding and trying to make sense of that environment in the present *and the future* is vital for all organisations if they are to prosper or even just survive.

Benefits of Foresight and your role in the process

At the beginning of this booklet, we set out a number of important questions for your member firms about their awareness of the future. Not many are likely to have complete 'answers' to all (or even most) of those questions but foresight can help your members to:

- More fully understand the environment in which they are working.
- Assess the impact of emerging technologies on their business.
- Share knowledge through networking.
- Generate future strengths.
- Devise positions of power and defence to meet new trading conditions.
- Make better investment decisions.
- Look beyond normal sectoral boundaries for opportunities.
- Get new perspectives on future markets and changes in customers' needs.

In businesses where foresight is already being used, it is usually part of the strategic planning structure. It provides the tools and techniques to map the near term future by indicating dangers, areas needing attention and also highlights a range of directions, options and alternative paths. **Foresight works best when it is an inclusive process uncovering the widest diversity of viewpoints.** The aim should be to reflect, as far as possible, the complexity of the environment otherwise your radar scan for detecting change is too narrow.

Even those companies who do use foresight in shaping their corporate strategy often miss out on the full benefit by making it an *exclusive* process confined to senior management or a business unit within the company. **Being involved in thinking through the implications of alternative futures can help all people working in a company harness their creativity and anticipate change.**

Trade associations, professional or other membership based organisations can help to widen out the process by:

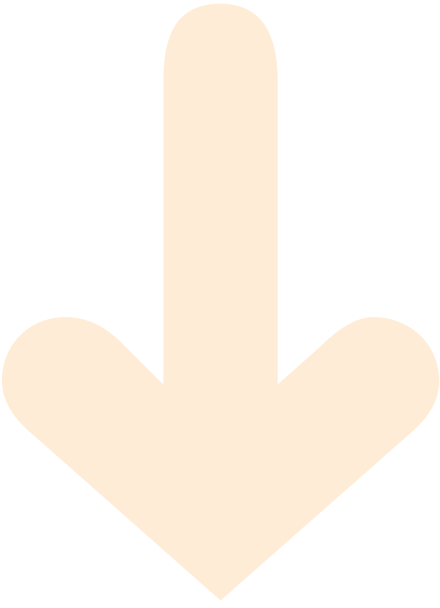
- Encouraging foresight throughout the organisational structure. Often, the most successful foresighting activities begin with a 'bottom-up' rather than 'top-down' approach and
- Using existing networks within the industry sector to bring together a broad spectrum of participants to the foresighting process.

Membership organisations will already have valuable expertise which can be used in leading a foresight activity. However, the nature of this expertise varies as member organisations are diverse both in terms of sectors served and the **principal** role in their industry or sector. For example organisations may have a:

- **Research and development focus** - Research and development is a central part of foresight with technological and scientific advances often being drivers of significant change. Many with a focus on this area are already experienced in using the Foresight Programme and accessing its wide information sources.
- **Strategy focus** - Foresight as a mode of structuring and communicating alternative futures is likely to be a small evolutionary step for such organisations with mechanisms for environmental scanning and 'analysis' of trends already likely to exist. But, it may also be that a key purpose is to promote (and defend) existing strategies to government and other interested parties. Developing, more open and inclusive methods used in the 'deepest' foresighting level may prevent views becoming entrenched and assist in anticipating policy and sectoral developments.
- **Networking and information focus** - Here, the key role is to facilitate inter-connections between members. These organisations will already be at the centre of a network with information flowing through them as the shortest path between two or more members. Networking is already an important aspect of the Foresight Programme as;
 - The volume and complexity of knowledge is such that not all of it can be known by all members of the network at any one time. Instead, it is more effective and efficient for the appropriate knowledge for a particular problem or application to be shared when required.
 - Sharing knowledge is a generative process so networking in foresight activities is likely to create new ideas about the future.
- **Learning, training and skills development focus** - Organisations specialising in learning and training will already be experienced in facilitating and be able to transfer those skills effectively into leading others in foresighting.

Plus, the level or depth of foresighting you undertake is likely to be influenced by the primary role of your organisation:

Membership organisation focus	Foresighting level/'depth'	Examples of methods (see also section giving sources of help)
1. Sector strategy, R & D	Industry wide	Environmental scanning, secondary data (including Foresight Panel Reports), STEEP analysis
2. Networking/information	Company specific	Workshops, SWOT (<i>strengths, weaknesses, opportunities, threats</i>) analysis, scenarios
3. Learning and training	Individual skills/development	Backcasting from scenarios, gap analysis



Foresight - Some starting questions

*'Industry foresight is based on deep insights into the trends in technology, demographics, regulation, and lifestyles that can be harnessed to re-write industry rules and create new competitive space.'*²

The starting point for foresight is to consider what you want to achieve. Foresight can be done on many levels or depths - the membership organisations featured in this series of case studies (details of all the booklets published to date are given at www.foresight.gov.uk) all set out to do something slightly different from each other although all initially took an industry wide perspective.

We do not know the future until it is experienced (and then it is the present). The aim of foresighting, however, is to construct a map of provisional futures based on stated and explicit assumptions arrived at by thorough and rigorous techniques and methods. Creating a robust and shared view of the future starts by asking questions - some examples (shown in both an industry wide/visionary and a business context) are:

The industry wide/visionary perspective	The business context
If you want a better view of the future what questions might you ask?	What questions do I need to ask to take my business into the future?
What exists today which will shape our future?	What are the threats and opportunities?
What directions and dynamics are at work to shape the future?	What STEEP factors are relevant for us?
What futures are possible from today's circumstances?	What business objectives are possible?
What future would we like?	Where do we want our business to go?
What futures would exist if...?	What is likely to throw us off course?
How will our actions make a difference to the future?	What can we do to make our own future?
What will succeed and what will fail in alternative futures?	What strategies can we adopt?
How will the action of others make a difference to our future?	Who will our competitors be next year and five years hence?

Some elements of Foresight

To help you answer these questions, five basic elements of foresighting activity are shown below together with examples of some of the methods and processes often used in each element. These methods, together with many others to help you on your way, are more fully described in documents included on the Foresight web-site (www.foresight.gov.uk). Not all foresighting activity will always include all elements (for example, membership organisations with a strategy focus might often include elements 1 and 2 but not 3, 4 or 5).

Element 1

Developing commitment: engaging stakeholders and making the purpose clear and relevant.



Pointers: A clear purpose or 'end-point' is crucial to effective foresighting and to gaining 'buy-in' from your membership. Clarity of objectives will enable you to define the scope of your activity, choose the appropriate methodology, select the time horizon to be considered and identify appropriate participants, facilitators and others to be involved in the process. It is important to establish ownership of the objectives and process by the people who will be acting on the outcomes.

Some methods - consultation, surveys, steering groups, networking.

Element 2

The context: sharing the stakeholders' understanding of the present situation, trends and emerging opportunities and threats.



Pointers: Environmental scanning helps to understand the present picture and identify the driving forces shaping future landscapes. It requires data from the widest variety of sources. Making sense of the information gathered is a crucial task. The significance of issues, the probability of their occurrence and the extent of their influence on the industry and its people need to be carefully analysed.

Some methods - data collection can be by reference to published material, Foresight Programme web-site, field research such as observation, interviews with experts, surveys (including Delphi surveys), networking, group discussions. Methods of analysis may include time series, STEEP and SWOT. Workshops help with sharing ideas.

Element 3

Expanding the context: taking a wider view, exploring alternative trends and 'what ifs'.



Pointers: - A major benefit of foresighting is helping to build more robust strategies by widening perceptions of possibilities and opportunities. This 'thinking out of the box' and considering the effects of a wide range of issues leads to an identification of the key uncertainties or 'what ifs' which have the potential to change the course of events significantly. It is these uncertainties that make it impossible to predict the future by a straight-line extrapolation from the past.

Some methods - creative techniques used in groups or workshops include brainstorming, idea generation, visioning, evaluation of ideas. Other techniques include alternative trend extrapolation, force field analysis and modelling.

Element 4

Opening up possibilities: building alternative scenarios.



Pointers: - Images of alternative futures (scenarios) are developed from exploring the different paths arising from the key trends and uncertainties which have been identified. Scenarios are used to explore opportunities and threats in various possible landscapes - they are not forecasts and they are not predictions. Concepts of 'best/worst case' or asking 'which scenario is most likely?' turn scenarios into prophecy. In contrast, well-articulated, internally coherent scenarios built on wide environmental scanning, thorough analysis and creative participation of stakeholders are likely to be credible and carry potency and impetus for change.

Some methods - techniques to help in building scenarios include setting priorities (by ranking and voting) and the identification of driving forces. Other methods bring scenarios to life, such as scenario-dramas, story telling and role-play.

Element 5

Making choices: commitment to create preferred futures.



Pointers: - The impact of the scenarios created needs to be explored in the context of the current goals of the business - testing the strength of present strategies, existing relationships and the continuity of basic assumptions. But, by being involved in foresighting, people develop images of preferred or desirable futures along with a stronger idea of risks and the indicators of change. Linking those images of the future with the present (back-casting) forms the basis of strategy - how we achieve the chosen future. Strategic actions may involve major change, incremental change or merely the monitoring of new trends. Whatever the extent of the (r)evolution needed, the shared knowledge and culture created by foresighting provides a common mental model and language for concerted action. All participants will have a better understanding of the reasons for change and an awareness of its effects.

Some Methods - group workshops help with building ownership of and commitment to decisions. Logical planning methods, such as back-casting, missions, goals, contingencies, change models, strategic intent and capability analysis help build understanding and trust in the plans.

In this booklet, we can only give you an outline of what is possible and might be included in your foresighting. There are excellent sources of advice to help you further on the way and some of these are given in the final pages.

First, however, a few cautionary words.....

Watch out for!

- Try not to make your foresighting too mechanistic. Rigidly following flow diagrams may appear to make it simpler but, only by deciding what **your organisation** wants to achieve and working out an appropriate design for your foresight activity will you achieve maximum value from it.
- The more that you can involve participants in all elements, the more powerful (and long lasting) the experience of foresighting will be. For example, environmental scanning and information may be more *efficiently* undertaken by one person and presented to the group but it is likely to be more *effective* if done by that group as a whole (subject to time and cost resource availability).
- Manage the expectations of participants in the events carefully. Foresight events can be very empowering but do not raise hopes that everything can be changed overnight - it usually takes just a little while longer.
- Selection of an appropriate time horizon is vital. Too long a period ahead and it may be difficult to relate to but too short a period will mean that present day concerns dominate. A few years beyond the usual strategic planning cycle is often chosen as a pragmatic solution.
- You need to get people thinking out of the box and being truly creative. Expert external facilitation together with as great a mixture of backgrounds and experience as possible may help. Longer rather than shorter workshops will also be beneficial although, again, resources are likely to be an important factor. **If you do achieve a sustained level of creative thinking which is grounded in solidly founded analysis then foresight can be empowering for individuals, revitalising for businesses and revolutionary for industries.**

Are you ready for the future? (or too busy dealing with today to think about tomorrow?)

All membership organisations and their member businesses are very different. Most, however, have the aim of improving competitiveness whether that be at an individual firm level or industry-wide. As technology becomes more revolutionary and markets more global, the need to be ahead of the present by anticipating the future becomes ever more urgent. The old certainties where the past was a good guideline to what will happen next are long gone.

As this case study illustrates some membership organisations are using foresight to be ready for the future. Undoubtedly, others are too caught up with the worries of the present to lift their eyes to the horizon.

By answering the following questions, you can decide for yourself into which category you fall.....

Your role in leading into the future

Tick the statements you agree with:	
We have a key role in leading our industry/sector forward	<input type="checkbox"/>
We want to get closer to our member firms and the individuals who work for them	<input type="checkbox"/>
We already assist our industry in key areas such as strategy formulation, lobbying, training, research and development, providing information	<input type="checkbox"/>
The pace of change in our industry is increasing all the time	<input type="checkbox"/>
Making sense of the impacts of change is complex	<input type="checkbox"/>
We are trusted by our members	<input type="checkbox"/>
We need to help our members prepare for the future	<input type="checkbox"/>

Establishing the present picture - Given your role as a membership organisation, many of the questions can be answered at three levels: for your own organisation; for the industry/sector as a whole and with respect to the individual member firms. Please think as widely as time allows!

Tick the appropriate boxes if you have anticipated possible changes in the factors listed and their likely impact on various operational areas	Operational areas				
	Products	Services	Competitors	Customers	Suppliers
Factors					
Social					
Technology					
Economic					
Environmental					
Political					

Tick if you have made an assessment of:	
Internal strengths	
Internal weaknesses	
External opportunities	
External threats	

Expanding the context, constructing alternative scenarios

Tick if you have constructed a range of alternative futures and how they might impact on:	Industry/sector wide	Your organisation	Membership firms
Purpose/mission			
Structure			
Products and services			
Management			
Knowledge and skills base			

Tick if you have identified potential ways to:	Industry/sector wide	Your organisation	Membership firms
Minimise weaknesses			
Maximise opportunities			
Close the 'skills gaps'			
Harness the power of technology			

Tick if you have explored:	Industry/sector wide	Your organisation	Membership firms
Potential triggers for change			
A system for giving 'early warnings' of those triggers			
Strategic options to meet the challenges of those futures			

Making choices

Tick if you are confident of:	
The future that you want to make happen	
The steps to take today to bring about the future you want for your industry and member firms	

More ticks than blank spaces? You probably have already begun to prepare for the future in order to be ready to face it positively. More blank spaces than ticks? You could be in real danger of facing the future unready for the potential dangers facing you. Remember though that, however you 'scored', that foresight is not a once and for all activity - it needs to be an integral part of how you operate to be truly effective. We wish you good luck with your own foresighting activity and welcome feedback on your experiences of leading your membership into the future.

Finally, in the UK, the national Foresight Programme offers many resources to help you (see overleaf).

Sources of help: The UK Foresight Programme

The UK Foresight programme, led by the DTI Office of Science and Technology, brings together the voices of business, the research base and Government to develop shared visions of what lies ahead. It encourages organisations to think now about where they want to be and what/who they need to get them there.

The Programme operates in a five-year cycle, looking at future needs, opportunities and challenges through sectoral and thematic panels. All panels consider education, skills and training and the implications of their proposals for sustainable development.

How to become part of Foresight

Foresight welcomes new participants and contributors to the Programme. There are many ways of becoming involved:

→ **Through the Foresight web-site** - www.foresight.gov.uk

The Foresight web-site provides a freely accessible, managed library of scenarios, information and views about the future. It supports the work of Foresight by providing information to stimulate thought, debate and collaboration - both for Foresight panels and for everyone else with an interest in these issues; communicating Foresight conclusions; supporting an ongoing dialogue in which anyone can participate and providing a platform for organisations to undertake their own Foresight exercises.

→ **Through 'Your Future in Business! The Foresight Training Toolkit'**

The Foresight Training Toolkit provides a practical, flexible resource for advisors to help small businesses prepare for and take advantage of the future. The aim is to encourage businesses to look beyond normal commercial time scales to identify opportunities and threats and to explore what action to take now to benefit from these opportunities and overcome or avoid the threats.

The guide is made up of eight interchangeable modules and comprises a range of materials, tools and guides for use in workshops, company sessions and seminars. It is intended for use by advisors who have completed the Foresight Advisors Training Programme and is not designed to stand alone as an "off the shelf" reference source.

→ **Through the Foresight sectoral and thematic panels**

Comments, inputs and participants are always welcomed by the panel secretariats. You can contact the panels through the web-site - www.foresight.gov.uk - or by sending a fax to 020 7215 6715.

→ **Through regional Foresight networks**

If you would like to know who co-ordinates the Foresight activity for your region and how to get in touch with them, please send a fax to 'Foresight: Business and the Regions' on 020 7215 6715 or telephone 020 7215 6754.

→ **Through Foresight Associate Programmes**

For further details please fax 020 7215 6715 or telephone 020 7215 6732.

→ **Through Foresight publications**

A full list of publications (free of charge from the Office of Science and Technology) can be found on the Foresight web-site (www.foresight.gov.uk) or telephone 020 7215 6708.

Publications include a wide range of sectoral reports from the first round of Foresight, and scenarios on environmental, retailing, finance and social futures.

Foresight Panels

Thematic Panels

- Ageing Population
- Crime Prevention
- Manufacturing 2020

Sectoral Panels

- Built Environment and Transport
- Chemicals
- Defence, Aerospace and Systems
- Energy and Natural Environment
- Financial Services
- Food Chain and Crops for Industry
- Healthcare
- Information, Communications and Media
- Materials
- Retail and Consumer Services.

- Marine.

Your Future in Business! - The Foresight Training Toolkit

Foresight for Trade Associations and Other Member-Based Organisations: a guide for running effective sectoral Foresight exercises

Foresight - Make it your Business

A Guide to Future Markets - Future Business
(A guide to running Foresight workshops)

Foresighting around the World

References:

1. Oliver Sparrow 'Open Horizons' CD ROM RIIA, 1998 or see www.chatham.demon.co.uk
2. Hamel, C. and Prahalad, C.K., Competing for the Future, Harvard Business School Press, 1994

Final Panel Reports, recommendations and action plans for implementation are available from the Foresight Directorate, Office of Science and Technology, Department of Trade and Industry, 1 Victoria Street, London SW1H 0ET or via the Foresight web-site or by telephoning 020 7215 6708.

In addition to the general resources available from the Foresight Programme, the following publications are likely to be of particular help to any membership organisation thinking of leading a foresighting activity (all can be found on or via the Foresight web site - www.foresight.gov.uk):

Title: Leading into the Future: Foresight Perspectives
from the Construction Industry Research and
Information Association (CIRIA)

ISBN: 1 85773 1 778

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