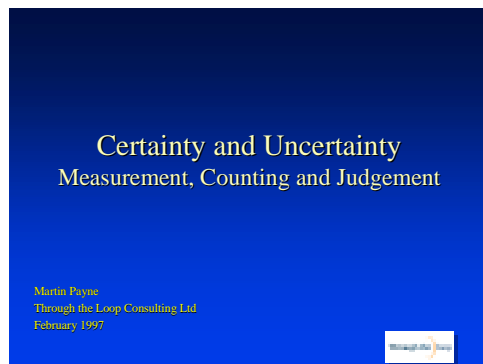
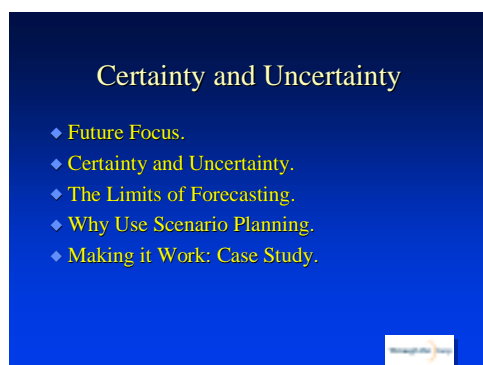


Certainty and Uncertainty: Measurement, Counting and Judgement

Thursday, 27 February 1997



Good afternoon, ladies and gentlemen. What does the future hold for us? How do we plan our business development to take advantage of the forthcoming opportunities and cope with the threats. Indeed, before we even do that we have to identify these opportunities and threats. We know what happened in the past, we should understand what is happening now and, if we are on the ball, we will have a good idea of what we can expect to see over the next few years. This enables us to undertake predictions and forecasts about the future of our business. We probably have a reasonable view of how much we will sell, where are competition is coming from and what the consumer wants. However, how far ahead can we see? What will we do if something unexpected occurs or how can we plan manufacturing and strategic developments when our market is becoming increasingly volatile.



There is clearly a strong need to focus on the future. Over the next three quarters of an hour or so I will be looking at the reasons why we have to place more emphasis on planning the future than may have traditionally been done, the importance of differentiating between certainty and uncertainty, the limits encountered through undertaking an approach based purely on forecasting, the benefits of adopting scenario planning and, finally, how it may work in practice using a case study from our own experience.



We are living not just in an evolving marketing environment but in one where is speed of change is constantly accelerating. The postal system was to slow so we started to use overnight couriers for when it absolutely, definitely had to be there next day. Then next day was not good enough so we started

sending our documents by fax. Now we become agitated if we do not receive an immediate reply to our e-mail across the globe. This means that it is not sufficient to research the future, ensuring that you are prepared for when it arrives but you must help to shape it so that you can take the best possible advantage. Don't surf the wave when it reaches you but help to create it. To do this you must create a vision and the environment to react to that vision. This means far more than forecasting your sales over the next couple of years or even anticipating changes in cost of sales. Your vision may tell you that you need to adapt your business in order to survive, evolve your core competencies or even get out altogether.

We are also seeing more signs that change is becoming less linear. We may expect to see many short-term discontinuous changes. These could appear small but they may also have a major impact on the future of the business.



Future Focus
Back in 1967, did you forecast:

- the end of the Cold War and opening up of new markets
- the PC revolution (or even the Apple Mac)
- that a record store could launch an airline, a cola, vodka, investments, a bridal store....
- AIDS
- the explosion of the Internet
- MTV and other global media.

The difficulty of preparing for the future in this type of environment is clear when you look back at the last thirty years. Let's go back to 1967 and the Summer of Love. If you were then looking to prepare your company for the future, what sort of factors would you have expected to impact on your business? It was

only a few years of the Bay of Pigs episode so would you have expected the fall of the Berlin Wall and the end of the cold war. What would be the implications of the new markets opening up in Central and Eastern Europe? We didn't know much about the power of computers so would we have envisaged a future with a computer on every desk and in every home? We probably expected just a few, very powerful machines. When we visited our local record store would we have expected it to give British Airways sleepless nights, or even Coca-Cola. Consider for a moment that the first Virgin store had not been opened in 1967. When we look back at 1967 we think of Free Love so how do we view this in the light of the spread of AIDS. The Internet had not been born yet today we are looking at it or its descendent as a very powerful communications medium. Finally, we had never heard of MTV or even satellite television and look at the impact global media have, especially on the youth market.

Future Focus

But you may have predicted:

- living on the moon
- interplanetary travel
- a cure for the common cold
- the end of the Beatles phenomenon
- the end of the Vietnam war

However, we would have been able to look the environment then and make some forecasts about what was likely to happen in the near future. The sixties were the decade of the space race so we may have extrapolated what was happening then and been looking forward to living and working on the moon.

Furthermore, interplanetary travel may have become just as easy as catching a bus. A cure for the common cold has still not been found despite all the research efforts. When would the Beatles phenomenon end? 1996 saw the highest-ever level of sales of Beatles records. Finally, when would the Vietnam war finish or when would its effects cease to affect society?

Future Focus

"Guitar groups are on their way out."
Decca Records, 1962

Predicting the future is always risky and sometimes what you have said can return to haunt you.

Fortunately, Decca Records ensured that it did not make the same mistake twice and promptly signed a group called the Rolling Stones.

When we come to look at the future there are two types of variables we must consider. First, we can look at certainty. This covers those trends which can be accurately predicted. You may have a pretty good idea of next year's sales volumes or imminent changes in cost of sales. If there is expansion in your core market, you

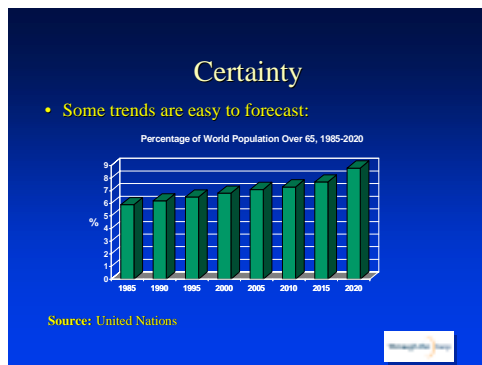
Certainty

- Trends which can be accurately predicted.
- Definite or probable events.
- Existing factors.
- Your own corporate behaviour (mostly).

probably know about it.

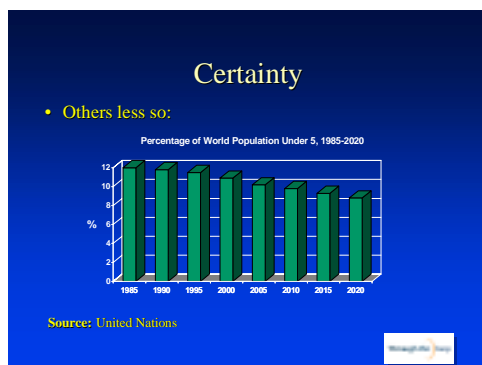
Certainty also includes those events which are definite or probable and so can be included in any business forecasting. These could include such factors as known changes in regulations, planned products and the like.

If you believe that existing factors impacting will not change then these are also included under certainty. Finally, you can be sure about your own corporate behaviour, most of the time.



As an example of how we view certainty we can look at the percentage of the population over 65. If we are looking into the future here, we can be fairly certain about the number of people in this age group as they are now over 35. If we are targeting products and services at this age group, we can have a pretty good idea

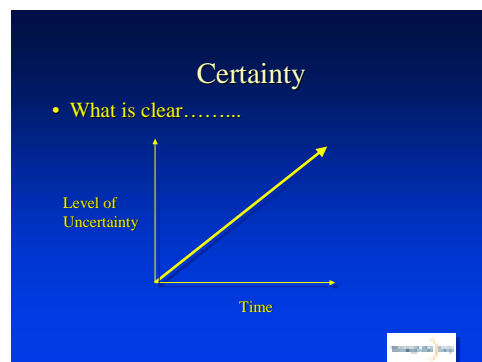
of how the total potential market size may change over the next thirty years.



However, if we are looking at a younger target market, say we are a baby food manufacturer or we sell pre-school toys, then it is much more difficult for us to forecast 30 years into the future. Once we are past a five year forecast we are not exactly guessing but the accuracy of our prediction will decrease the

further we move into the future as we become less confident about the variables which are introduced into the forecasting process.

The net result of this is that while we can identify certain factors as "certain", their accuracy or relevance will decrease over time. We may be happy to forecast variables such as economic trends over the next couple of years but we would less confident

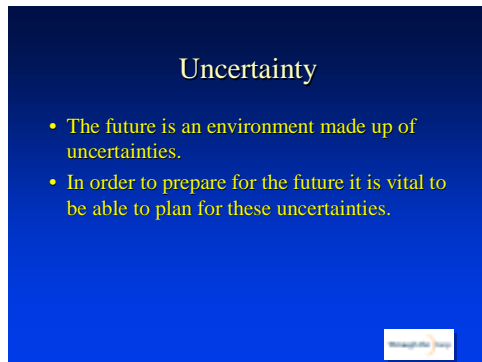


about predicting the level of unemployment or inflation for 2020.

The other side of the coin is uncertainty. The future is made up of uncertainties. We do not know what will happen next year, let alone in 30 years and so we are always faced with a

level of risk with any strategic plans we make. However, while we have no choice but to accept a level of risk, we must do our utmost to minimise it. We do this through the

identification and evaluation of these uncertainties so that we can be prepared for them should they start to have an impact on our business.



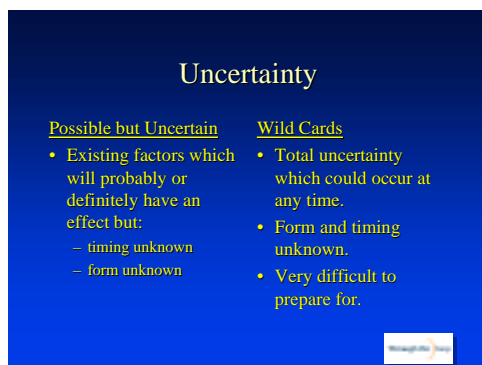
So what do we mean by uncertainty? I would like to identify two types of uncertainty.

Firstly, there are those factors which will occur and we know they will occur. However, we do not know what form they will have or when they will occur. These factors may exist now but as they change or occur in different ways

we have to adjust our plans accordingly.

The second area is defined as “wild cards.” These are factors which may or may not occur and we do not know their timing or form. If we can identify them to some degree then we have a better chance of understanding them should they occur and therefore adapting our plans to take them into account.

So in practice what are we talking about as uncertainty? Firstly, under the “possible but uncertain” banner we have a number of factors. How far ahead can we forecast



the weather? Certainly not far enough to be able to increase or slow down manufacturing let alone invest in new lines. For a company like Unilever a poor Summer can wipe millions of pounds off profits. In a similar vein, epidemics such as 'flu will provide a major boost to healthcare companies. We know we

will have competition in our marketplace and we may know who that competitor is but we do not know their long-term plans. This emphasises the importance of understanding your competitive set as you may be able to develop different predictive scenarios about how other companies may behave. What is the difference between a fad and a trend? Are you observing something which will last or will it fizzle out next week? Here we come across what I call the Buzz Lightyear Effect. Every year there tends to be one toy which all the children want but you have to plan and manufacture well in advance. Christmas 1996 production of Buzz Lightyears had to be planned before the film was released in the UK let alone the video which was the real stimulus of the christmas demand. Is environmentalism a fad of the 1990s or is it a sign of a

genuine change in consumer behaviour? Finally in this section we know that technology will develop but how?

Under the wild cards we can firstly include major disasters or diseases. Will we see the return of diseases we thought had been eliminated like plague and how can we plan for "new" diseases like AIDS or ebola? We must also make plans to cope with severe

Uncertainty

<u>Possible but Uncertain</u>	<u>Wild Cards</u>
<ul style="list-style-type: none">• Weather patterns.• Competitive behaviour.• Fads.• Development of technology.	<ul style="list-style-type: none">• Major disasters/diseases.• Major technological breakthrough.• New research findings/press coverage.• Major competitive movements.

weather or a plane crash.

How will a major technological advance affect our business? Is it something which will turn us from bit-part players into market

innovators or will it have the opposite effect?

New research findings might have the same sort of impact. It may be proven in 20 years

that our core product is linked to cancer or it may have prevent it. Moving on from that, how will we cope with any adverse publicity about our product or a major manufacturing problem. If our celebrity endorser is jailed or our factory is leaking toxic gasses into the air then we must have a crisis management plan for such an eventuality.

Finally in this section, we can easily monitor our current competitive activity but can we see where our competition may come from in the future? This could be a company diversifying into new areas or changing technology bringing two existing companies into the same market.

The Limits of Forecasting


- Requires known variables.
- Indicator of the future based on past performance.
- Does not allow lateral thought.
- Cannot consider unknown variables/uncertainties.
- May restrict an organisation to its current core competencies.

There are clearly limits to a forecasting technique if you are looking to plan for the future. You may not have known variables and how do you quantify something which may or may happen one day? Forecasting will tend to indicate how the future will develop but based on past performance largely. It does not allow

lateral thought and may miss the effect of developments outside your normal train of thought but which may impact on the business in the future. It is unable to take into account unknown factors or the true wildcards. Finally, it may restrict an organisation to looking at its current core competencies.

The Limits of Forecasting


- Acceleration of change in the business environment.
 - non-linear change
 - competitive unpredictability
 - removal of barriers
 - new markets
 - new competencies required



At the same time, any forecasting may become increasingly irrelevant as many of the changes in the business environment are non-linear, competitive behaviour may be less reliable than it used to be, barriers and trade restraints are being removed, new markets are opening up where there is little trading history on which


to base a forecast and new competencies are required to shape companies for the future.

The Limits of Forecasting



Certainty ←————→ Uncertainty

Forecasting Scenario Planning



All this means that as you move from a certain environment to a level of uncertainty you have to move from forecasting to the development of hypotheses and scenario planning. Strategic planning should combine both disciplines to be able to assess both the immediate future and the longer-term.

Scenario planning is used to make sense of these uncertainties and less measure them

Scenario Planning

- Offers a number of different future outcomes or hypotheses.
 - plausible but different
 - allows new perceptions helping you to shape the future
 - encourages development of different strategies which may be changed according to the actual development of the scenarios
- Does not attempt to forecast or invent the future.



but more judge their likely impact. By identifying driving Forces of Change and assessing their effects, we can evolve a number of different possible futures or scenarios. These should all be plausible in that the Forces of Change could lead to these outcomes although they could travel along

different paths. They will enable new perceptions to be developed, something which is not possible with linear forecasting. They will then be able to act as a tool for the development of strategy and these strategic plans can develop as the scenarios evolve. However, it is vital that scenarios are not used to predict what will happen but focus on a number of possible outcomes which can then be assessed in terms of their impact.

Scenario Planning

- Different scenarios may be equally likely outcomes.
- Actual outcome may not be one scenario but a combination of factors from different scenarios.
- Should be used as a tool to help development of future plans.
- Reduce risk through the anticipation of events.



Scenario Planning

- Recognition of non-linear development.
- Move from stable organisation systems to flexible and adaptive structures.

