Market research in a global organisation needs the help and support of the company's overseas affiliate companies. Most affiliate companies (in the UK for example) have dedicated Market Research Managers. They help the central research team in gathering and interpreting consumer views. These views provide information or insights that ultimately result in the development of new products suitable for a global market.

How the NPD process is supported by market research

The NPD Process		The Market Research Process
Identifying consumer views and product needs	←	Primary and secondary research into consumer views and product needs
Product concept and packaging development	←	Concept, volumetric and packaging testing
Testing the product	←	Consumer usage research
Brand positioning and advertising development	←	Pre-testing of image and advertising research
Product launch and post launch	←	In marketing monitoring

This case study follows the development of a new NIVEA Deodorant called *Pearl and Beauty* aimed at young women and it provides a clear picture of how market research has helped New Product Development (NPD).

Identifying consumer views and product needs – where to start?

Market research should start with the consumer and serves two purposes:

1. To inform companies about consumer needs and desires. What are the trends in the market? What do consumers want?
2. To give consumers the opportunity to talk to the providers of products and services so that their views are taken into account.

Businesses exist in a fast-moving world with increased consumer choice. It is essential that a company knows its market and its consumers before developing any new product. Lots of questions need answering.

Consumer insights drive New Product Development. This information takes into account their behaviours, attitudes and beliefs. It is an expression of their

wishes and desires. Businesses use consumer insights to create opportunities for their brands. It is the starting point that enables brands to fit meaningfully into consumers' lives.

Across countries, consumers are different in terms of culture and lifestyle. NIVEA's challenge was to find similar insights from consumers across different countries. This was used to optimise product development.

Secondary research

In the deodorant category, NIVEA used many secondary research sources to discover consumers' views and their need for deodorants. These related to different markets and were supplied by local country market researchers. These included:

1. A consumer Usage and Attitude study. This had been conducted a few years earlier across various markets (UK, France and USA).
2. An external study by Fragrance Houses. This covered the importance of scent and fragrance to people's well-being and mood.

Primary research

The research team felt therefore there was not enough recent knowledge about the consumer in the secondary research. They commissioned some primary qualitative research in key markets (Germany, France, UK and USA). This was aided by the local Market Research Manager. The aim was to understand the motivations for using deodorant among the female consumer.

Primary research is used when there is no existing data available to answer your questions.

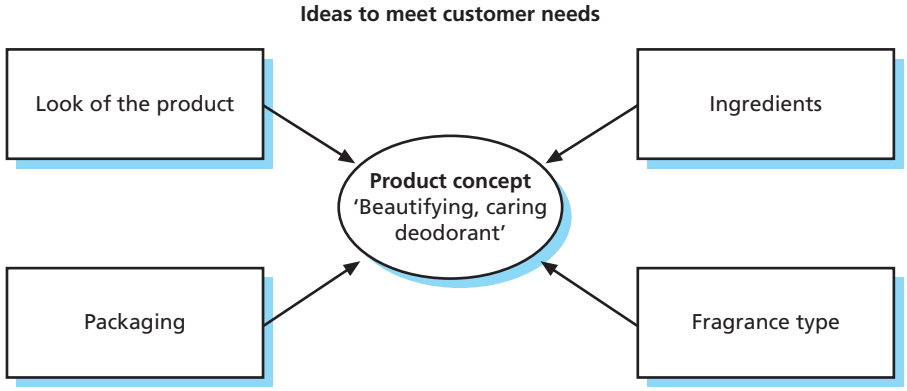
The research involved small discussion groups of females. This helped researchers understand the beliefs and motivations of this group. There were several main findings:

- There is steady growth in females shaving. They wanted to look after their underarms throughout all seasons (not just in summer).
- Women cared increasingly about the condition of their underarms.
- Women desired attractive, neat underarms. This symbolised sensuality and femininity.
- The deodorant segment remained focused on functional rather than beautifying products.

Results of the research

The market research revealed an unexplored market potential for NIVEA deodorant. The brand did not have a specific product that addressed 'underarm beauty' for the female consumer. No direct competitor was offering a product to meet these needs. So there was a clear opportunity to develop a new product. This would fit across different markets and with the current NIVEA deodorant range.

Turning consumer insights into product concepts



Consumers showed a need for a 'beautifying, caring deodorant'. The team generated ideas on how to address the consumer need.

From these ideas the marketing team created 'product concepts'. These describe the product benefits and how they will meet the consumer needs. Several concepts were written in different ways. These explained and expressed unique product attributes.

The company needed to know which concept was preferred by prospective consumers. It carried out market research to test whether the concepts would work. The research was conducted among the desired target market. For *Pearl and Beauty*, the desired target market was 18–35 year-old women who were beauty orientated, followed fashion and looked for products with extra benefits.

Quantitative research on the concept was carried out in two test markets (France and Germany). An international company such as Beiersdorf must test products in more than one market to assess properly the global appeal.

The concepts were tested monadically. Monadic testing means that the respondent of the test is only shown one concept. This stops the respondent being biased by seeing many variations of the same product concept.

A number of criteria were used to test the concepts:

1. Deodorant category performance measures. These included wetness, dryness and fragrance. The new concept must deliver generic core benefits.
2. Product attributes specific to the new product and NIVEA core values. The new *Pearl and Beauty* product has additional benefits to a 'regular' deodorant. For example, it leaves your skin feeling silky and gives you beautiful underarms. Consumers needed to understand and see these benefits.
3. The product needed to be relevant and motivate a consumer to purchase it.

The team chose the 'winning concept'. This best conveyed beauty while remaining relevant to the deodorant category and NIVEA brand.

Next, the research team tested various name ideas for the product and developed different designs for the packaging. Packaging design plays an important role in helping to communicate the image of the product. *Pearl and Beauty* needed to

communicate femininity and sophistication. Pink was a natural colour choice for the packaging. They also used a soft pearlescent container to emphasise the 'pearl extracts' in the product.

Various design ideas were tested using quantitative market research. In addition, this helped to predict the volume of the new products that would be sold, the optimal selling price and the level of switching from existing NIVEA deodorant and competitor products.

Testing

The stages described so far produced a product concept that consumers felt was relevant and which they were willing to buy. The next stage was to test the product on actual customers. Many product launches fail, despite great advertising. A big reason is because the product fails to live up to the promises made.

The Market Research Team conducted a product usage test. A de-branded sample of the proposed new product was given to the target consumer of females in several countries. De-branded means the deodorant was in a blank container so that the consumers did not know who made the product or what type it was. Very often consumers form opinions about products and services from advertising and packaging. This can sometimes be very strong and creates a bias in what they think of a product before trying it.

The consumers were asked to use the new deodorant for a week. They kept a diary of when they used it and scored the performance of the deodorant against a list of criteria. These included:

- Did it keep you dry all day?
- Did you have to reapply it?
- Did you like the fragrance?
- Did it last all day?
- Was the deodorant reliable?

Consumers applied the 'de-branded' deodorant under their right armpit and continued to use their current deodorant under their left armpit. This helped the users gauge if it was as good as or better than the brand they normally used. This gave a measure of how likely the consumer would be to swap brands.

The results of the test were positive. Most consumers loved the fragrance and the feel of the product on their skin. They felt it performed as well as their current deodorant. Most said they would swap their brands after trying the product.

Brand positioning

Now the marketing team had a new product idea that consumers liked. It had a name and packaging design that were well received. They now needed to check how this fitted with the rest of the NIVEA deodorant brand positioning and range.

The brand position is the specific niche in the market that the brand defines itself as occupying.

The NIVEA deodorant *Pearl and Beauty* adds a touch of feminine sophistication and elegance to the NIVEA deodorant brand's personality. This built on the core deodorant positioning. It made NIVEA deodorant more appealing, modern and unique to trendy, young female consumers.

Using qualitative research to inform advertising

The next stage was to brief an advertising agency to develop communication to support the launch of the new product. Through market research the team could check whether the advertisements positively supported and communicated the new product.

The company conducted qualitative research on some advertising ideas among various groups of the target consumers. It presented ideas in the form of 'storyboards' of what a TV advert could look like. The objective was to evaluate which advertisements were best ideas in terms of:

- Did they stand out as exciting or different?
- Were they relevant to the consumer?
- Did they communicate the right things about the new product?
- Did they persuade the consumer to want to purchase the product?

Evaluating success

Once the product is launched and the consumer can actually purchase it, the research process does not stop.

Continuous consumer tracking can be carried out to find out consumers' views of the new product. This involves interviewing people to find out whether they are using the product, what they think of it and why they would purchase it.

Beiersdorf uses other, secondary data sources such as consumer panel data and EPOS (electronic point of sale) data. These monitor the sales effectiveness of the product throughout the launch phase and through the product life cycle.

Conclusion

New product development should start with an insight based on consumer needs. Throughout the NPD process, market research is a valuable tool for Beiersdorf to check viability and minimise the risk of the product launches. Being an international company, it is essential that Beiersdorf develops new products using the insights of consumers across markets and cultures. This ensures the products are relevant to a large number of global consumers and will deliver the maximum return when launched. This maximises return on investment for the company and results in happy, satisfied and loyal consumers.

Source: adapted from www.thetimes100.co.uk – reproduced with permission.

Discussion questions

1. How was market research and product development interlinked in the development of *Pearl and Beauty*?
2. The target market for the new product was identified as follows:

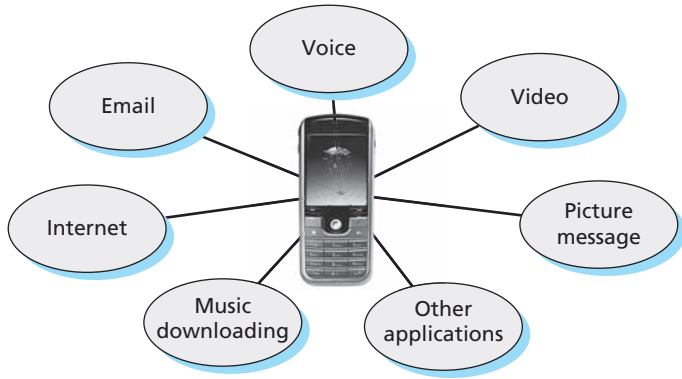
   '. . . 18–35 year old women who were beauty-oriented, followed fashion and looked for products with extra benefits . . .'

   In your view was this an appropriate market segment for the proposed new product? Justify your answer.
3. What are the challenges facing the Nivea sales team when selling *Pearl and Beauty* to the retail trade?
4. How does market research help salespeople to sell products?

CASE STUDY Hutchinson Whampoa: Market leadership in the 3G market

Introduction

3G stands for third-generation mobile communication and can be viewed as wireless broadband for mobile phones. It is a radio communications technology offering:

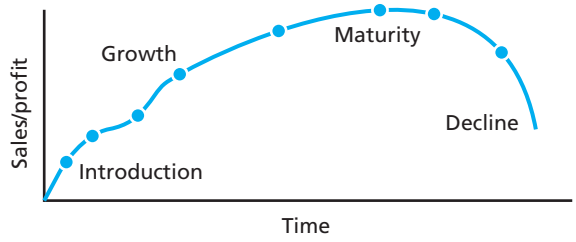


3G is a contemporary development, with phones first being developed on a major scale in Japan in 2001. Today, more than half of Japanese mobile phone users use 3G. It spread to Europe in 2003 and its use is growing rapidly here and worldwide.

The market leader in 3G in this country is 3. 3 has the highest customer base in its market sector.

As a mobile network provider, 3 recognised that 3G was the way forward for market development. It seeks to provide the best network available for mobile phone users.

The product life cycle



Products go through a life cycle:

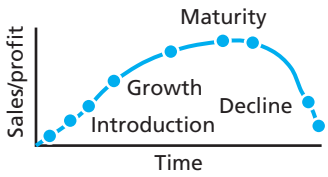
- When a new product is introduced to the market, consumers may have little awareness. Therefore, it is important to use promotional activity to give advice about the product's benefits.

- The next stage is growth. During this period more people find out about the product and purchase it.
- Finally is a stage of maturity when there is little expansion and a product may go into decline.

The typical life cycle of a product can be illustrated as above. The sales performance rises steadily from zero (when the product is introduced to the market).

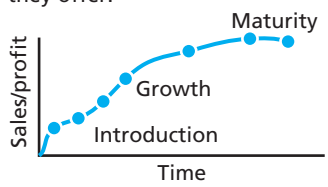
The mobile phone market fits this pattern.

First-generation phones (analogue mobile phones) have declined rapidly with the development of digital phones.



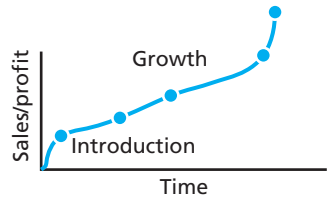
Terminal decline as product goes out of use.

Second-generation phones (GSM digital mobile phones) are in a stage of maturity – everyone knows what they offer.



These phones are now at the maturity stage.

Third-generation phones (3G digital phones with much greater bandwidth) are in the growth phase.



Now in a rapid growth phase.

Relationship between the life cycle and sales

Initially the product will grow and flourish. However, as new competitors come into the market and as excitement about the product reduces, a new stage in the life cycle stage is reached, called maturity. If the product is not handled carefully at this stage we may see the saturation of the market and interest in the product or services begins to decline.

At each stage there is a close relationship between sales and profits so that as organisations or brands go into decline, their profitability decreases.

To prolong the life cycle of a brand or product, an organisation needs to use skilful marketing techniques to inject new life into the product.

Maintaining a product's life

A product's life cycle may last for a few months or for more than a century. It all depends on how good the product is originally, how easy it is for competitors to emerge, and how good a firm is at keeping its own product relevant and attractive to consumers.

Hutchison Whampoa, the company that owns 3, has led the growth of the global 3G market. It has invested heavily in new technology and provides the most comprehensive network for 3G communications.

What is marketing strategy?

Marketing strategy describes how a business meets the requirements of its market.

The marketing strategy must enable a business to deliver its objectives.

Markets are made up of customers with wants and needs. Market planners must provide products and services that are better than those which competitors offer.

The organisation with the most effective marketing strategy should become the market leader.

Creating a marketing strategy

To create a marketing strategy you must first find out about your environment through market research. Investigation into the 3G market in Japan first indicated that the 'killer application' would be video messaging. This has not proved to be the case. For example, Japanese consumers have been far more interested in music downloads. Market research by 3 showed that consumers are interested in the extensive range of 3G phone applications.

Marketing strategy covers all elements of the procedure that an organisation uses to satisfy the market, such as research, promotion and advertising.

The marketing strategy must enable a business to deliver its objectives.

The components of marketing strategy

Market research	Product	Pricing	Advertising	Promotion	Consumer tracking
Finding out about consumers and the market	What you offer consumers	How much you charge	How and where you advertise	e.g. special offers	Finding out about product sales and customer views about your product

Hutchison Whampoa's objective is to be the market leader in providing 3G wireless communications. All aspects of 3's market plan are tailored to achieving this. For example, the company's advertising helps customers appreciate the benefits of 3G services and content.

Product orientation

Production and marketing go hand in hand in successful businesses. You can only convince customers that you can meet their needs if you have the products to do so.

3G technology has significantly more bandwidth than 2G technology. More bandwidth means more space for transmitting large amounts of data, e.g. videos rather than text. A 3G phone offers up to 384 kilobytes per second when a device is stationary or moving at pedestrian speed. During 2007, 3 will launch a high speed service which will have a target speed of 1.8 Mbytes per second.

There are three main sections of 3's UK business:

Communications	Media and entertainment	Information services
All forms of personal communications, voice and video calling.	Television, music audio and video, computer games and media publishing.	Wireless web, access to the rest of the internet and a range of other news and information services.

First mover advantage

3 was the first company in Europe to appreciate the opportunities offered by 3G. It invested seriously in this market, hoping to acquire 'first mover advantage' by being the first one to develop a specific market.

The first mover becomes associated by customers with that expansion. It is then able to be at the leading edge of new developments so its rivals are continually trying to catch up.

3 is always seeking to improve its products and services to maintain its market leading position. In 2006 these included:

- signing an exclusive deal to stream ITV1 – ITV's flagship channel – to its 3.75 million customers in the United Kingdom (customer numbers in August 2006);
- signing deals with leading handset producers such as Nokia, Motorola and Sony Ericsson to provide handsets to complement the network. A recent example of this is the link with Sony Ericsson's K610i and K800i Cyber-shot phones;
- screening the 2006 World Cup directly on customer mobile phones. This created an all-time high in mobile television usage;
- launch of the X Series from 3, which is supported by a commercial link with key internet service and software providers such as Microsoft, Yahoo, Google, eBay, Skype, Slingbox and Orb. These links will take wireless broadband to the next level, allowing consumers to experience the full internet experience whilst on the move.

Market orientation

Hutchison Whampoa took a considerable gamble in investing in the 3G network market. At the time it was a relatively untried new technology, but there was considerable support for the development. Britain is a member state of the European Union (EU), which was able to see the advantage of this innovative technology. In 2002 the EU Council wanted telecom network providers to transfer 80 per cent of telecommunications to 3G.

3 is always seeking to improve its products and services to maintain its market leading position.

Existing network providers and new competitors had to bid for licences to operate using this system but the cost of these was extremely high. Because of this, the successful companies were left with only limited funds to invest in the new technologies. However, 3 was determined to lead the field and has invested considerably in this market. Today it is beginning to harvest the benefits.

Achieving market leadership

3 invested £4.4 billion to purchase one of the five licences available from the government. Since then, 3 has invested heavily in developing its network which was launched on 3 March 2003 and which today covers 90 per cent of the UK population.

The market is getting stronger all the time. The network is continually being extended and there are new and innovative companies producing the high-quality phones required to access the products and services delivered across the network.

When you phone someone using 3, 3G chops up your call into a miniature packet of data, which is coded. This is a highly efficient way of sending information. Using this system of chopping and coding, 3G can deliver large files such as pictures and videos at a much faster speed.

The results of 3's market research

3's market research shows that young people like 3G because it enables them to send pictures, view videos and listen to music downloads. It is also popular with business customers and people who work in the media – for example, film editors and journalists. The market research was able to illustrate that 3G provides customers with many benefits including:

1. Real-time communication – for example, phone calls, emails (including large attachments) and faxes. This means that people can be in constant touch.
2. High-speed internet access – you can browse the web and download data files and software using your handset wherever you are.
3. Access to information – for example, watching the World Cup or accessing news bulletins.
4. Personal organisers – including electronic diaries and lists.
5. Global roaming – you can access services anywhere in the world (within 3's sister territories).

Asset-led marketing: Video conferencing for business people or schools linking with partner schools in other parts of the world

An asset is something you have possession of. In this case, Hutchison Whampoa owns 3, which is the UK's market leader in 3G. This provides customers with a much greater range of communications benefits than non-3G offerings.

Asset-led marketing involves using your material goods in the most efficient way – the market determines this. Wise marketers know that assets work best when they meet customer needs. Market research is therefore seen as imperative for 3. For example, it showed that ITV1 is a highly popular television channel.

Research also revealed that 3's customers wanted to watch ITV1 on their phones, so the company formed a link with ITV. The consequence is that 3's network works better to meet customer requirements – this is asset-led marketing.

Asset-led marketing involves using your material goods in the most efficient way.

3 is continually seeking to improve its network and services. This involves improving:

- the network;
- the content available through the network;

- links with mobile phone producers;
- links with global leaders in internet technology.

Conclusion

3G wireless technology provides an exciting new development in the way people communicate with each other. It enables us to use a much more comprehensive range of communication than previous forms.

Because of the greater bandwidth the new technology offers, there are tremendous benefits to be gained by business and private users. Features such as high-speed internet connections and the transmission of pictures and sound give users access to high-quality information wherever they are.

Future development

A major strength of 3 is an emphasis on anticipating and meeting customers' needs. The company recognises that it can continue to be the market leader only if its product remains superior to that of its rivals. This will only be the case if 3 understands what its customers want.

In a fast-moving industry, it is important to find out what clients prefer today, but 3 must also research their future requirements. It must also frequently research new technologies – in this way it will stay at the forefront of the field and retain market leadership. 3G is a developing technology and the greatest benefits are likely to come in the next couple of years. Because of its market leadership, 3 is ideally placed to continue to lead developments in 3G.

Source: Adapted from www.thetimes100.co.uk – reproduced with permission.

Discussion questions

1 We have seen how the mobile phone market fits the typical product life cycle pattern with the 3G digital phone now being in the growth stage.

How could Hutchinson Whampoa use the product life cycle model to develop future marketing strategy for the '3' brand?

2 What are the advantages and disadvantages of being 'market leader' in a market and assess the actions 3 is taking to maintain its market leadership position?

3 Provide a medium-term directional marketing plan for the company for its new video conferencing product, paying particular attention to the sales and distribution aspects of the plan.

CASE STUDY McCain: Responding to changes in the external environment

McCain's business

The McCain product most people recognise is Oven Chips. McCain is the world's largest producer of chips, buying 12 per cent of the British potato crop. McCain is also one of the world's largest frozen foods companies. McCain is a privately owned company with a strong market focus. This means that it carries out research to find out what consumers want. It then uses this market information to create products that consumers want to buy.

McCain's business is broader than just chips, with a range as wide as frozen potato specialities and frozen light meals. It provides consumers with a wide variety of cut and seasoned potato products through UK retailers, such as supermarkets and restaurants. These include roast potatoes, potato wedges, hash browns, waffles and potato croquettes. McCain produces more specific potato shapes like Potato Smiles, Crispy Bites and Sumthings (shaped as numbers) which appeal to younger consumers. McCain also makes pizzas.

Chips have come a long way since the potato was first brought to this country by Walter Raleigh in the seventeenth century. By the 1850s fish and chips were sold in the streets and alleys of London and in some of Britain's industrial towns.

17th century	Potato introduced by Walter Raleigh
1850	Fish and chip shops in London and major cities
1980s	Development of the oven chip
2005	Development of new varieties of low fat and salt content oven chips

If asked to name a typically English dish, most people will say 'fish and chips'. Chips are produced in lots of different shapes and sizes, ranging from those deep-fried in fish and chip shops to McCain's 5 per cent fat oven chips.

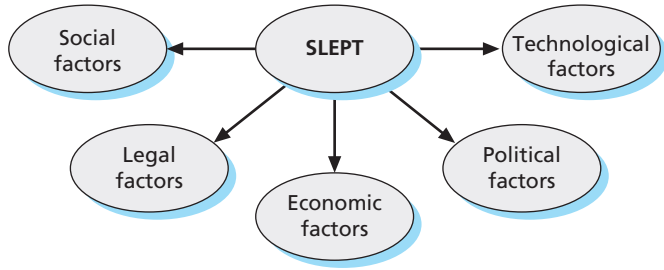
External challenges

One of the biggest environmental factors affecting McCain in 2005/06 was the growing concern about obesity, particularly in children. This case study shows how McCain has risen to the challenges of this debate and other external challenges.

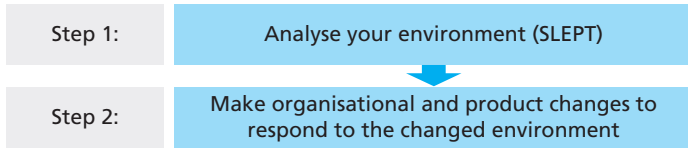
McCain's view is that its chips can and do play a role in a healthy balanced diet and it is continually finding ways to ensure McCain products are as healthy as possible.

SLEPT analysis and social factors

In order to be able to understand its customers' requirements and respond to other changes, it is important for a company to analyse its environment. A SLEPT analysis is a tool that helps to analyse the environment.



To create a SLEPT analysis the company needs to examine the key environmental factors that affect its business. These are broken down into:



Having carried out the analysis it must then take action to respond to the important changes that have been identified.

Of course, some of the factors in the SLEPT analysis can be placed under more than one of these headings.

The following analysis outlines SLEPT factors and indicates some of the changes that McCain has made and is making.

Social factors

Social trends are one of the key factors affecting a business. Consumer buying patterns are determined by trends. Just as the demand for some popular clothes are determined by fashion, demand for food products is determined by eating patterns. Eating habits are always changing. Currently one in four of all British potatoes consumed are eaten as chips.

Recently McCain and other food producers have seen a slowdown in sales as a result of campaigns to encourage healthier eating such as that spearheaded by Jamie Oliver. McCain has responded to this challenge in two main ways:

- by reducing quantities of salt and oil throughout its potato products range. McCain argues that these figures are very low already. For example, McCain's Oven Chips contain only 5 per cent fat, 0.8 per cent saturated fat and 62 mg of sodium in every 100 g portion. They are made with only natural ingredients – specially selected potatoes and sunflower oil.

- by seeking to get the message over that its chips are not unhealthy. The message that it communicates through public relations campaigns and advertising is that all McCain potato products are made from simple ingredients such as whole potatoes and sunflower oil.

A key way in which McCain has responded to changing customer tastes has been to improve the nutritional make-up of its products. All of McCain's potato products are now pre-cooked in sunflower oil instead of regular vegetable oil to reduce saturated fats. There is no added salt in oven chips and added salt has been reduced by up to 50 per cent in other potato products.

Legal factors

Responsible businesses not only abide by the law, they seek to create standards above minimum requirements.

Food labelling

McCain has to be aware of a number of legal factors. The government's Food Standards Agency has recommended that firms put 'traffic light' labels on food to help people understand what they are buying and to help them make the right choices:

- Red represents high levels of ingredients such as fats and salts.
- Green represents low levels.

McCain has put 'traffic light' labels on its British products as a response to consumer concerns about healthy eating. All of McCain's potato products are able to display the green label for saturated fat and none of its products show a red label. Also featured on the labels are Guideline Daily Amounts (GDAs) which show how much fat, saturated fat, sugar and salt each product contains. This helps the consumer to achieve a consistently balanced diet.

Oven Chips	per 135g serving oven cooked	% of GDA	Home Fries	per 135g serving oven cooked	% of GDA
MED FAT	6.8g	9%	MED FAT	8.4g	12%
LOW SATURATES	0.3g	4%	LOW SATURATES	1.1g	5%
LOW SUGAR	0.3g	1%	LOW SUGAR	0.7g	1%
LOW SALT	0.3g	5%	MED SALT	0.9g	14%

Advertising

In Britain, advertising of products is supervised by a voluntary body within the advertising industry. It is called the Advertising Standards Authority (ASA). McCain makes sure that all its advertising sticks rigidly within the requirements of the ASA. The ASA sets out that all advertisements must be:

- legal;
- decent;

- honest; and
- truthful.

McCain takes these responsibilities seriously. It is important to build a reputation for honesty and fair play.

In addition, McCain's products comply with a range of laws, including:

- The Food Safety Act, covering the way in which food is prepared and served.
- The Trades Descriptions Act, which states that goods and services must be exactly as described.
- The Weights and Measures Act, governing such aspects as giving the right weight on packs. For example, McCain's oven chips come in packs of 454g, 907g, 1kg, 1.5kg, and 1.8kg.

Economic factors

Economic factors include changes in buying patterns as people's incomes rise. For example, as incomes go up people prefer to buy what they see as superior varieties of a product type. We see this with the development of ready prepared foods.

As people become cash-rich and time-poor they prefer to switch to ready meals and simple to prepare foodstuffs that they can quickly heat in an oven or microwave. Rather than buying potatoes and making chips at home or taking the time to go to a fish and chip shop, it may be seen as more desirable to buy oven chips. Of course, it may be cheaper to make your own chips by peeling and cutting up potatoes. However, with growing affluence people prefer ready prepared oven chips.

Responsible eating and healthy exercise encourages everyone's health and well-being. McCain has risen to this challenge by creating a range of varieties, e.g. McCain's Straight Cut Oven Chips, Home Fries, roast potatoes and wedges, to appeal to a variety of customers.

Political factors

On political factors, the UK government has increased the pressure on food suppliers to come up with healthier foods. The government publicises and supports healthy eating by creating initiatives such as 'Healthy Schools'. This encourages pupils to think about the choices they make when choosing what to eat.

McCain supports the government's initiative. It believes that the foods that it provides, including potato-based products, are nutritious provided that they are prepared in a healthy and simple way.

Technological changes

Challenges of food technology

Food technology is one of the most dynamic technologies in the modern economy and it involves researching and developing new techniques for making products as

diverse as ice cream, probiotic yoghurt, frozen oven chips and muesli bars. Each of these products involves finding technical solutions to problems such as how to:

- freeze while retaining flavour;
- maximise natural nutritional characteristics;
- turn a frozen product into an oven heated product.

McCain is continually being faced by new challenges from technological factors. It should be no surprise therefore that McCain's food technologists were only too happy to rise to the challenge of making its potato products even healthier. McCain needed a solution that not only reduced fat and salt, but also kept the sort of flavour that would delight customers.

Solutions

The solution was to use sunflower oil which reduced saturated fats by 70 per cent across the whole potato product range. Food technologists know that by working with real potatoes they are dealing with a product with a very strong nutritional pedigree.

For example, it is a little known fact that potatoes are a major source of vitamin C in the UK diet. As a product, potatoes are the second most important staple food in the world today (rice is the first), providing essential carbohydrates that help us to generate energy.

Potatoes also have tremendous future potential. In 1995 the potato became the first vegetable to be grown in space. NASA worked with top scientists to develop super-nutritious and versatile potatoes. These can be used to feed astronauts on long space voyages and NASA hopes one day that these will feed space colonies.

Conclusion

Change comes from a number of sources – Social, Legal, Economic, Political and Technological.

This case study has illustrated how these changes have affected McCain, particularly in relation to its core products.

Change is the one constant in the business environment.

Because McCain is a market focused company it recognises that it has to respond to what its consumers want. There are clear indicators that today's consumers want to live a healthier lifestyle.

Consumers are increasingly aware of food content and food issues. More and more people look at food labelling and read information in the press about what is good for them. They listen to people like Jamie Oliver and government spokespeople. They listen to advice from teachers and nutritionalists.

The challenge has been, and continues to be, to prepare chips and potato products in the healthiest way possible. Fortunately for McCain, it has market researchers and food technologists who enable the company to keep in tune with the changing environment.

McCain's advertising supports the company's message that chips are nutritionally acceptable provided they are made in the right way. The challenge now is to keep listening to consumers and to the external environment in order to continue to give those consumers the best value healthy chips and other food products.

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Discussion questions

1. Most of the trends and changes in the macro marketing environment lie outside the control of the individual company.

   With this in mind, using the information in the case study discuss why McCains should concern itself with trends and changes in the macro environment.
2. How would the trends and changes in the SLEPT factors outlined in the case affect each of the elements of the strategic marketing planning process for McCains?
3. How could the salesforce contribute to analysing and responding to a changing market environment?
4. Markets continue to evolve and change. How can a company try to anticipate and forecast future important trends and changes in the macro environment?

CASE STUDY Syngenta: Developing products for a better world

The use of science for research and development into new products has helped to build Syngenta as a leading global agri-business.

Using R&D to improve agricultural productivity

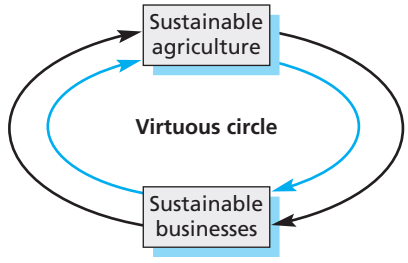
The population of the earth is growing at a fast pace. In 1950, 2 billion humans lived on the planet. By 2006, this had increased to 6.5 billion and by 2025, the world's population is expected to reach 8 billion.

This growth in population is expected to be in urban, not rural areas. This leads to a higher calorie demand per person associated with dietary changes. It puts a heavy burden upon the world's limited resources and further increases pressure on rural communities in the struggle to increase agricultural productivity.

In 1960 one hectare of agricultural land was required to grow food to feed two people. By 1995 one hectare was required to feed four people and by 2025 the same area will need to feed five people. Feeding this growing demand requires sustainable solutions for agriculture across the world. This involves balancing the need to produce food with concerns for the environment.

What is sustainability?

Sustainability is a 'virtuous circle'. If agriculture uses sustainable solutions it will be able to meet the needs of future generations and become the type of farming which future generations want to inherit. As sustainable businesses grow, they develop better methods and solutions to support farmers and growers around the world. Both communities and businesses benefit and local economies grow.



Who is Syngenta?

Syngenta is a leading global agricultural business committed to sustainable agriculture through innovative research and technology and whose customers are in the primary sector.

Syngenta is a relatively new company formed by the merger of the agricultural divisions of AstraZeneca and Novartis in 2000. Syngenta's goal is 'to be the leading

global provider of innovative solutions and brands to growers and the food and feed chain'. This provides the business with its direction as part of the virtuous circle. The company offers customers choice of chemistry, seeds and biotechnology products. More than 19,500 people work for Syngenta in over 90 countries. Its main activity is producing products that protect crops from weeds, diseases and pest infestations, and breeding and selling seeds of new crop varieties. This enables agricultural land to be used for the sustainable production of food.

Why research and development is so important

Syngenta works in partnership with over 150 organisations worldwide to research and develop sustainable agriculture practices. Research and development (R&D) into plant breeding and plant protection products by companies such as Syngenta is essential to ensure higher agricultural productivity. Without crop protection products it is estimated that 40 per cent of arable food production would be lost to pests and diseases. Syngenta invests almost US$800 million (about £500 million) each year in research and development to improve ways of growing and protecting crops.

Business to business

Syngenta operates in markets where transactions take place on a business to business (B2B) basis between companies rather than direct to consumers. This is why many people might not be aware of the company's name.

However, Syngenta touches nearly 95 per cent of the world's population through its products and activities. Within these markets, Syngenta uses its R&D knowledge, creativity and skills to give it competitive advantage.

The development of a new crop protection product or a new plant variety takes many years and requires a large investment both of people and capital. Syngenta's R&D invests over $2 million per day to ensure it has a pipeline of new products coming to market and to keep it ahead of its competitors.

The role of R&D

As society develops, consumer demands change to reflect different needs. Consumers want to choose from a range of fresh, high-quality products. To meet these needs in a sustainable way farmers have to balance environmental concerns with the need to produce food. Within Syngenta research and development are two separate, but closely integrated, functions.

Research is a systematic investigation to seek answers to agricultural problems. Scientists such as biologists and chemists develop technologies which may eventually lead to new products. For example, chemists investigate thousands of different compounds to see if they have the potential to be a new crop protection product. Once a suitable compound is identified, then development takes place.

Development involves turning the research findings into a product. Development scientists perform tests on the compound to see how it operates in realistic growing conditions.

R&D at Syngenta involves developing new products and supporting existing products. It can take nine years for a product to reach the market. This is a costly process. Syngenta can only achieve a return on its investment once new products reach the market. A new product is patent protected to ensure payback of R&D costs, but this protection only exists for a limited time. Consequently, Syngenta concentrates on fully patentable products to ensure payback and profit.

Syngenta's goals

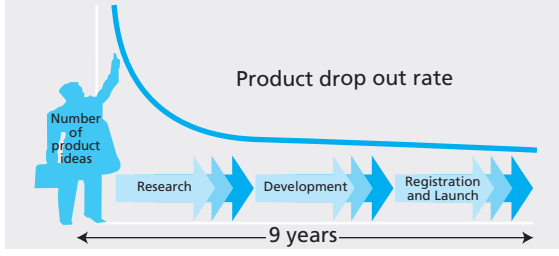
Syngenta's main goals for research and development are:

- to provide the most effective products for farmers and growers that are also safe for human health and the environment;
- to develop the best new plant varieties to gain higher yields and quality in a range of soils and weather conditions;
- to maximise crop productivity while maintaining and improving farmland biodiversity.

New product development

Finding a new compound and bringing it to market is a long process. Here are the main stages of the R&D process:

1. *Identify new areas:* The research needs to identify areas of opportunity. In crop protection this often starts with chemistry. Chemists look for new compounds which will overcome existing problems or where resistance to existing products has developed in pests or diseases.
2. *Test the new ideas:* Biologists then test the compounds to see if they have the active potential to become products while ensuring environmental safety.



3. *Trial in specific conditions:* Researchers and developers test whether the compounds would work in various conditions, for example, in open fields. By a process called formulation development the active ingredients become a product that farmers can use.
4. *Product safety:* Environmental scientists ensure that products are safe to use. This is an assessment which goes on throughout the above process.

5. *Support users:* When the products are launched, Syngenta provides support for farmers. This helps them use the products in the most effective way.

During the phases of research and development, a large number of compounds and plant varieties will be dropped because they do not meet the high standards required by the company and the government regulators.

R&D and environmental sustainability

Much of Syngenta's R&D focuses on the development of new products for farmers and growers, but the company also invests in environmental projects. These demonstrate how highly productive, profitable agriculture can go hand-in-hand with biodiversity and environmental sustainability. Two examples are:

SOWAP (Soil and Water Protection) Project

Soil erosion is a huge problem in arable farming, particularly when ploughed fields are subject to heavy rainfall. In Europe, around 200 million tonnes of soil per year is washed into lakes, rivers and roads, causing pollution and reducing agricultural productivity.

Working with around 25 project partners across Europe, Syngenta led a four-year project demonstrating how the practice of conservation agriculture reduced soil disturbance and helped provide permanent soil cover, and how diverse crop rotation can reduce erosion by more than 60 per cent. When applied correctly, conservation agriculture reduces water pollution and improves farmland biodiversity, while maintaining crop yields.

Operation Bumblebee

Bumblebee populations on UK arable farms have declined by more than 70 per cent over the past 30 years. This is because of changing ways in which crops were grown, which led to the loss of vital nectar food resources and nesting sites for bees.

One of the 20 native species of bumblebee has disappeared altogether. Three others are on the verge of extinction. Operation Bumblebee involved more than five years of research by Syngenta into the habitats for bumblebees, butterflies, spiders and other insects on farms.

The research involved a number of test sites within the United Kingdom. The edges of fields (field margins) were cultivated to create biodiversity sites. Scientists at Syngenta designed a special pollen and nectar seed mixture that included wild flowers and clovers. Farmers are trained to establish and manage these mixtures along the field edges. The impact upon the bee population was clearly beneficial.

Managing field edges in this way also produces major environmental benefits on farms while maintaining high food production. If farmers manage their farms this way they qualify for payments from the Department for Environment, Food and

Rural Affairs (Defra). In this way, as well as others, Syngenta has helped farmers to improve the environment.

Supporting farmers

Farmers get full product support. For example, Syngenta trains over 1 million farmers each year worldwide in the safe use of its products. Syngenta's representatives in the field use relationship marketing skills with farmers for repeat business. It also provides farmers with the confidence to try new products and innovations as and when they are launched.

Conclusion

With the rapid growth in world populations and developing economies, there are increasing demands upon limited resources.

Syngenta's approach is about providing sustainable solutions. At the centre of its approach to R&D is the use of science.

This makes the need for research and development vital for effective sustainability. The use of science creates knowledge and allows Syngenta to develop added-value products and services. Syngenta ensures that its business is able to respond to industry demands in a competitive world and has helped build competitive advantage.

Syngenta's work also benefits society. Successful R&D programmes help Syngenta build its competitive advantage and benefit the next generation of farmers and consumers. Its developments have helped improve the lives of many rural communities around the world. Improvements in agricultural productivity enable farmers to live healthier, safer and more prosperous lives and provide consumers with cheap, high quality food.

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Discussion questions

1. Are Syngenta's R&D activities technology or market led and how can marketing and sales help at each stage in the R&D process outlined in the case?
2. How would an understanding of product adoption and diffusion help in developing and marketing Syngenta's new products?
3. Comment on the view that as a commercial organisation Syngenta should restrict itself to developing and marketing new products for farmers and growers rather than investing in environmental projects. In particular what sales and marketing advantages might Syngenta gain from being involved in environmental projects
4. Why might relationship marketing be felt to be particularly effective to a company like Syngenta?