Portakabin: Developing products and services to meet market demand

Introduction
The Portakabin Group is a private company, owned 100% by the Shepherd family. This integrated Group is involved in the hire and sale of interim and permanent accommodation. Portakabin Ltd specialises in producing modular buildings. In modular construction, buildings are manufactured and fitted out in a controlled factory environment whilst the foundations are being prepared on-site. The customer's modules are then taken to the site, craned into position and linked together. Architectural features (e.g. external cladding, glazing, lifts, a stair tower or a pitched roof) are added on-site.

The divisions within the Portakabin Group reflect client's needs e.g. Portakabin Hire supplies interim accommodation and fittings such as air-conditioning, on hire, whereas Yorkon manufactures complex, architecturally designed permanent buildings.

Product range and development
Portakabin produces a range of specially tailored products that have attractive layouts, and good aesthetic qualities and are also highly energy efficient for different markets, including:

* Portakabin WardSpace - hospital wards
* Ultima - office buildings
* Lilliput - nursery schools.

Portakabin has supplied the healthcare industry with modular buildings in small numbers for a number of years. Recently, there has been an increasing demand for new high-quality healthcare buildings to relieve severe shortages of space in many hospitals. Portakabin has therefore developed a new product: Portakabin WardSpace. It is designed specifically to supply hospitals with much needed high-quality accommodation. The Portakabin WardSpace concept is a direct response to the National Health Service Plan (NHS), which is designed to improve care and service to patients so that they recover more quickly.

In setting out its plans for new building construction, the NHS is demanding a design solution that 'not only satisfies functional requirements but is also economical in both its capital and running costs i.e. cheap to build, use and maintain'. The Portakabin WardSpace design is modelled on a 32-bed ward, which is the largest practical size for nurses to supervise and observe. Every patient has convenient access to toilets and showers, all of which are single sex. Every patient has a generous area around the bed for visitors and personal belongings, a personal locker, a window view and access to entertainment services.

One main aim of Portakabin WardSpace accommodation is fast delivery to meet the urgent NHS agenda, with handover of the new buildings 24 weeks after the client has approved the plans. The wards are attractively decorated and fitted. The benefits of the design to patients are that there are more single person units to improve patient privacy and confidentiality, and more social interaction in the social areas, which leads to faster recovery.

External influences driving change and product development

Social
The NHS plan notes that 'the most notable change in today's society is the public's own increased expectations about the quality of the delivery of services, whether in the public or private sector'. The Patient's Charter sets out patients' rights. It states that people attending a healthcare facility for assessment, diagnosis, treatment or care can reasonably expect to have:

* confidential consultation and discussion with those responsible for their treatment
* total privacy when meeting the requirement for interventions and/or bodily functions
* a safe, clean, hazard-free environment, with a pleasant ambience.

All of these have implications for building design. The UK also has an ageing population. As a result, the demand for hospital space is continually increasing 'fit' a market worth being in.

Legal
New products must comply with all relevant legislation. In developing the Portakabin WardSpace design, Portakabin engineers researched all applicable aspects including air handling (to prevent the spread of airborne diseases) and
temperature control to meet hospital requirements. Other considerations included all aspects of health and safety, and fire control regulations.

**Economic**
The resources available to the NHS are finite. The NHS needs facilities that are:
* technically suitable
* comfortable for all users
* cost-effective to build, maintain and use.

Getting this balance right lies at the heart of all evaluations of hospital designs.

One of the key advantages to planners of a modular system like Portakabin WardSpace is that costs can be kept under control because of the certainty of the construction process, with new wards being constructed within a factory environment before delivery and assembly on-site. This contrasts with an outdoor building project based around steel, bricks and mortar, when capital costs can soar as a result of delays due to late delivery of materials or poor weather conditions.

**Political**
Along with education, health is a key issue for voters, and therefore with politicians. The NHS plan (above) is the government's attempt to revolutionise NHS service provision. The government is investing in solutions that maximise health gain, are people centred and resource effective. All of these have implications for design. The government's investment also means that money is available for innovative approaches to solving healthcare problems. The government also has a pressing agenda which demands that 7,000 new beds are available by 2004. The Portakabin WardSpace concept was designed to deliver against this agenda because of its speed of construction.

**Technological**
The use of computerised systems to hold, process and transfer patient information both digitally and by video at every point of clinical activity is rapidly becoming a reality. Portakabin WardSpace buildings incorporate a coding system, an integrated communications system that is attached to every nurse, so when a patient 'buzzes' for attention the nearest nurse can attend. Computer write-up points are also supplied in every bay to write up notes in the patient's vicinity, thereby improving efficiency.

**Research and development**
The PESt(L)E/SLEPT analysis revealed clear opportunities to develop Portakabin's product presence in healthcare, so the company carried out research to create a product carefully tailored to this market. This involved working with external experts who advised on health implications. To establish the required design, Portakabin's own architects also consulted with NHS Estates. Cost constraints were also considered: the new product had to be designed to stay within the purchasers' budget.

The next stage was to create a digital prototype. Modular wards were a new concept for the NHS and so Portakabin needed to educate potential purchasers. The company prepared support materials, including detailed layouts, images and a compact disc visual presentation to show the product in its best light.

**Product development**
The Portakabin WardSpace design was developed quickly to meet the opportunity presented by the NHS plan. Many ideas were generated in order to come up with a winning concept. These wards were to be constructed and fitted out within a factory environment and then assembled on-site. Factory construction has all sorts of advantages, including no rain to delay construction. Modular construction also meant that from design to finished building, a ward could be completed in just 24 weeks; potentially 50% of the time it would take a traditionally built ward to be created. Another major advantage that reduces timescales is that parts of the assembly are produced in batches. The components of a ward for a London hospital will be similar (if not identical) to those going to a hospital in Manchester. This slashes build programme time compared with on-site project manufacturing, where each unit constructed is a one-off in a method call job production.

As with all Portakabin products, Total Quality is built into product development. All of Portakabin's employees are trained and encouraged to come up with ideas for improving company performance e.g. by identifying ways to reduce waste or to improve customer service. The aim is to achieve continuous improvement in all aspects of performance; hence improving quality, cost and customer service with minimal disruption to patients and staff.

**Questions:**
1) What is the value proposition of Portakabin WardSpace?
2) Do you see a good strategic product-market fit in this case?
3) Describe the marketing research process followed by Portakabin for the Portakabin WardSpace product.
4) Which strategy has the Portakabin Group adopted?