10 OPERATION MANAGEMENT DECISIONS

Quality management

Quality - „the heart of Nokia’s brand promise”

In Nokia quality is the highest objective, not only being the characteristic of their products and services, but one of their most important essences. It is strictly linked with their pursue of continuous improvement, as they perceive it as exceeding customers’ expectation. Moreover as Nokia is one of the leading companies in the sector of telecommunications, high quality standards have to be maintained in every aspect of its operation.

Nokia wants to achieve excellence in the following fields:
- customer service and gaining customers loyalty (by taking care of the quality and reliability or their products and services)
- product leadership (improvement, innovation)
- operational modes - effective, efficient and ethical management

Management

As all operations influence the final quality of their performance (products, services etc), quality is managed from the top - starting with the quality of management, through processes to the final product. As the consistency of all actions is crucial in managing the quality, special framework for management practices („Self-Regulating Management System“) has been developed. In Nokia, „everybody in the chain has a role to play in achieving quality”, thus all the employee in all lines and operational units have to take it personally.

As the customer is the driving force in Nokia, so managing the quality is started with acquainted with customer requirements and then processes are continuously improved according to the feedback we received from the customers.

Service & product design

In all its businesses, Nokia cares about developing products that meet specific need of its customers. Thus for example, all the products of Business Solution mode are tailored to the requirement of specific entrepreneur seeking the optimal solution or him. While in mobile phone section, the lifestyle of the target group is also analysed.

Technology - “Not only Research but Development”

Nokia believes that effective research and development is vital to remaining competitive in the mobile communications industry. In 2005 about 36% of Nokia’s workforce was involved in R&D in centers in 26 countries. Nokia invests a substantial portion of our resources in research and development long and short run activities supporting the development of new products as well as seeking for cutting edge technologies for future ventures.
Blending cutting edge technology with high fashion - “experience design”

When designing the product, emphasis is put not only on the its technological aspects but also on the layout. In Mobile Phone section fashion designers are incorporated in to the process of developing a new product.

DESIGN STAGES:

Target group study
The main thing is to start with an understanding of the user, the consumer, and the life they are living. Within Nokia there are specialists who do that research in a methodical way. The researchers travel the world, “accompanying people to work, watching them eat, sleep, meeting their friends…. watching every step of their lives to find out: what items of all their possessions they use everyday, and in which particular way”.

Choosing the theme and developing the product
Then the leading theme for the design is developed. This process involves the designers but people who can carry the idea through all the areas. They create and develop a theme or story, and then need to communicate that theme to show how it affects the design language, the selection of materials, the colours and graphics, not just of the product but the packaging, advertising etc. So in Nokia they aim to design an experience rather than a product.

Testing
Finally the prototype is tested on the target group to assure for example by checking if they choose the designed developed for them from bunch of others. So in Nokia they design the experience not a product. That’s why all the aspects of the product i.e. how it’s packaged; what accessories are available; the kind of environment it may be sold in; what services should be targeted to the consumer of that product is also controlled to create a coherent experience for the customer.

Here are some examples of some “experiences” developed by Nokia.

NOKIA 7600 - “A souvenir from future”
The original inspiration was the idea of a “souvenir from the future,” and this influenced not only the design of the phone, but also the on-screen icons and wallpapers, ringtones, key graphics and accessories, all of which were designed specifically for the product.
Supply-chain management

For Nokia, supply chain management is a very important operational area. They perceive it as a significant competitive advantage of their business. They require that all products and services sold under the Nokia brand comply legally with human rights and workplace practices throughout the value chain. The efficiency of their supply-demand network helps them in meeting the growing demand for their products. The close cooperation with customers and suppliers is one of our core development principles. Moreover, it promotes diversity in the supply chain (including companies owned by minorities, women, etc.) and strives to include suppliers from all over the world.

Nokia’s supply chain includes direct sourcing (material supply for Nokia products, such as components, parts, packaging, contract manufacturing, software development, and research and development) and indirect sourcing (office equipment, services, etc.).

Requirements

Nokia expects the companies in its supplier network to take a similar ethical, environmental, managerial business approach. Nokia’s requirements are stated in a set of global Nokia Supplier Requirements (NSR) based on international standards. They recognize standards and management systems which are equivalent to or exceed their own requirements.

- The ethics requirements include mainly Human Resource Management standards such as fair compensation, working conditions, training and competences, etc. (to read more click here)
- The environmental requirements comprise the demand of environmental management system (EMS) and compliance with Nokia’s standards for materials and waste management (to read more click here)
- Whereas the managerial requirement imposes the corporate governance driven by conduct policy, such as a code of conduct, defining the standards of performance of the company in all their aspects.
**Giving support to the suppliers, training**

Nokia offers their potential suppliers its support in meeting the *Nokia Supplier Requirements*. It provides training focused either on their expectations and the management of labor conditions or Design for Environment practices enabling all companies, that want it, to comply with the high standards required by Nokia.

**Monitoring**

Having once selected the supplier, Nokia carries out systematic assessments of the suppliers performance to ensure compliance with the Nokia Supplier Requirements. This assessment are carried put by trained Nokia assessors, its results are communicated to the supplier and if needed appropriate course of action is recommended. Moreover and in-depth labour conditions assessments are performed 5-10 times per year. For Nokia, also supplier self evalulation is a useful tool for improving their supply-chain.

**Look at supply chain issues from an industry perspective**

Despite being the leader on the market, Nokia keeps close cooperation with other entities on the market, working together on to improve their operations. In 2004 Nokia joined the *Global e-Sustainability Initiative Supply Chain* working group. The aim of this group is to promote good conduct and develop tools, management practices, processes, and systems to assist members in dealing with supply chain issues. Other GeSI members include Nokia co operators as opponents (for instance Motorola, Sun Microelectronics, Telefonica)

**Substance management**

Nokia requires that all components and parts supplied to us are compliant with the *Nokia Substance List*, which identifies substances that Nokia has banned, restricted, or targeted for reduction with the aim of phasing out their use in Nokia products. Suppliers are required to have a record of the raw material content of products supplied and, if needed, to provide end-of-life treatment recommendations. To ensure the high quality and compliance with all Nokia standards, Nokia even tracks the origin of raw materials used by the suppliers because supply chains in the electronics industry are both long and complex. Moreover suppliers are recommended to adopt similar practices.

**Human resources, job design**

In May 2007 Nokia’s personnel was over 68,000 employees. The staff includes fulltime, part time and contract employees. As Nokia recognizes their needs and different life styles, it provides them flexible working conditions including teleworking or working at remote.

One of the Nokia strength are the employees. That’s why it aims to created them the best working environment and growth opportunities. It conducts several programs to encourage them to submit their own ideas and contribute to the company’s growth such as ‘Listening to You’ annual survey or conducted by intranet "Ask HR" that gives a prompt and openly published response for all queries.

Employees are encouraged to be responsible for their own development and to take advantage of the various development opportunities available such as „submit your venture proposal”. In turn, Nokia offers them a company-wide incentive and bonus systems to trigger innovativeness and help to shape their careers.
Moreover Nokia co operates also with students, giving them opportunity to get experience and in future become a part the company.

**Location**

As a global company, Nokia operates in over 130 countries with the headquartered in Espoo in Finland, in the origins of Nokia. To create cutting edge technologies, it carries out researches in technologically advanced countries. Moreover, according to its diversity and location policy, Nokia wants to cooperate with companies form different locations as gaining new markets is one of the companies goals.

**Process, capacity design**

Due to the inherent properties of the telecommunications market, Nokia is required to be very flexible. Each quarter new technologies, solutions and cutting edge products are introduced. That’s why it is critical to be able to quickly adapt to changes. In this case incorporating new technologies in all the processes is invaluable and helps to achieve flexibility Although telecommunication products have rather short lives, Nokia has design the capacity to ensure meeting all the demand (capacity built in view of demand supports the credibility of Nokia).

**Layout design**

Nokia as a international company also uses global manufacturing network that gives them the ability to respond quickly to changes in demand and technology. They have suppliers in all parts of the world so that they can easily introduce changes to their processes and the utilization of resources is optimal.

**Scheduling**

Average life cycle of a mobile phone is about 2 years and during one year many new models are introduced. That’s why production of one line of products is done simultaneously with the research and design process of new products. Scheduling and taking measures in anticipation of new ventures is in this case a critical issue.

**Inventory management**

Thanks to joint ventures and close cooperation with their supplier, Nokia can optimize their inventory levels. The suppliers as Nokia partners also participate in product development process, what helps better assess the needs of the future production. Efficient management of the inventory is also supported by the diversification of the location of suppliers. Moreover Nokia builds its inventory in view of demand, minimum levels of the inventory has to be maintained.

**Maintenance**

Providing training and development for their employees is one of the Nokia’s promises. They pay much attention to be in touch with all new technologies and maintained the high level of well trained staff.