

Nokia's Product Innovations

INNOVATIONS DES PRODUITS DE NOKIA

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Abstract: Innovation is the process of making improvements by introducing something new. In Nokia this definition follows very strictly. Over the years Nokia has produced successful models. This paper deals with Nokia technological innovation in the market that is sports tracker. Sports Tracker is a GPS based activity tracker that runs on S60 smart phones. With the help of these models from Nokia people can get the information of location and can upload photos. This paper provides strong evidence what keeps them ahead of its competitors and as a number one company what are the challenges they are facing from its competitors. Finally the paper concludes how sports tracker is helping the people in their day to day life and what will be their future move in product innovation.

Key words: Innovation, Nokia, Sports Tracker, GPS

Résumé: L'innovation est le processus d'amélioration par l'introduction de quelque chose de nouveau. Nokia suit cette définition très strictement. Au fil des années, Nokia a de bons modèles réussis. Ce document traite l'innovation technologique de Nokia sur le marché de sports tracker. Sports tracker étant une activité de poursuivre basée sur le GPS fonctionne sur les smartphones S60. Avec l'aide de ces modèles de Nokia les gens peuvent obtenir les informations de localisation et peut envoyer des photos. Ce document fournit des preuves solides à ce qui les tient avant ses concurrents et comme le numéro un d'entreprise ce que sont les défis auxquels ils font face à de ses concurrents. Enfin, le document conclut comment Sports tracker aide les gens dans leur vie quotidienne et ce que sera leur futur mouvement dans l'innovation des produits.

Mots-Clés: Innovation, Nokia, Sports Tracker, GPS

1. INTRODUCTION

Nokia Innovation Center Tampere is an open innovation network, where information flows freely between collaborators and joint teams regularly work together to achieve world-class scientific research results. The first and central collaborator in the center is Tampere University of Technology (TUT). The center was officially opened in September 2007, and about 80 researchers are currently involved in its activities. Nokia Innovation Center has its facilities in the Hermia Science Park, Tampere, Finland,

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* Received 2 May 2008; accepted 1 June 2008

within walking distance from both Nokia Research Center and Tampere University of Technology.

Nokia Innovation Center Tampere focuses on the following things

- content and media ecosystems (future digital media; maintaining and sharing personal content between various devices).
- smart UI solutions (camera-end image processing; visual user interfaces for the next generation experience).
- printed electronics (miniaturization and electronics integration) .
- modular system architectures (advanced computer architectures and devices).

In March, 2007, they posted a mobile phone application called Sports Tracker on a company Web site that is open to the public. The program, still a work in progress, was designed to let runners and cyclists take advantage of the global positioning capability included in some Nokia models. Users can record workout data such as speed and distance, and can plot routes. The response to Sports Tracker was overwhelming. Eventually more than 1 million people downloaded the program and used it for sports the developers never dreamed of, such as paragliding, hot-air ballooning, and motorcycle riding. More importantly, the users avidly provided criticism that Nokia (NOK) then used to make improvements. For example, developers added the capability to create online groups where users can share favorite routes and even photos they took along the way. According to Jussi Kaasinen a member of the team at Nokia Research Center in Helsinki that developed Sports Tracker "People were misusing the application in creative ways."

2. SATISFYING THE DEMAND OF URBAN POPULATIONS

Nokia, is obsessive about consumer research, the site is an alternative to the focus groups and surveys that are usually used to gauge consumer reaction to a new product. But, though the cost of managing the site is negligible, saving money is not the main motivation. Nokia is not looking at the cost we're looking at, it's how we are making the application better for the consumer," says (Jari Pasanen). Beta Labs is part of a broader push by Nokia to harness customers and partners in the service of innovation. At Nokia.com the company allows users to share and rate applications they have created such as screen-savers or games. And over the past year, Nokia designers have traveled to the developing world to ask users to sketch their own dream cell phones. By yearend, more than half the world's population is expected to live in urban areas, so to exploit this mega-trend Nokia's researchers visited shantytowns Mumbai, in India, Rio de Janeiro, and Accra in Ghana. One person's design included a sensor to test water quality—a potentially useful application in some emerging markets—while another person wanted a handset that flashed the word "Peace" to help defuse conflicts. Nokia's fear was that people would come up with ideas that already existed, like a phone with a camera. But suggestion of people were much more creative (Younghee Jung).

3. PRIME DESTINATION FOR TECH BUYERS

Ever since Nokia launched the Beta Labs Web site last year, with Sports Tracker as the debut application, it has tested some 20 not-quite-ready-for-prime-time programs directly with users. Other applications have included the latest version of a program that allows users to download maps onto their handsets, and a program that lets people get access to data on their handsets remotely via a PC Web browser. The Beta Labs site has become a prime destination for the so-called lead users—tech-savvy buyers of high-end, N-Series phones which Nokia executives prefer to call multimedia computers. The site generates more than 1 million page views and about 200,000 downloads a month, according to Nokia. Thousands of users contribute by comments. Right now Nokia having the positive problem of how to manage all the feedbacks Nokia's plan is to turn blogging responsibility over to software developers, so

they have direct contact with customers (Tommi Vilkamo).

For Nokia, the benefit of free applications such as Sports Tracker is getting owners to take fuller advantage of the computing power of their handsets. Judging from the number of people who not only downloaded the program, but also uploaded routes and photos onto a sharing site, the strategy is a success. People are also taking advantage of the fact that the software records location information when users snap a photo with the handset camera. Users upload maps embedded with photos they took along their route to a sharing site Nokia established for the purpose, creating a multimedia diary of their day's voyage.

4. NOKIA AHEAD OF MOTOROLA

Nokia (NOK) saturates the booming mobile-phone market in a way neither Moto nor any other competitor has been able to duplicate. Nokia's formidable lineup of some 100 models is just one of many reasons why more than one out of every three handsets in the world traces its origins to the Helsinki suburb of Espoo. The former producer of rubber boots and timber, which famously made a risky decision in 1992 to focus on mobile technology, seems to be doing everything right these days. Nokia's supply-chain management may be the best of any company in the world. By diversifying its products and its geographical reach, Nokia now seems far less vulnerable to shocks than it was three years ago. Nokia has definitely learned from its experience in the past and that's why they have spread their risk a lot more (Neil Mawston). One lesson Nokia learned was that it doesn't pay to rely too heavily on a few top-selling models. Motorola, by contrast, became overly dependent on the Razr. Nokia has nailed both the high and low ends of the market and pretty much everything in between. For affluent buyers who want the latest technology, the \$750 top-of-the-line N95 includes an Internet browser, music player, GPS satellite receiver, and the ability to connect to Wi-Fi networks as well as standard cellular services. Even Nokia's entry-level phones offer extras that appeal to Mumbai tea sellers and vast numbers of other low-income people enjoying their first taste of telecommunications. Its \$45 model 1200, for example, can go more than two weeks without a recharge and has a built-in flashlight, handy for people who live in homes without electricity. Nokia's dedication to the security of SSL remote access and feature rich initial product sets it apart from other competitors in the marketplace (Jason Wright). The company has invested hundreds of millions of dollars building distribution systems and networks of retailers in developing countries, including vans that bump along the rural roads of India between stops for instruction on how to use mobile phones (BusinessWeek.com, 05/04/07, "Nokia Gets It Right for South Asia"). As a result, it's the No. 1 handset supplier in China and India and is growing fast in Africa, the industry's next frontier. Meanwhile, Motorola's low-cost phone for India has been a flop despite a \$35 price tag, in part because its limited features didn't convey a sense of status to potential buyers. Most impressive is that Nokia has managed the shift to low-cost phones while maintaining healthy profit margins. The company earned an operating profit of 16.8% on mass-market mobile phones in the first quarter of 2007, a modest decline from 18.5% a year earlier. But that doesn't even include Nokia's high-end multimedia devices, which had a profit margin of 18.8%. In the most recent quarter, net profits were \$1.3 billion on sales of \$13.4. (Business Week.Com 19/07/07). Nokia makes money at the low end because of its superefficient manufacturing systems. It also keeps costs and complexity under control by sharing components among devices and designing phones that have fewer parts than competing models. Such practices pushed Nokia to the No. 1 spot last year in Boston consultancy AMR research's annual survey of top supply chain operators.

5. CHALLENGES OF NOKIA

Nokia still has weaknesses. Its E Series devices for the corporate e-mail crowd lag rivals such as Research In Motion's (RIMM) BlackBerry and are unprofitable. Swedish rival Ericsson (ERIC) is far

ahead of Nokia's joint venture with Siemens in the market for base stations and other mobile infrastructure. And in design, Nokia faces a serious challenge from Apple (AAPL) and its hot iPhone. Nokia has only a few touch-screen products and none as advanced as the iPhone, with its glass surface and finger-operated interface.

6. CONCLUSIONS

Nokia Sports Tracker is a GPS based activity tracker that runs on S60 smart phones. Information such as speed, distance and time are automatically stored to our training diary. Recorded data can be exported to Google Earth. Sports Tracker is an example of how Nokia has begun experimenting with user-generated innovation. That's the premise behind Nokia Beta Labs, a Web site where the Finnish handset maker lets users test the latest smart phone software. Nokia developers are realizing that aiming the application at amateur athletes was too narrow. They are thinking of rebranding the application as a kind of life-tracker. Based on the response to the software on Beta Labs, that may well help drive users to Nokia's Ovi Web portal (also in beta testing), which is the basis of Nokia's attempt to carve out a big piece of the evolving, mobile Internet. Nokia has been awarded the annual Frost & Sullivan Product Innovation Award for its Nokia Secure Access System SSL VPN solution. This award recognizes Nokia for excellence in new product innovation within the network security industry. In a recent analysis entitled World SSL VPN Markets, Frost & Sullivan studied Nokia -- one of the first large security vendors to enter the secure sockets layer (SSL) VPN market -- and its Nokia Secure Access System SSL VPN solution. (Business Wire 05/11/03). Although Nokia's product is so successful in the market but there are challenges for Nokia which they have to look after and have to meet the customer's demand successfully like what they did over the years. Nokia will continuously face challenge from its competitors but time and again, the Finns' consistently excellent distribution, manufacturing, and marketing have prevailed. It will take more than one cool phone to threaten Nokia's dominance.

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