

# Heidelberg, honeywell, and eaton: essay



**ASSIGN  
BUSTER**

1. Why should manufacturing companies build smart products and provide smart services? What business benefits can be gained? Provide several examples beyond those discussed in this case? In business, " Smart" means solving problems fast and efficiently. For manufacturing companies, decreasing the cost, increasing the profit and expanding the market are the benefits they can obtain. If manufacturing companies can develop smart products or smart services, they can gain those benefits. In the paragraph, it said maintenance is one of the key elements in the life cycle of a product.

The function, efficiency, reliability and permanence will also be the other key components to affect the market. The more functions a product has, the higher price will be sold. If a product can enhance the reliability and permanence, both customers and companies can diminish the cost when they try to fix the products. The other important thing for a product is operating efficiently. High compatibility not only create high value added product but also raise the efficiency.

Combining above can build a brand image and expand the market. Thus, a company can reach the terminal goal of the business and gain the benefit. .

What information technologies are used by the companies in this case to build smart products and provide smart services? What other IT components might be used? Give example of the capabilities they would provide.

The main information technologies used in the Heidelberg case are built-in sensors and networking microprocessors, kinds of self-monitoring and networking capabilities. Honeywell developed Experion Process Knowledge System (PKS). This information and operation technologies system is

deployed by a customer but controlled and monitored by Honeywell via network connections. The other manufacturing company, Eaton, designed “Home Heartbeat”.

This system use water sensors, open/closed sensors, and power sensors. The sensor system connects with a wireless network and notifies the amiss via the other alert system such as e-mail or text message of the cell phone. The three companies may be able to consider other information technologies such as customer relationship management, supply chain management, database management and intra- or extranet. For maintenance points, building a mature list of customers’ preference and requirement can attract more purchasers. Moreover, collect more information about the product such as consumable can balance more exact budget.

At last, developing and managing intranet and extranet which transfer the database can make the product or the service operate more efficiently. 3. What are some limitations of a smart products and smart services strategy? Give several examples that a business might encounter, and explain how it might overcome them. Information technology and smart product or service strategy is closely connected and inseparable. The direction to grow the information technology will affect the strategy to market the smart product or service.

There are some different types of information technology such as hardware, software, telecommunication network, and database management. To mature those technologies, high research and development (R&D) expense is unavoidable. Considering more realistic way and designing step by step

may be able to decrease the cost. Also, seeking more sponsors or cooperating with government is the other solutions.

The maintenance expense is the other cost. Although those companies develop some efficient and convenient maintainable way for customer, both company and customer still have to spend some money to upkeep.

Educating customers how to upgrade or upkeep by themselves may be the way to overcome. How to find the cheaper substance and increasing the compatibility between different system will be the two factors which affect the reliability.

For this part, friendly cooperation or skill exchange between the industries can offer more resources and splash for a new smart product. The last limitation will be the security problem. Database not only in intranet but also in extranet always has to face the high risk of stealing. Personal recognized system is necessary for protecting the confidential database. The entrance guard and the control center could be added to enhance the safety.

Furthermore, the discard confidential database and resource sharing program should be process carefully. At last, the complete and continuous education is required for every employee in the company.