Case study: mobile worker

Q1:WHAT KINDS OF APPLICATIONS ARE DESCRIBED HERE?
WHAT BUSINESS FUNCTION DO THEY SUPPORT? HOW DO
THEY IMPROVE OPERATIONAL EFFICIENCY AND DECISION
MAKING?

- > TECHNOLOGY ADVANCE HELP TO MAKE WORK EASIER
- MAKE WORK TO FASTER AND MORE SYSYEMATICAL
- > CAN CONNECT WITH OTHERS PEOPLE
- ➤ MORE PREDICTABLE AND REALISTIC

- Q.2: Identify the problems that business in this case study solved by using mobile digital devices.
- ability to communicate and observe the same items whenever they are not all in the same place.
- <u>iPad</u> give him instant access to entire operation
- iPhone and <u>iPad</u> become so indispensible

- PepsiCo runs about 17000 distribution routes each day.
- The iPhone and iPad help employees of PepsiCo's North American Beverage division ensure that the right product arrived in the right locations as quickly and efficiently as possible.
- PepsiCo drivers and merchandisers began each day by picking up printed schedule with order quantities and task to be performed at each outlet, It was difficult to accommodate last-minute changes in orders because communicating with the delivery was difficult when they were on the road.
- PepsiCo North America Beverages created a customer inhouse app for the iPhone called Power4-Merch, which immediately notifies merchandisers when a driver has arrived at the store. The merchandiser's iPhone has a electronic timecard, and he can see his schedule, the store details, the account profile, and everything he needs to know to service the store.

3. What kind of business are most likely to benefit from equipping their employee with mobile digital device such as iPhone, iPads?

1. Hospitals

For example, Doylestown Hospital has a mobile workforce of 360 independent physician treating thousand of patient. They use iPhone 3G to stay connected around the clock to hospital staff, colleagues, and patient information. The Doctor use iPhone feature to e-mail, calendar, and contact from Microsoft Exchange ActiveSync.

Transportation

The companies such as Johnson & Johnson, Coco-cola, Apple use ChaiLing applicant Mobile for its 30 driver that updates shipment information, collect signature, and provide global positioning system (GPS) tracking on each box it delivers.

Mobile banking

Banks and other financial institutions use mobile commerce to allow their customers to access account information and make transactions, such as:

- check bank balances
- process bill payments
- · transfer funds between accounts
- · verify deposits and other transactions

Q4: One company deploying iPhone has said, "The iPhone is not a game changer, it's an industry changer. It changes the way that you can interact with your customers and with your suppliers. "Discuss the implications of this statement.

- Give the competitive advantage to a firm
- Easy to manage the information system among employees
- Give a new an opportunity and innovation in the strategies of competing in industry form a firms to market a product or service.

Case study 2: Ups competes globally

What are the inputs, processing, and outputs of UPS's package tracking system?

Inputs: The inputs are detailed information (customer information, package information), pickup, delivery, current location, bar coded label, special software program by using the UPS Web site.

Processing: The all information are transmitted to a central computer, distribution centers, logistical planning, (DIAD) program which was their drivers had been hand held delivery information Acquisition Device, called UPS net, DIAD is collected from scan able label on packages, and changing schedules.

Outputs: UPS served tools that able to a customer which is Cisco Systems, to include UPS functions, such as tracking and cost calculations, into their own Web sites. Destination (on the way), pick-up and delivery schedule.

2. What technologies are used by UPS? How are these technologies related to UPS's business strategy?

UPS has used the dispatchers in computer center to download the label data and use special software to create the most efficient delivery route for each driver that consider traffic, weather condition and the location of each step. By using the software, UPS estimate it save 3 million fewer gallon of fuel of every year. This technology related to UPS's business strategy which is best services and lowest rates.

Moreover, to accomplish business strategy which UPS want to increase cost savings and safety, UPS are train driver to use "340 Methods" to optimize the performance of every task from lifting and loading boxes to selecting a package from a shelf in the truck.

UPS has also used hand held computer called Delivery Information Acquisition Device (DIAD) which can access wireless cell phone network. Drivers can know their task by hand held, the DIAD has a function which is automatically captures customers signatures.

3. What strategic business objectives do UPS's information systems address?

Scannable Bar-code: One of the MIS business strategy objective. this system's objective is to use time more efficiently and use low labor force in classify the packages destination and reduce human error in classifications that will reduce the cost. It means by reducing cost they can keep up the lowest rate.

In delivering UPS uses special software that help drivers to take the most efficient routes to deliver the package, plus this system considers the traffic and weather conditions.

DIAD: Every driver has device that has information about at automatically captures customer's signature along pickup and delivering information from UPS's central computer. Every deliver person can access information about the package and the customer can check the package it delivered or not. Also the signature that from the delivery will be proof, sender can check it.

Cisco system: contains the customer can know about their packages information more detailed such as shipping rates, determine time in transit, print labels, schedule a pickup, and track packages. Those actions can get the high technology to the senders and it can reduce the time losing. They can check their tracking and cost calculations and shipments cost without the UPS site.

OMS: Advanced delivering system that takes packages from the warehouse of companies and delivers their fulfillment parts of equipment more quickly with in efficient routes.

4. What would happen if UPS's information systems were not available?

If UPS's information systems were not available, UPS will face some problems. The process of providing information to customer will become slow. The customer cannot receive the information rapidly.

The operation of UPS will also become slow. Because UPS is using technology and information to monitor and control the operation when information system does not available, it will effect to the operation of the organization.

Case study: mashaweer(exercise)

Question 1:

What Kinds of applications are described in this case? What business functions do they support?

Answer

The applications described in this case are: PDA, centralized application and SCADA. The business functions that the case supports: Manufacturing and production, finance and accounting and human resources.

Enterprise Resource Planning (ERP)

A process by which a company (often a manufacturer) manages and integrates the important parts of its business. An ERP management information system integrates areas such as planning, purchasing, inventory, sales, marketing, finance, human resources, etc.

CISCO

A leading manufacturer of networking equipment, including routers, bridges, frame switches and ATM switches, dial-up access servers and network management software. Cisco was founded in 1984 by Leonard Bosack and Sandra Lerner, a married couple both employed by Stanford University. Initially targeting universities, Cisco sold its first router in 1986.

Mashaweer's Server

Another software components developed by Innov8 include the Mashaweer Server. The Mashaweer Server is a centralized application that manages the following elements:

- Orders (Placement, editing, pricing, review, tracking and reports)
- Routes management and optimization
- Clients (Management, reports, discounts)
- Packages tracking
- Contracts
- Call Center
- Satellite offices
- Representatives
- Cash transactions and expenses tracking or representatives and satellite offices
- Asset tracking and satellite offices
- Asset tracking of vehicles, PDAs and mobile printers
- Management reports.

Application Programmers' Interface (API)

The Application Programmers' Interface (API) is a set of programming instructions and standards for accessing a web-based software application or web tool. A software company releases its API to the public so that other software developers can design products that are powered by its service.

SCADA (Supervisory Control and Data Acquisition)

SCADA is a category of software application program for process control, the gathering of data in real time from remote locations in order to control equipment and condition. SCADA is used in power plants, as well as in oil and gas refining, telecommunications, transportation, and water and waste control.

Major Business Functions:

- 1. Manufacturing and production: Assembling the product
- 2. Sales and marketing: Identifying customers
- 3. Finance and accounting: Creating financial statements
- 4. Human resources: Hiring employees

Question2:

What are the benefits from equipping their riders with PDAs?

Answer

Through this technology Mashaweer decreases the amount of errors due to the fact that the messenger is tied to an automated process where he receives his tasks through the PDA handheld. And also to manages the following:

- 1. Tracking the order items progress.
- 2. Track the collecting of order fees.
- 3. Messaging the riders.
- 4. Track the cash and expenses.
- 5. Synchronizing data periodically and at the beginning of each shift.

Question 3:

Was it a good decision to expand the business to Cairo? What are the implications of information Systems?

Answer

Yes it was a good decision to expand the business to Cairo since the succeed in Alexandria.

The implications:

Mashaweer heavily depends on technological advances that occur every day and depends on the tools so it benefit from the advancements and prices reductions that continuously take place. As a result Mashaweer's total costs will be decrease, enabling it to decrease its prices and further improve its quality to become even more convenient for a large number of people.

Question 4:

Do you think that Mashaweer will be able to accomplish their future strategy and sustain its market share?

Answer

Yes, Mashaweer will be able to accomplish their future strategy and sustain its market for below reasons:

Mashaweer is an online supermarket that will enable people to do their grocery shopping through Mashaweer's website and get it delivered by its representatives within 30 minutes of placing the order. Mashaweer's call center is expected to make up an important revenue stream for the company in the near future, as the company starts introducing marketing campaigns. Using the technology they have invested in building their infrastructure, Mashaweer now has the potential to easily enter and penetrate other markets in different regions as a very low initiation cost.

Question 5:

Do you think in near future, the competition between Mashaweer and Wassaly will be aggressive? Why?

Answer

No. the competition between Mashaweer and Wassaly will not be aggressive as Mashaweer is the only company of its kind in Egypt that operates on this scale. However, there is a company called Wassaly that was established in Cairo after Mashaweer's success in Alexandria.

Wassaly cannot compete with Mashaweer because they have following advantages:

- Database of thousands of loyal clients.
- Self-investment is manageable
- Highly qualified and carefully selected riders
- Delivery sector in the Egypt.
- Various revenue streams.
- Being the owner of the IT Company