

Conceptual Overview Of Mo-DeL System

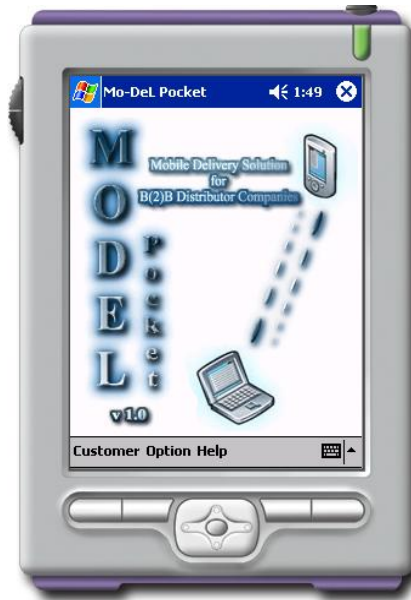
### Future Work:

I started this project at 23 February 2004. So the time to implement this project is very little, nearly 7 weeks. So the Mo-DeL System is not finished yet, some parts still missing and some of them are weak. But the completed parts are all right for the first version.

In the next version of the system, I plan to improve the modules and add more functionality to the system. For example, the most important missing part is the best before date, and management of stock according to best before date. In the next version it can be added in to system.

Security parts and extra modules should be added in to system. The things that I implement in this project are hand-made security guards. Crypto algorithms, SSL and some other security parts should be added. Maybe a computer to serve as firewall can be added in to system.

Also some other optimization process can be applied to the web service, windows and Pocket PC applications' methods. By this, the performance of the system may be increased as today's e-commerce application require robust and fast operation.



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## Mo-DeL Delivery System

Mobile Delivery Solution  
 For  
 B(2)B Distributor Companies



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## Idea:

The growth of the Internet demands that businesses provide clients with a better, more efficient user experience. Web Services have been created to make applications communicate each other across businesses and solve the interoperability of applications across operating systems, programming languages, and object models.

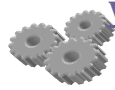
On the other hand, the most capable personal digital assistants (PDAs) used today are more powerful than many of the desktop computers in use just five years ago. For this reason, many organizations are turning to smart devices as a way to improve operational efficiencies and gain a competitive advantage.

While powerful devices represent one source of opportunity, the ubiquity of the Internet represents another. How does an organization successfully exploit the Internet to integrate these devices with its infrastructure?

In addition, how does an organization integrate its operations with the dissimilar systems and platforms that its customers and business partners use?

Therefore, in this project, I've searched answers to this question through improving the existing delivery systems with web services and MS .NET smart device extensions. In my point of view, the business to business delivery system is the relation between a distributor company, its workers and experts.

“Speeding up the processes and time saving in all sectors” is the main idea of this decade.



## Work Done

Lots of delivery companies use different kinds of technologies to automate and speed up their delivery processes. Generally used devices are connectionless hand terminals, PDA's or Pocket PC's. Instead the Pocket PC's and PDA's are smart and have enough hardware capabilities for connection, designed systems so far are not real time. So information about orders, sales, stocks etc. are updated at the end of days, this cause a big time delay and this time delay sometimes- can cause big problems and chaos.

Mo-DeL system is a connection based real time system. The mobile clients, which are on the market, can communicate with the base over web service and update the shared database simultaneously. So, stock changes, sales, orders, and many other data can be seen actively by other clients and base applications.

### Mo-DeL Base

I have built windows application that can be used in selling-accountancy of the distribution progress in the base. On this application, connected with the web service, the sales, orders and stock changes can be watched real-time.

### Mo-DeL Pocket

Smart device application, which is tested on the Pocket PC 2002 emulator and assumed that the device is connected to the internet via GPRS every time, can be used by the experts who take orders or make sales, and also by workers who deliver the goods and get payments.

## Mo-DeL WebService

The web service which I developed is used transform and store information between applications which are run on different platforms and different computers. It is back office platform of my project which stores information about what and how much is ordered or sold, which expert or worker make the sales, the payment styles, and the stock information about cars/trucks and also customer information. (Generally needed information about distributor companies.)

I tried to make my project as flexible as possible to use any kind of products that will be delivered. So if it will be applied to the real world, I decrease the number of the needed modifications on the program, according to the different sectors.

## Subsystems

Main modules of the system have enough capabilities to be used as fists version, but if the project would be extended, modules can be improved and seperated to different applications and also different platforms.

- Ordering & Sales Management
- Basic Stock Management
- Stock & Supply Management
- Customer info. & Questionnaire System
- Administration System
- Management Info. System (CRM reporting)

As an addition a module to handle offline scenarios added into Mo-DeL Pocket. If the GPRS connection is unavailable, experts/workers go on their works without any difference, their sales, orders and other records are buffered in a little database located in Pocket PC. When the connection is available, the buffered information is sent to the base immediately.

