Application Development and Business Planning for the MotorolaTimeport Wireless Device
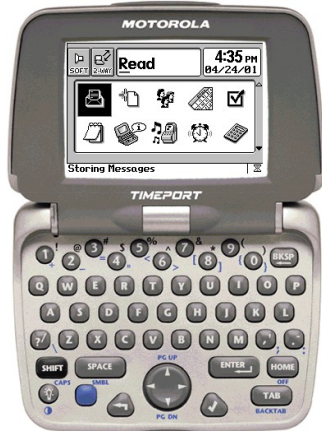
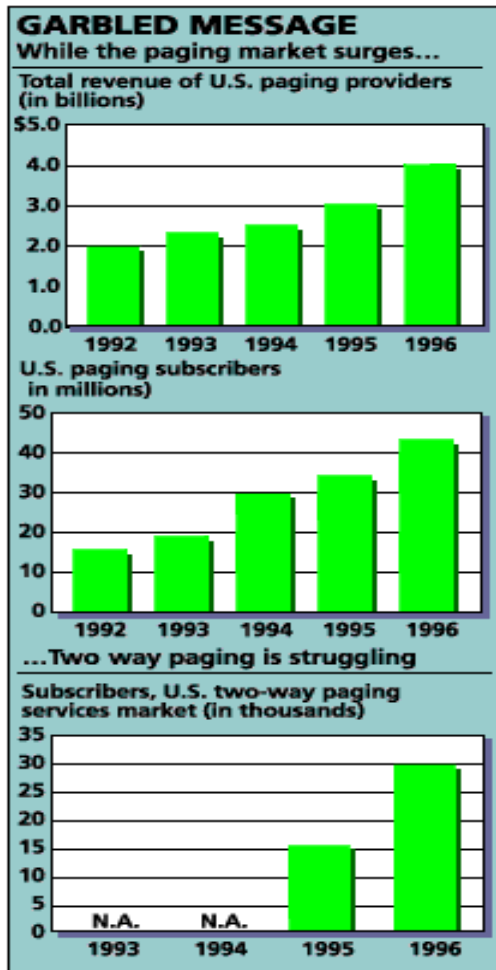Presented April 27, 2001

By:

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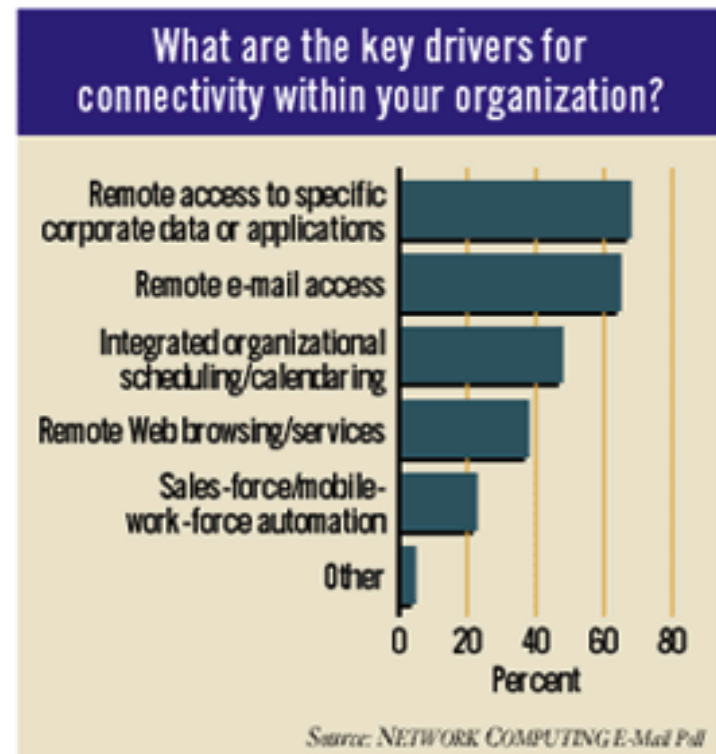
Background - 1

- The world is becoming increasingly more reliant on wireless communications.

- People are striving for ways to efficiently and effectively collaborate and communicate with each other.
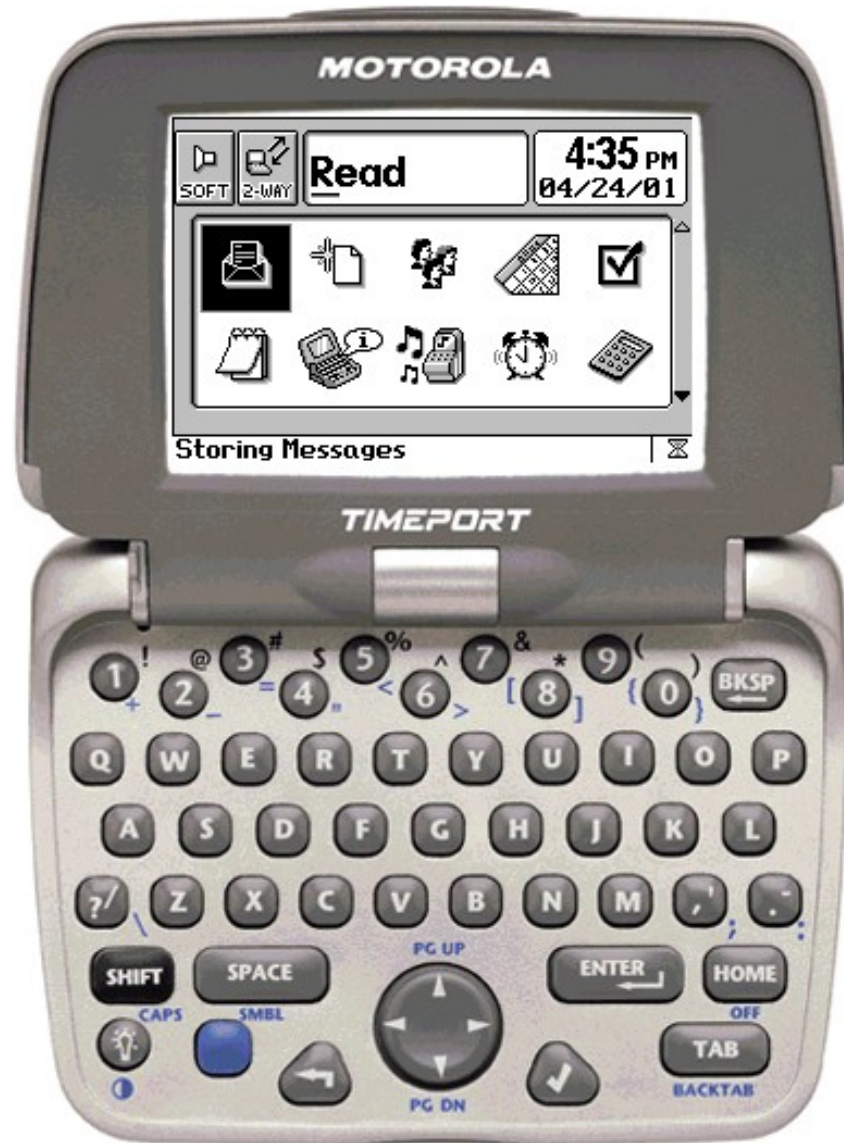
Wireless Communication Trends

GARBLED MESSAGE
While the paging market surges...
Total revenue of U.S. paging providers (in billions)
U.S. paging subscribers (in millions)
...Two way paging is struggling
Subscribers, U.S. two-way paging services market (in thousands)
Source: Dataquest Inc.

What are the key drivers for connectivity within your organization?
Source: NETWORK COMPUTING E-Mail Poll

Motorola Timeport - 1

- The Motorola Timeport is a two-way messaging/paging device.

- Communications features include voice mail, e-mail, paging, and short 2-way messaging.

- Applications include calendar and games, and other applications for various purposes can easily be downloaded to the device.

Motorola Timeport - 2

Project Goals

- To determine how to best market the Motorola Timeport two-way messaging device to universities as a tool for students, faculty, and staff.

- To develop applications that would be useful for the university environment.
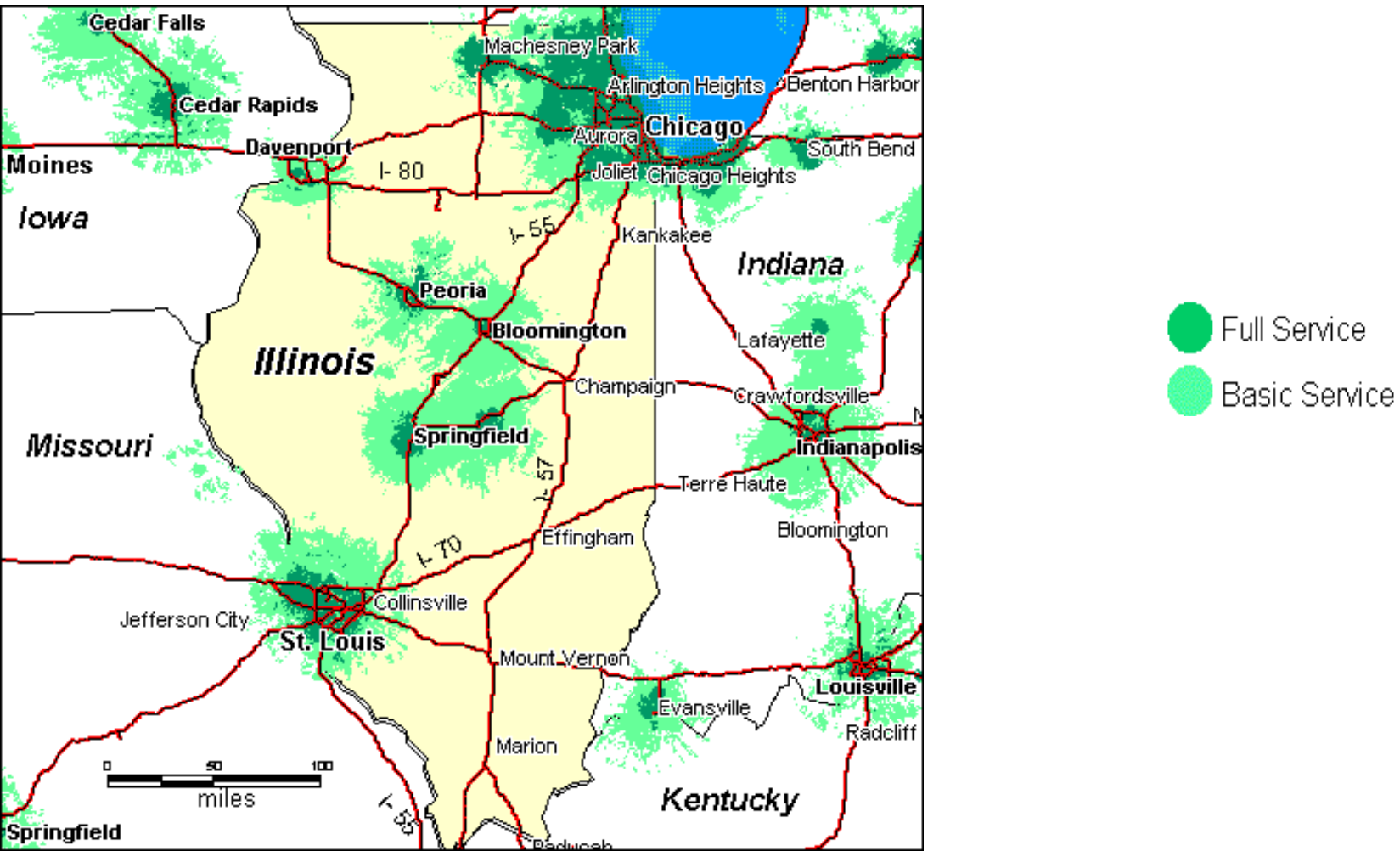
Approach

- Divided into 4 teams, each of which focused on a different aspect of the project.
  - Needs and Features Analysis Team
  - Device Comparison Team
  - Software Development Team
  - Usability Testing Team

Needs and Features Analysis Team

- Goal – To determine various features that would be necessary to market the Timeport as a tool for university students.

- General device features determined to be necessary include:
  - Make the device cheaper
  - A user manual included with the device

Device Needs - 1

- The device's coverage area should be increased

Device Needs - 2

- The device needs a new navigation method

Device Needs - 3

- Software applications determined to be useful for the device include:
  - An application to query a university's master calendar
  - An application to query a university's phone listing
  - Web browsing software

Device Comparison Team

Goals: - To examine the features of various wireless devices including pagers, cellular phones, and personal digital assistants.

-To determine which devices are best suited for university students.

Device Features

Pagers

Cell Phones

Ideal Device

-Short text messaging; SMS

-alpha-numeric data

-PIM functions:

Calendar, Tasks-List, Memos

The Ideal device would take on the necessary aspects of all devices

-Voice capability

-real time communication

-Email

-Web Query

-HTML browser

PDAs

Internet Features

Device comparisons

Pagers	Motorola's Accompli 009	Motorola V. Series V100 Personal Interactive Communicator	Motorola's Timeport	RIM (Research In Motion) Pager
Voice Capability	yes	yes	no	no
Calendar	yes	yes	yes	yes
SMS	yes	yes	no	no
Short Text Mgs.	yes	yes	yes	yes
Email Access	yes	yes	yes	yes
Web Query	yes	yes	no	yes
HTML Browser	no	no	no	yes
Color Display	yes	no	no	no
Available Currently	no	no	yes	yes

PDA's	Handspring Visor Prism	Palm VIIx	Sony Clie	Microsoft Pocket PC
Voice Capability	yes*	no	no	no
Calendar	yes	yes	yes	yes
SMS	no	no	no	no
Short Text Mgs.	no	no	no	no
Email Access	yes*	yes	no	yes**
Web Query	yes*	yes	no	yes**
HTML Browser	yes*	yes	no	yes**
Color Display	yes	no	no	yes
Available Currently	yes	yes	yes	yes

* w/ visor phone or modem   **requires phone and CompactFlash modem

Cell Phones	Ericsson R380	Ericsson A2628s	Motorola's V. Series™ V8162 Phone	Samsung Uproar	Samsung Stinger (expected release later this year)
Voice Capability	yes	yes	yes	yes	yes
Calendar	yes	no	no	yes	yes
SMS	yes	yes	yes	yes	yes
Short Text Mgs.	no	no	no	no	no
Email Access	yes	yes	yes	yes	yes
Web Query	yes	yes	yes	yes	yes
HTML Browser	no	no	no	no	yes
Color Display	no	no	no	no	yes
Available Currently	yes	yes	yes	yes	no

Ericsson R380

-possesses most of our defined features

-lacks an HTML browser and color display

Motorola Timeport

P935

Accompli 009

Timeport offers a few key features which make it an ideal device for the university student:
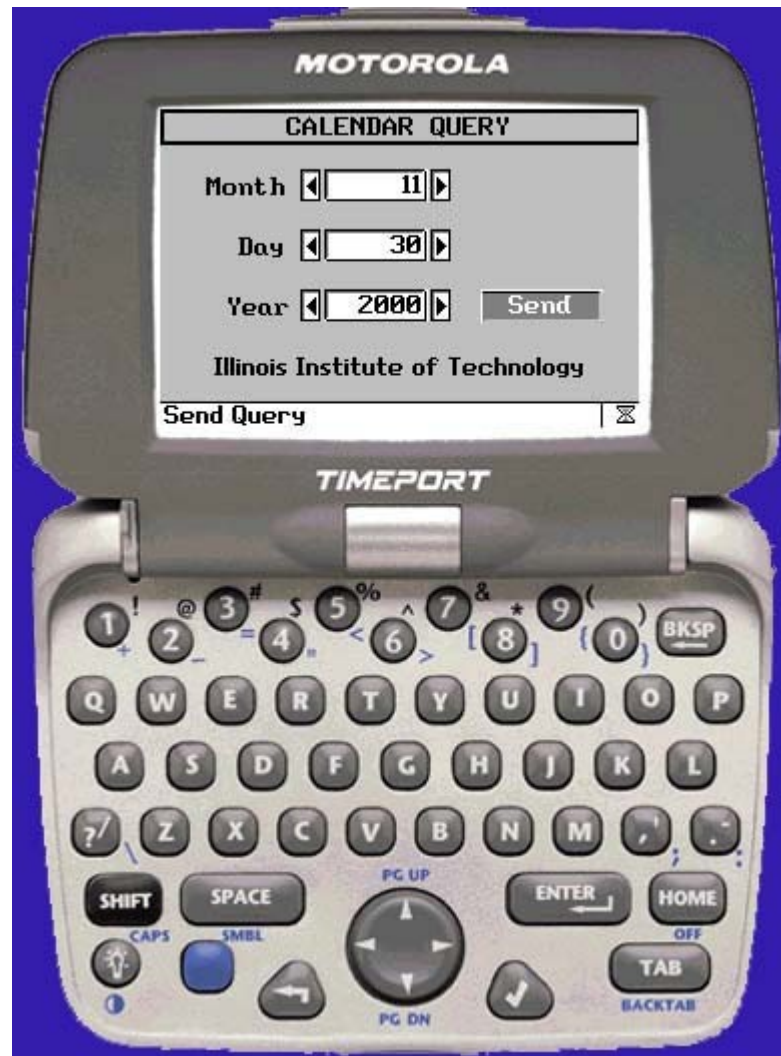
-Simple interface using a QWERTY keypad for quick messaging

-Software development kit allowing for user-defined applications
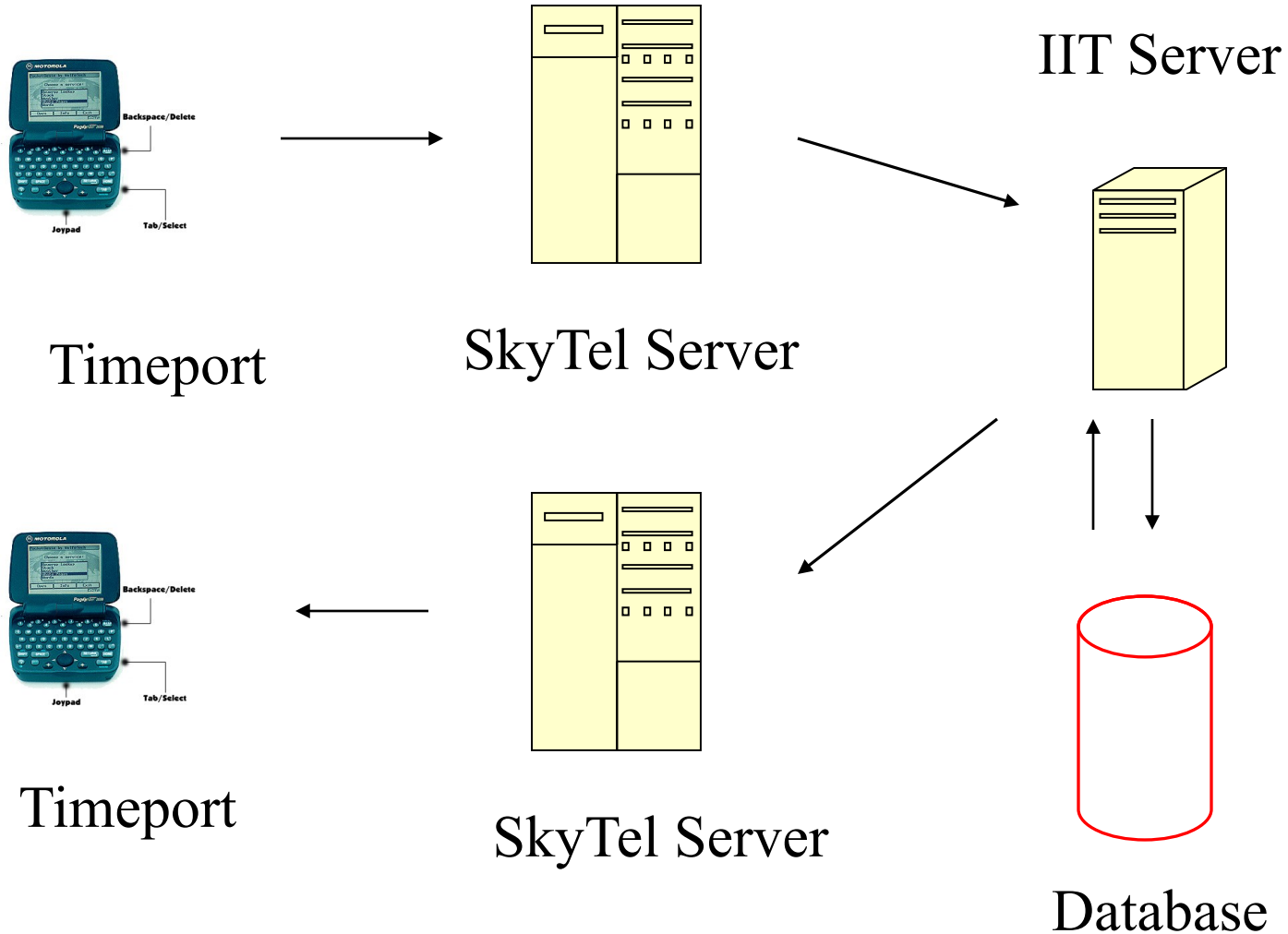
Software Development Team

- Goal – Implementing software applications for the Timeport determined by the Needs and Features Analysis Team to be valuable for university students.
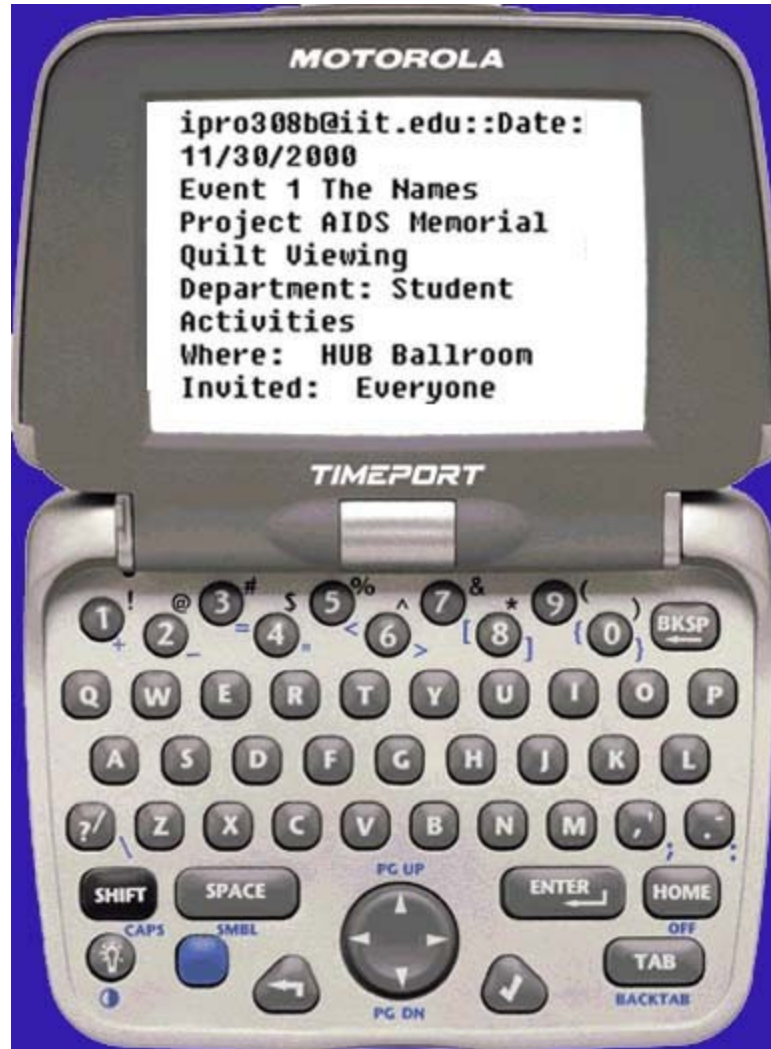
Calendar Query Application -User Requests A Query

Message Being Processed

Timeport

SkyTel Server

IIT Server

Timeport

SkyTel Server

Database

Message is Received

Usability Testing Team

- Goal – To conduct usability testing on the Timeport device and the software applications developed for it by the Software Development Team.

- Procedure and Methods for Testing

- Results and Recommendations

Business Plan Team

- Goal – To develop a business plan for Motorola and Skytel for marketing the Timeport device to universities as a tool for students, faculty, and staff, using the findings of the IPRO team.

Business Plan - Analysis

- Cellular Phones are typically superior wireless devices

- Universities contain untapped potential for consumers and providers

- Timeport can be adapted to tap into this potential

Business Plan - Solutions

- Start by advertising the "wired campus" to small schools, then increase in size

- Attract both faculty and students to use the Timeport

- Train students to operate a help desk

- This will open doors for further technological integration in universities