



**PLUG IN** TO  
**THE WIRELESS WORLD**  
M2M Communications

**wavecom**<sup>®</sup>

短信仍然是今后工业**GSM**通讯的主流  
北京wavecom专营店 [www.sendsms.cn](http://www.sendsms.cn)



# SUMMARY

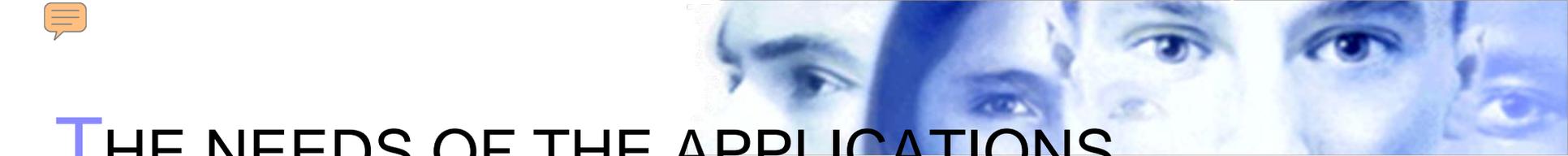
- Can the Rapid rise of SMS act as a Catalyst for M2M?
  - M2M Applications overview
  - Our approach
  - SMS: Strengths and Weaknesses
  - SMS: Offering a value added services platform at low cost
  - SMS: Attractive for GPRS deployment
  - Will SMS advantages still be suitable for M2M in years to come ?



# M2M APPLICATIONS OVERVIEW

## ■ M2M main applications :

- Utilities (remote metering)
- Alarms / Security
- Vending machines (maintenance / m-commerce)
- Machines maintenance (lifts, copiers, billboard, industrial programmable controllers)
- Fleet management systems
- Retail / POS systems



# THE NEEDS OF THE APPLICATIONS

	Utilities	Alarms	Vending	Maintenance	Fleet	POS
Events	✓ SMS	✓ SMS	✓ SMS	✓ SMS	✓ SMS	
Regular Update of Information	✓ SMS	✓ DATA / SMS	✓ DATA / SMS	✓ DATA / SMS	✓ DATA / SMS	✓ DATA
Large files transfer		✓ DATA /	✓ DATA	✓ DATA	✓ DATA	✓ DATA
Transaction security Acknowledge		✓ SMS / DATA	✓ SMS / DATA		✓ SMS / DATA	✓ SMS / DATA
Very low Cost	✓ SMS	✓ SMS	✓ SMS	✓ SMS	✓ SMS	✓ SMS

# OUR APPROACH



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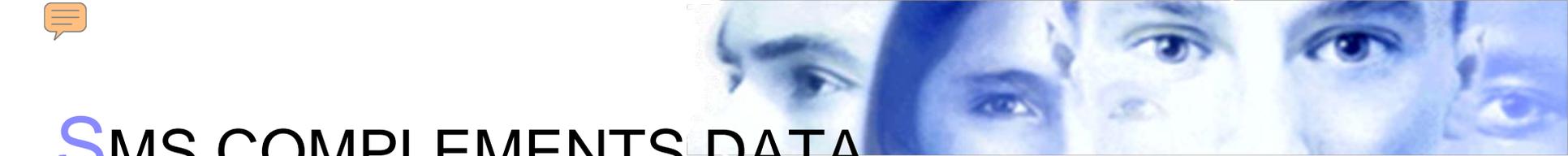
# SMS STRENGTHS / WEAKNESSES

## ■ STRENGTHS

- Already implemented in the networks (use only signalling channels)
- Cost effective bearer
- Available virtually everywhere
- Supported by all terminals
- Acknowledge facility
- Store and forward
- Proven technology
- As simple as sending an email...

## ■ WEAKNESSES

- Latency
- Message length limitation
- Depends on network signalling traffic load
- No minimum time of delivery
- Store and forward



# SMS COMPLEMENTS DATA

## *Today's applications*

- SMS : highly attractive commercial option
- Quick design of applicative software  
*(as simple as sending an email...)*
- Store and forward facility may be needed
- Prepaid SMS and specific SMS packages are already existing
  
- Data calls for large files transfer
- Data calls as a backup solution for SMS



# VALUE ADDED SERVICES PLATFORM AT LOW COST

- People can launch their application today:
  - Immediate service deployment
  - Global coverage (SMS is fully available)
  - Appropriate terminals are available (modems/modules)
  - Cost effective solution (Signalling channel usage)
  
- Applications will last:
  - Service continuation and migration (can operate both on GSM and GPRS networks)
  - SMS attractive in initial GPRS deployment
  - GPRS will deliver SMS as packetised data

# CASE STUDY: JC Decaux

**JCDecaux**  
communication extérieure

- Customer profile
  - World Leader in urban communication
- Application
  - Remote control of advertising sign
  - Two-way SMS:
    - Advertisement updates
    - Breakdown warnings
- Wavecom solution
  - Integration of WMOD2 modem





# CASE STUDY: JC Decaux



## ■ The needs

- Remote management over GSM :
  - Real time information update (allows time sharing advertising facility)
  - Alarms / maintenance
- Job despatch for the workforce
- Need of a flexible solution (billboards, traffic signs, public toilets)
- Communications operational costs



## ■ Why SMS?

- Suitable for a daily file transfer
- Appropriate cost of communications
- 2-ways solution



# CASE STUDY: DIGICORE (South Af.)



## ■ Customer profile

- Product integrator for a leading car leasing company

## ■ Needs

- Tracking of vehicles / Theft avoidance
- Driver behavior monitoring (mileage, speed limits, etc)
- Remote diagnosis of vehicles (oil, water,...)
- Reduced insurance costs





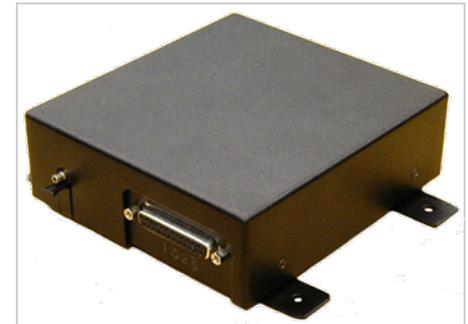
# CASE STUDY: DIGICORE (South Af.)

## ■ Services for end-user

- Breakdown assistance
- Enhanced leasing services  
(possibility of pay per mile)

## ■ SMS

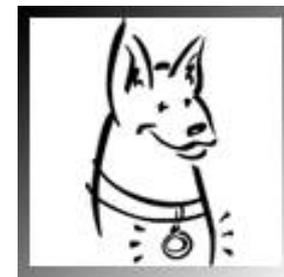
- Sustainable operating costs
- Store & Forward facility
- Suitable for small amount of data





# NEW POSSIBLE APPLICATIONS

- Device-to-device
  - Ex: Coffee machine (shown at CeBIT)
- Dogs tracking
  - GPS + SMS solution (recovery / insurance fees)
- Rat traps alarms
  - SMS (food chain protection)
- Many others...



it is up to your imagination!



# SMS V/S THE INTRODUCTION OF GPRS

- SMS store & forward capability will still be an advantage
- GPRS will overcome SMS latency and throughput
- GPRS charging can help for long series of SMS (SMS as packetised data)
- Still coexistence of SMS and GPRS for small data to transfer (cost effective)
- BUT... step by step introduction of GPRS



# THE GPRS HYPE

- All markets have big expectations about GPRS
  
- What you will NOT have from day one
  - Roaming facility
  - High bit rate
  - Interoperability testing
  - Appropriate tariff options
  - Efficient customer care service
  - Simultaneous voice / data
  - MO : OK / MT : ?
  - GPRS global coverage
  
- A gap between this reality and the way GPRS is promoted today
  - Focus only on high bit rate !

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# OUR VISION

- Starting today with field proven / cost effective / future-save solution : SMS
  
- All industries not ready to change their terminals (continuity / migration)
  
- Operators to consider M2M markets
  - SMS / Data calls at appropriate cost
  - New subscribers database
  - Heavy users – No churn !
  - Revenues diversification

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# THE WAVECOM APPROACH

- M2M dedicated products:
  - Line of professional products
  - Upgradable products:  
SMS / Data / Voice -> GPRS
- Develop M2M expertise
  - Organization
  - Partnership
- Being proactive...



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# CONCLUSION

- A need to trigger M2M markets
- Educational market stage
- People shall start today:
  - Everything is already existing
- Operators to take M2M into consideration:
  - Offer appropriate SMS/airtime tariffs
  - Being proactive for M2M solutions
  - Return on investment :
    - New / additional sources of revenues
    - Differentiation factors
    - Low risk of churn

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# CONTACT INFORMATION

## ■ 北京wavecom专营店主要业务：

- 代理销售wavecom原厂M1206B、M1306B FASTRACK系列产品
- 生产基于wavecom Q24PL芯片系列的短信猫（工业手机）

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