Applications and Solutions
What the future in Russia and Eastern Europe will look like

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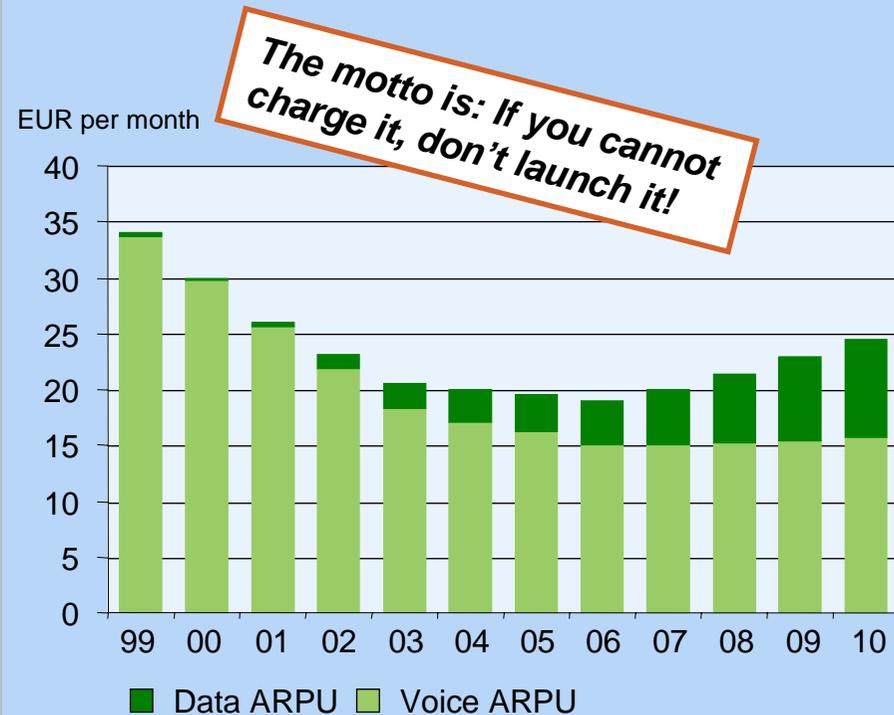
Siemens mobile networks
Moscow, September 2004

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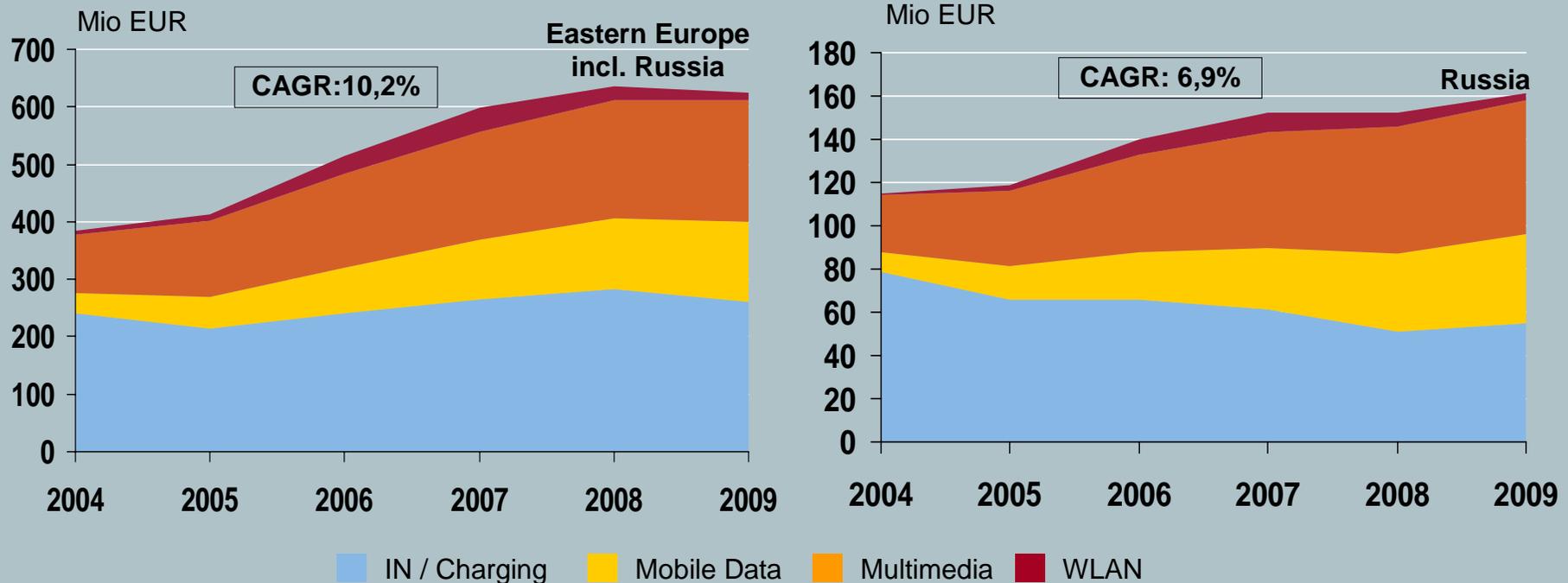# Apart from the roll-out of a smart network operators can increase ARPU by introducing innovative mobile services

With innovative mobile services operators can

- **Increase their data ARPU up to €2 through multi-media services**

- **Increase enterprise ARPU up to 70%**

- **Charge everything they launch**

- **Secure growth and ARPU through flexible and fast tariff changes**

The motto is: If you cannot charge it, don't launch it!

EUR per month

Chart showing Data ARPU and Voice ARPU from 99 to 10:
- 40, 35, 30, 25, 20, 15, 10, 5, 0 (y-axis)
- 99, 00, 01, 02, 03, 04, 05, 06, 07, 08, 09, 10 (x-axis)

■ Data ARPU □ Voice ARPU

Source: ICM N SM Market Assessment
Status: August 2004

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The demand for innovative mobile services in Russia and Eastern Europe will increase within the next five years

Mio EUR — Eastern Europe incl. Russia

CAGR: 10,2%

(Chart: stacked area chart, 2004–2009, y-axis 0–700)

Mio EUR — Russia

CAGR: 6,9%

(Chart: stacked area chart, 2004–2009, y-axis 0–180)

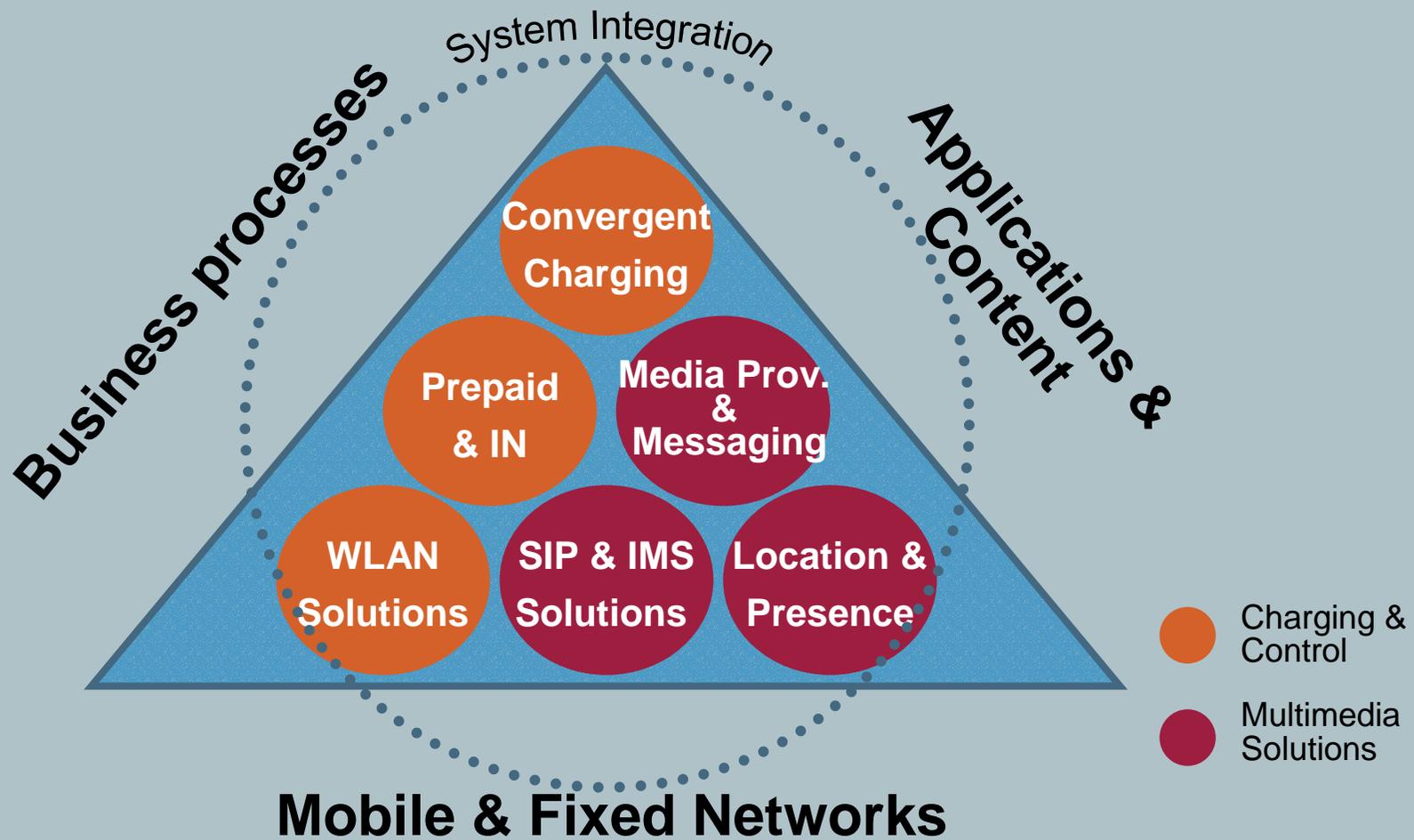Legend: IN / Charging | Mobile Data | Multimedia | WLAN

- Growth mainly triggered by ramp-up of Multimedia Services, Mobile Data, and Convergent Online Charging (leveraging and expanding Prepaid Solutions)
- Croatia, Serbia, Bosnia-Herzegovina, Macedonia, Slovenia, Romania, Bulgaria, Hungary, and Poland grow significantly above EE-average (CAGR: 10,2 %)

Source: ICM N SM MA, August 2004, incl. Service

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What the future in mobile communication in Russia and Eastern Europe will look like

System Integration

Business processes

Applications & Content

Convergent Charging

Prepaid & IN

Media Prov. & Messaging

WLAN Solutions

SIP & IMS Solutions

Location & Presence

Charging & Control

Multimedia Solutions

Mobile & Fixed Networks

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It is all about seamless user experience and increased enterprise efficiency

End-customer expectations		Challenges for the Operator
Freedom of choice		Present a broad variety of best-in-class services along with flexible pricing
Don't care for the network		Provide services agnostic to networks and technologies
Personalized communication		Adapt services to context and user profiles
Unleashed potential		Support corporate customers' business processes

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It can be seen as a leadership strategy for operators to focus on …

Applications and services to generate revenue and increase APRU

Convergent Online Charging to secure revenue

System integration to address sub-scribers' expectations of a seamless user experience and increased enterprise efficiency

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Operators who are already navigating towards 3G can also increase their ARPU by pushing New Multimedia Services

Communication

- Push and Talk over Cellular
- Instant Messaging
- Picture Chat
- Multimedia Conferencing

**Multi-Media
Multi-User
Multi-Session**

- Photo Share
- Push-to-Flirt/-Show
- Person-to-Person Gaming
- Audio and Video Streaming

- Info Channel
- Information Sharing
- Interactive guidance
- Collaborative working

Entertainment

Information

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Next generation messaging (NGM) stimulates new messaging revenues by comfortable and simple user experience

Messaging today

End-User View

click → save
        send

→ via MMS
→ via Email
→ via SMS
→ via IrDA
→ to MML
→ pictureshare

???

Technical View

SMS | VMS | UMS | MMS / WAP

NGM allows simplicity…

…and tomorrow!!

click, save , send, buy…

via NGM

!!!

Data
Functions
Interface Layer

Reduce Opex

Time to Market

Capex

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Push and Talk & Instant Messaging bind existing and attract new users with community services

Simply press a button and speak - „Walkie-Talkie" style

Send immediately messages to one ore more of your peers depending on their presence & availability
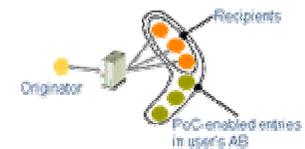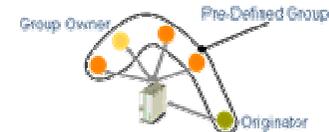
Chat Group

Group Owner — Group Participants / Members

1-to-1 sessions

Inviting User — Invited User

Ad-hoc instant group talk

Originator — Recipients — PoC-enabled entries in user's AB

Instant group talk

Group Owner — Pre-Defined Group — Originator

Trendsetting options for communities

- Kids community loves multimedia chat

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Multimedia Streaming and Download
allow profitable business with multimedia content

CONTENT

| News/ Sports |
| Games |
| Live Cam |
| Video E-mail |
| Pictures/ Sounds |

STREAMING

VIEW

DOWNLOAD

View NOW the goals from the soccer championship!

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Location Based Services increase ARPU by enriching applications with subscriber's position

A-GPS high-accuracy positioning opens high-revenue location market

Mobile operators can chose a tailored solution for all their requirements

Low-investment entry solutions are also available for high-accuracy positioning

Future-proof investment through Siemens involvement in standardization

safety

tracking

info

mapping

A-GPS compliant to 3GPP & (new) to OMA
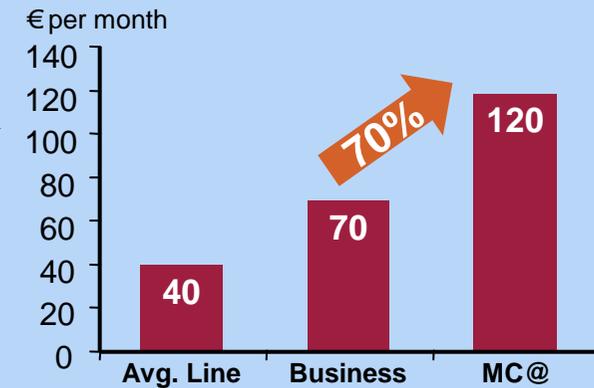
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Operators have different levers to raise revenue with innovative applications and solutions

They can raise the revenues by

Attracting enterprise customers to mobile networks
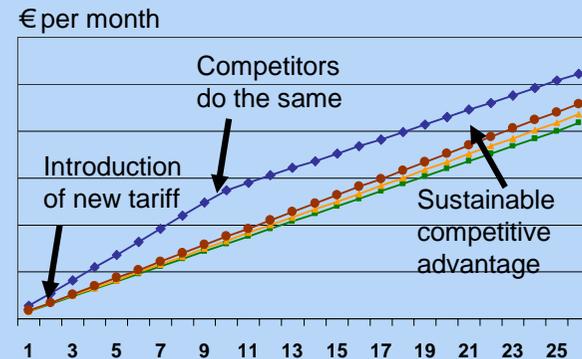
Example: Netcom MobileCentrex(@vantage)

Increased ARPU with MobileCentrex

€ per month

Bar chart: Avg. Line = 40, Business = 70, MC@ = 120, with a 70% arrow

Driving market expansion with flexible tariffs and loyality programs

Business Case Calculation: Operator to increase revenue with a new tariff model

Revenue vs. weeks since introduction

€ per month

Line chart showing: Introduction of new tariff, Competitors do the same, Sustainable competitive advantage; x-axis weeks 1 to 25

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Convergent Online Charging increases the end-customer's loyalty and revenue

for all networks

for all charging models

converging prepaid & postpaid

supports flexible tariffs and loyalty programs

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Market demands for Convergent Online Charging

Differentiation	uniform environment for rating, account management, and customer loyalty / bonus programs
Flexibility and time-to-market	multi-layered rating customization
Revenue assurance	real-time systems based on telco grade IT
Investment protection	future-proof solution
Cost reduction	converging prepaid and postpaid infrastructure

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Summary

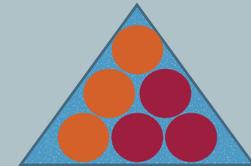|	
Multimedia Solutions	▪ Fully integrated context-aware multimedia solutions
Convergent Online Charging	▪ Flexible charging for all services, all networks, converging prepaid & postpaid
Competence in system integration	▪ Customized and comprehensive end-to-end solutions

Solutions for profitable growth
- allow fixed and mobile carriers to offer differentiating value add, and
- leverage applications & content, communication, and business processes

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Let's make it happen!

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