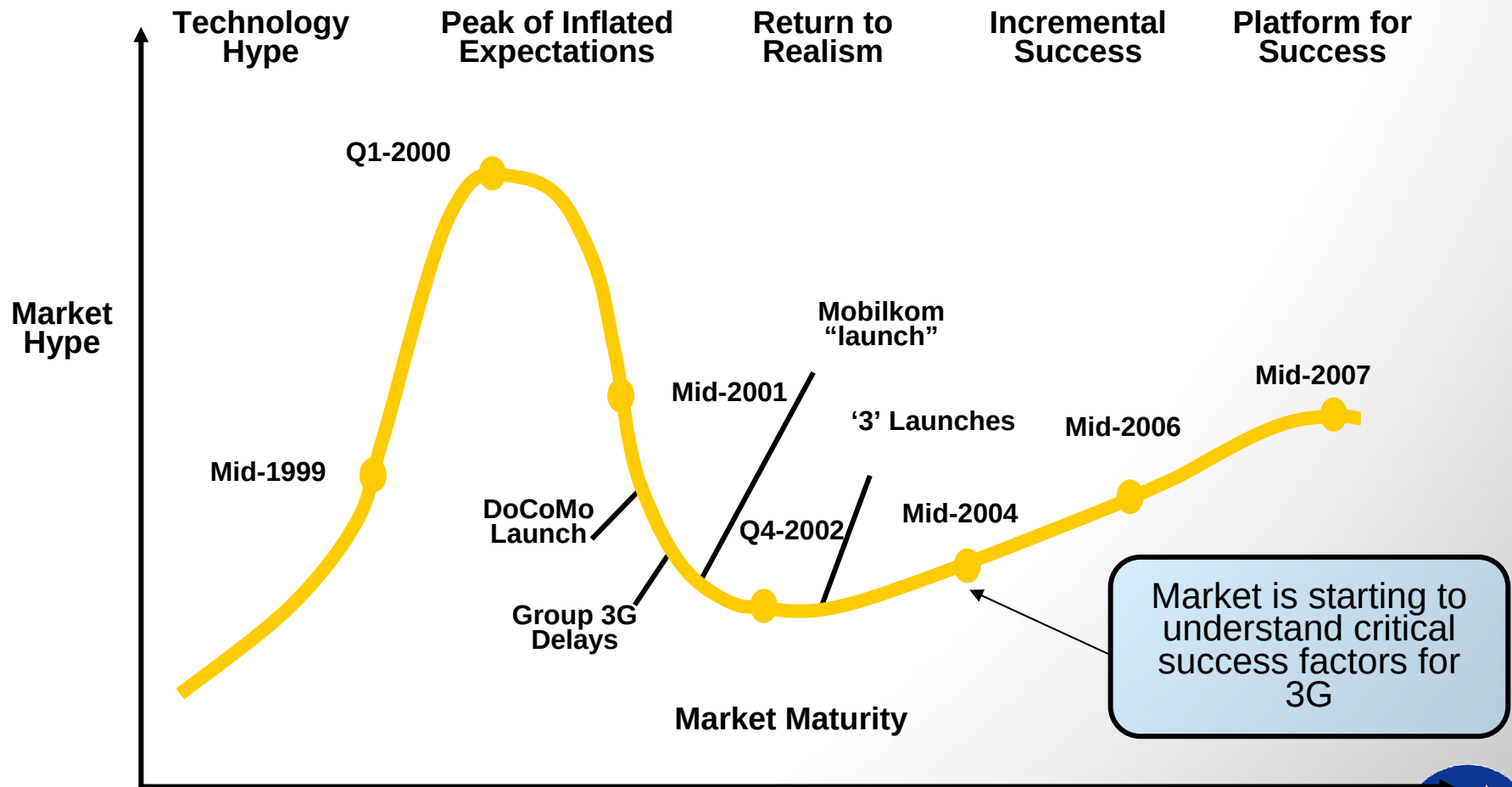
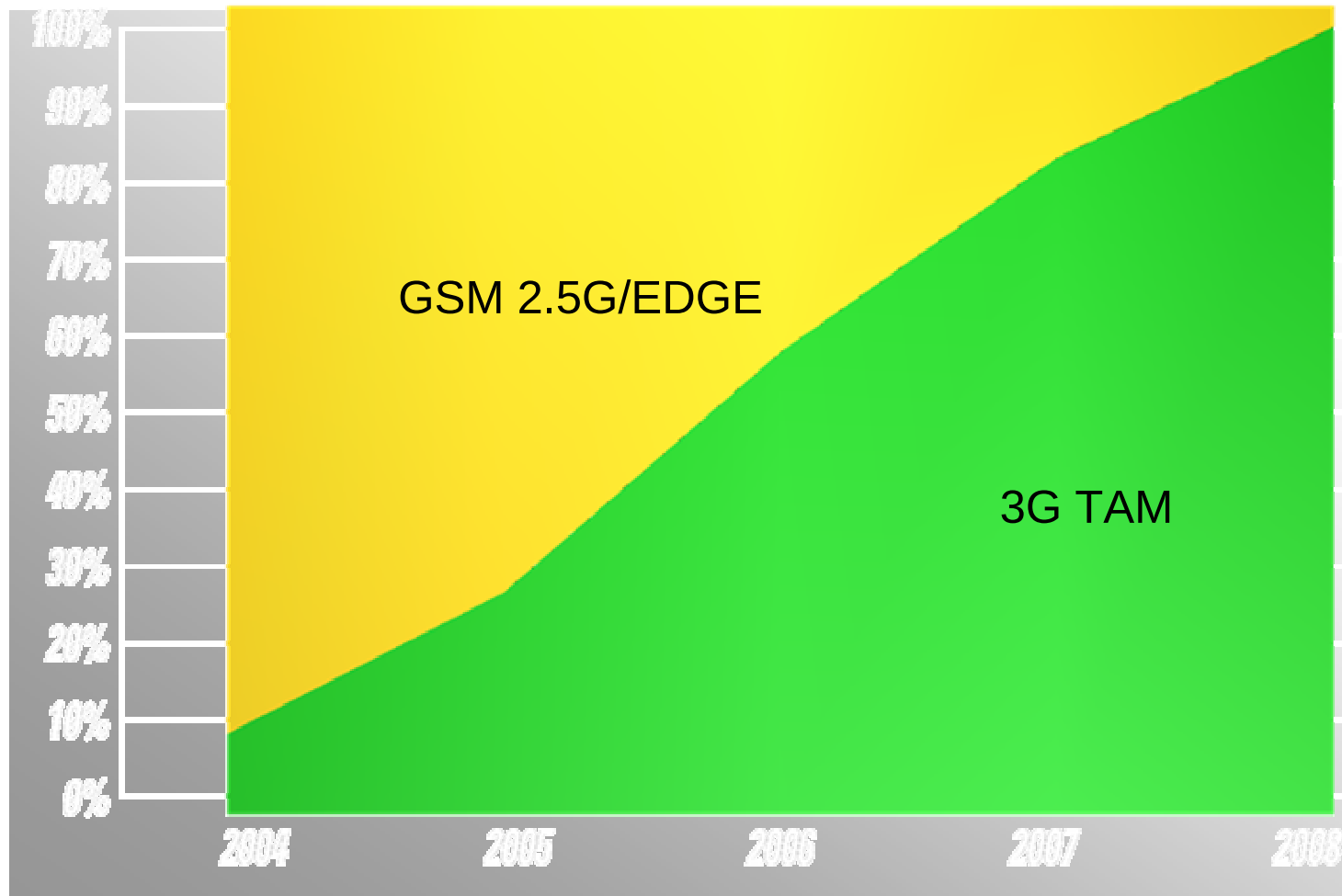


# 3G Market Hype Versus Reality – now is the time



# Consolidated 2004-2008 3G & 2.5G Convergence

## 3G/2.5G Convergence



Source: Motorola EMEA Strategy Group

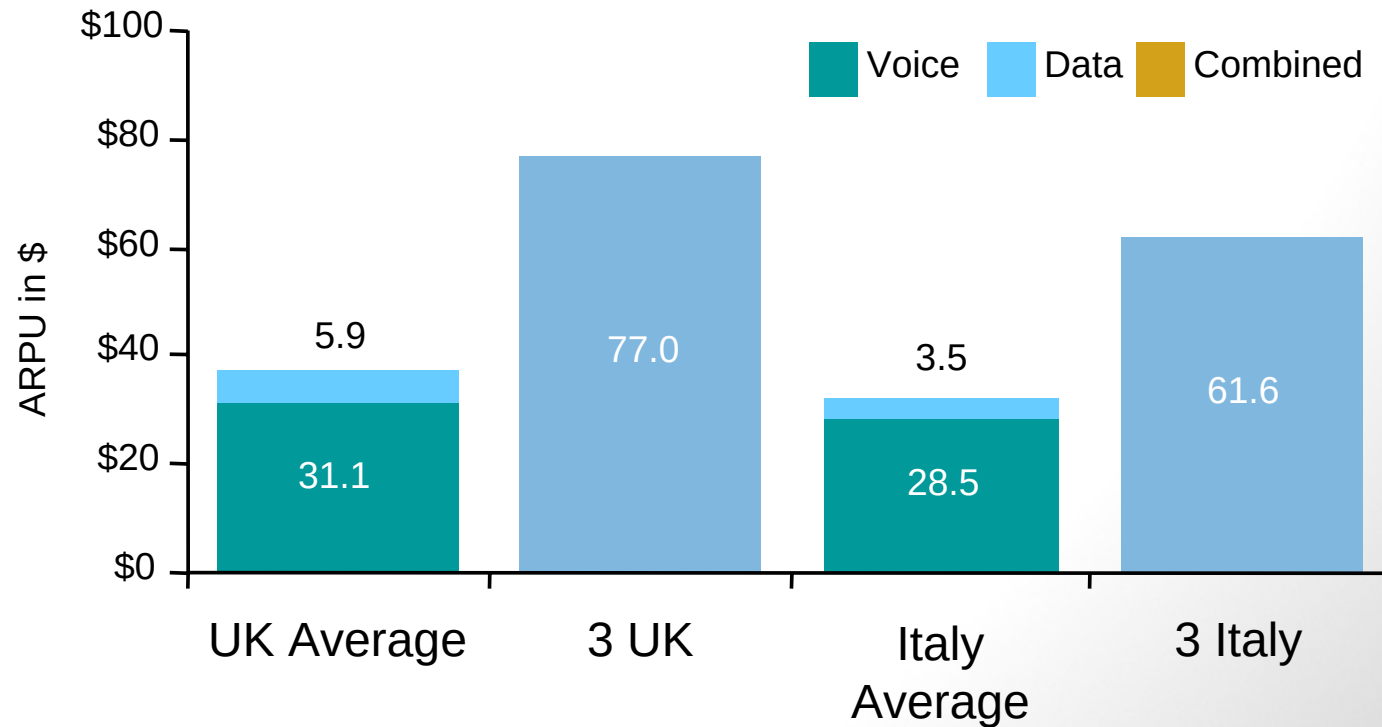


# Value to Operators



# 3G Delivers ARPU

## Recent Hutchison 3G Results ARPU (Voice and Data)



Source: Dow Jones (2003), Analysis (2002), Merrill Lynch (2003)



# Network Operator Needs

Operator service offering

Business propositions - fast pipe

Consumer propositions - extension of existing offerings

What operators want from handset manufacturers?

Early access to samples

Existing stable UMTS platforms

Products which are similar in size, weight, battery life to current GSM products

Products which will enable commercial launch in 2H '04



Browse



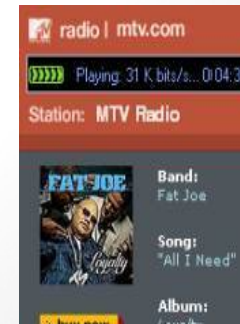
Stream



Download and Play



Talk and See



Listen



Location



# Consumer Needs



# Consumer Needs - THE CONSUMER INSIGHT

“ There are lots of things that technology enables me to do, but it's not always at hand when I need it.”

“ I know there's more and more stuff you can now do on mobile phones but it always seems slow and complicated.”



# Consumer Needs

Most feel that technology will not change their lives...

Help me do  
what I  
already do

I use the  
feature  
that fits my  
lifestyle

It's about ME  
and  
what I can do  
to benefit ME!

...it should  
enhance what  
they're already  
doing



# Consumer Needs

MOTOROLA 3G COMMUNICATION

YOU, INSTANTLY and WHEREVER YOU ARE

## STONE OF VOICE

Iconic, youthful, fun,  
innovative...



RICH EXPERIENCES  
=  
MEANINGFUL  
RELEVANT  
VALUABLE

...but also  
simple  
playful and  
imaginative  
exciting



# 3G Experiences



Talk and  
See



Listen



Download  
and Play



Stream



# 3G Key Services

Browse



Multimedia Messaging



Worktool



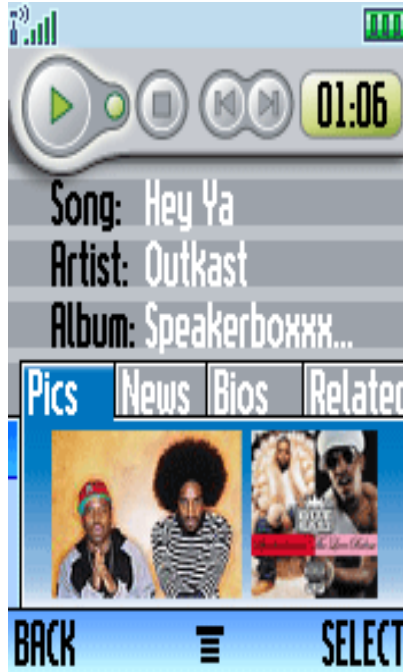
Location



... and make a crystal clear phone call at the same time!

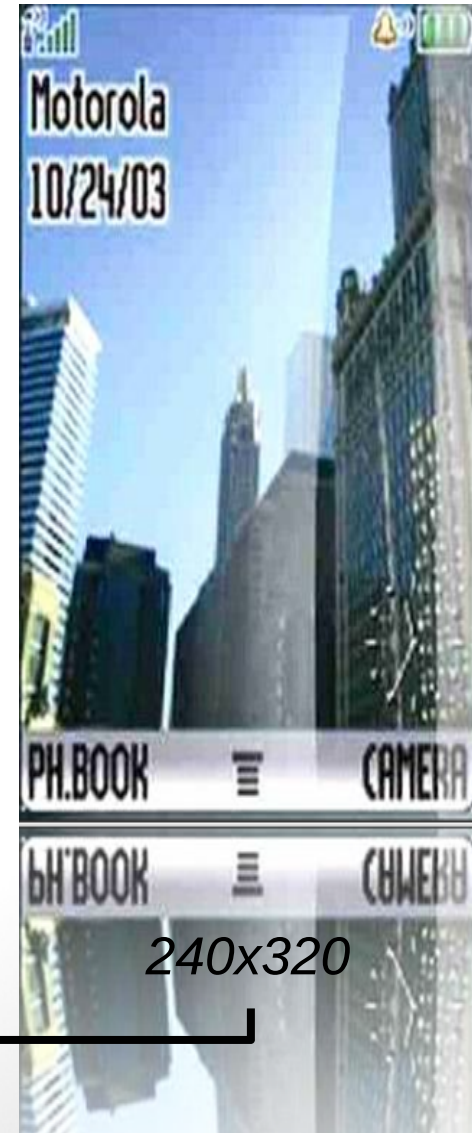
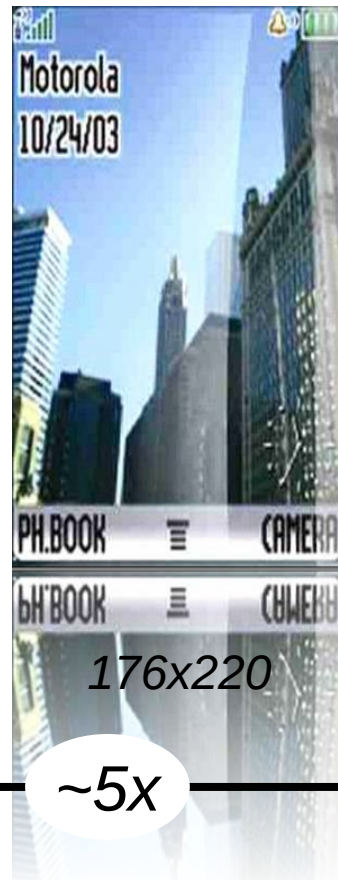
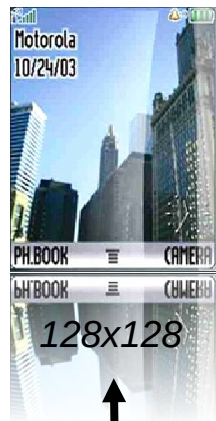


# Product Idea Definition: Music Player Strategy



# 3G Window to the World

3G



~5x



# 3G Megapixel

*VGA*



*1.2 MP*



# Why Motorola?





EMEA: 22 million units



EMEA  
development  
team

Cost  
competitive

Understanding  
of needs

Full  
product range

Proven  
reliable  
product  
architecture

Leading  
in HSDPA

One stop  
shop



# MotoMusic Strategy

## Music Centric Device/itunes

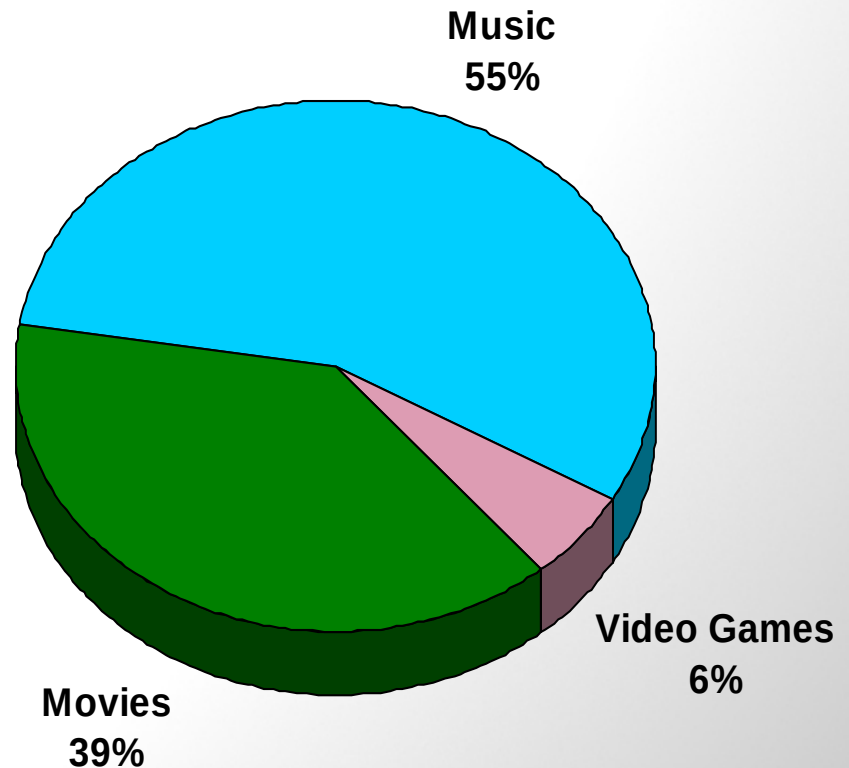


# Music is the Killer Entertainment Application...

## How important is music?

Consumers in a recent study were asked “Which type of entertainment would you keep if you could only use one?”

Over HALF of consumers responded that MUSIC was the most important entertainment in their lives <sup>1</sup>



<sup>1</sup> Edison/UMG study July 2003 (US)



# Music Vision



Deliver additional value to end users by offering a portfolio of telephony devices that provide compelling **no-compromise audio experiences**

and

**create revenue opportunities for mobile operators and the music industry**

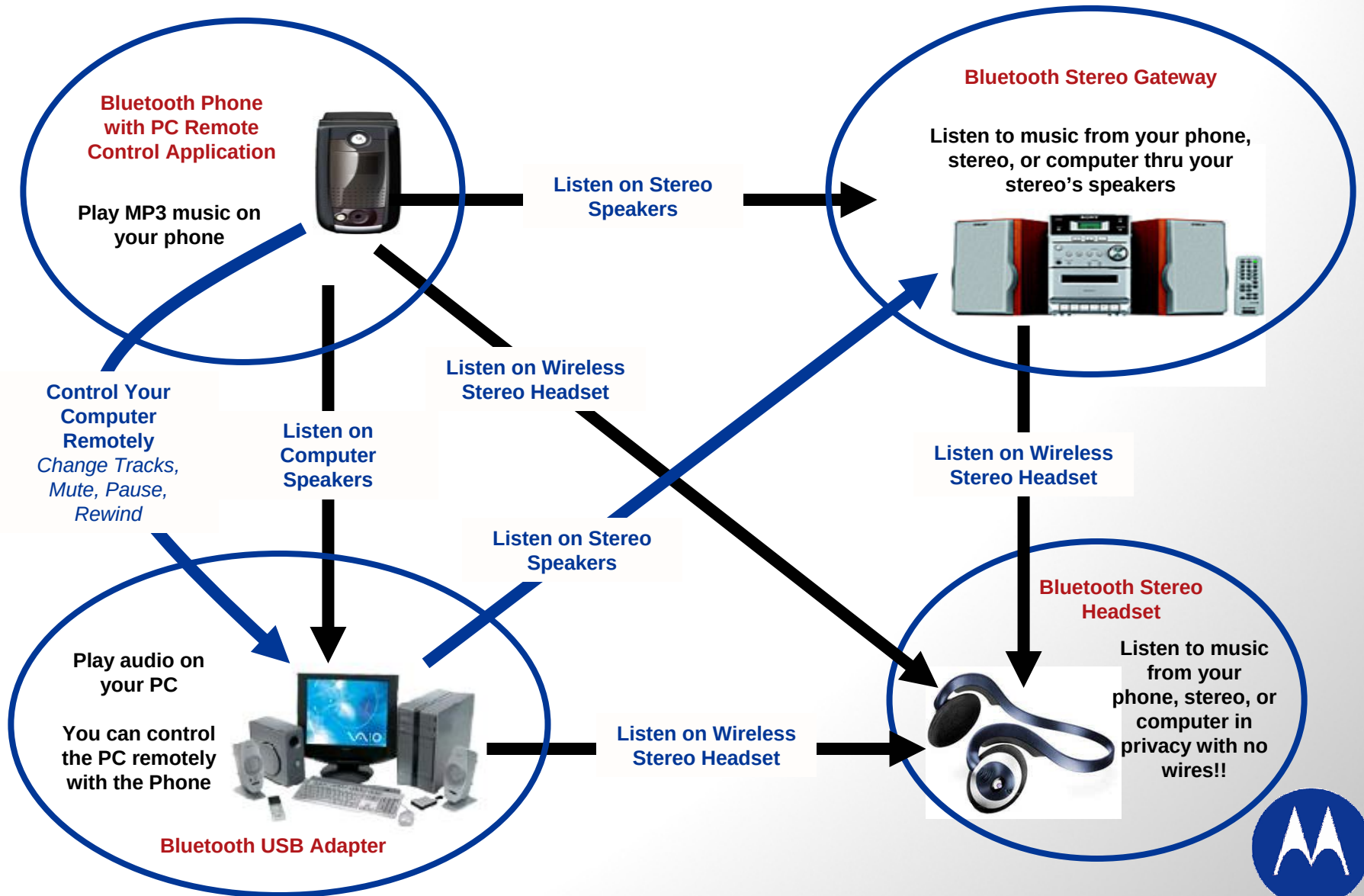
by developing new channels for the discovery, acquisition, and management of full music tracks and related media...

by

**working with key partners** to deliver a music ecosystem



# Motorola's Stereo Audio Ecosystem



# Terminal Essentials - Driving Convergence

- **Connectivity**

- Easy: Make transfers to and from the PC (USB, Bluetooth, etc.)
- Fast: Optimize speed of transfer and plan for managing down-time
- Flexibility: Support the ability to playback across multiple domains (FM transmitter)

- **Codecs and DRM**

- Balance audio quality and necessary file size
- Account for interoperability challenges
  - Related to size and source of a user's existing digital collection

- **Metadata**

- Fundamental to collection management
- Drives how users will browse/select desired tracks



# Terminal Essentials - Driving Convergence

## **Storage**

Target sub-1000 song sweet spot

44% of today's mobile digital consumers carry less than 50 songs (Jupiter, '04)

## **Audio Controls**

Enhance listening experience with customized playback control

Spatialized audio effects, graphic equalizer, and sonic visualizations

## **Media Player**

Support discovery and acquisition experiences without interrupting playback

## **Hardware**

Support audio fundamentals: dual speakers, standard 3.5mm headset jack, 8 hours battery, dedicated physical keys for play/pause, previous, next, and volume



# Research Summary & Final Considerations

- Operators should **leverage consumer impulse purchasing** behavior by providing mobile music discovery and acquisition services
  - **Convenience and immediate gratification** - consumers don't always have to be in front of PC to get music
  - **Pricing is key to the uptake of the service**
- Allowing **transfer of music to and from device** increases interest in the music phone proposition; users want to leverage their existing music collections
- Beyond price and design; standard **digital audio player** attributes add significant value to the device



# Delivering the Value Proposition

Motorola has developed a music applications roadmap that aggressively increases the emphasis on wireless connectivity, value-added services, and revenue opportunities for operators

## **Phase 1 – iTunes client application on the handset**

- **iTunes Client** – Synchronize with iTunes desktop, play iTunes on the handset

## **Phase 2 – Leverage the handset's wireless capabilities**

- **iTunes Ringtones** – Leverage & integrate iTunes experience with ringtone business
- **Mobile iTunes** - Access iTunes store directly from handset to purchase media; share playlists with peers

## **Phase 3 – Introduce additional value-added applications**

- **Connected Media Player** – Mobile iTunes plus referral engine that generates alternative music suggestions based on what is currently playing on the handset
- **Music ID** – Real time identification of unknown songs



# In Summary

