Imaging Interoperability between CE Devices – *How do we get there?*

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Motorola is committed to …

Seamless mobility.

Easy, uninterrupted access to communication, information, entertainment, monitoring and control.

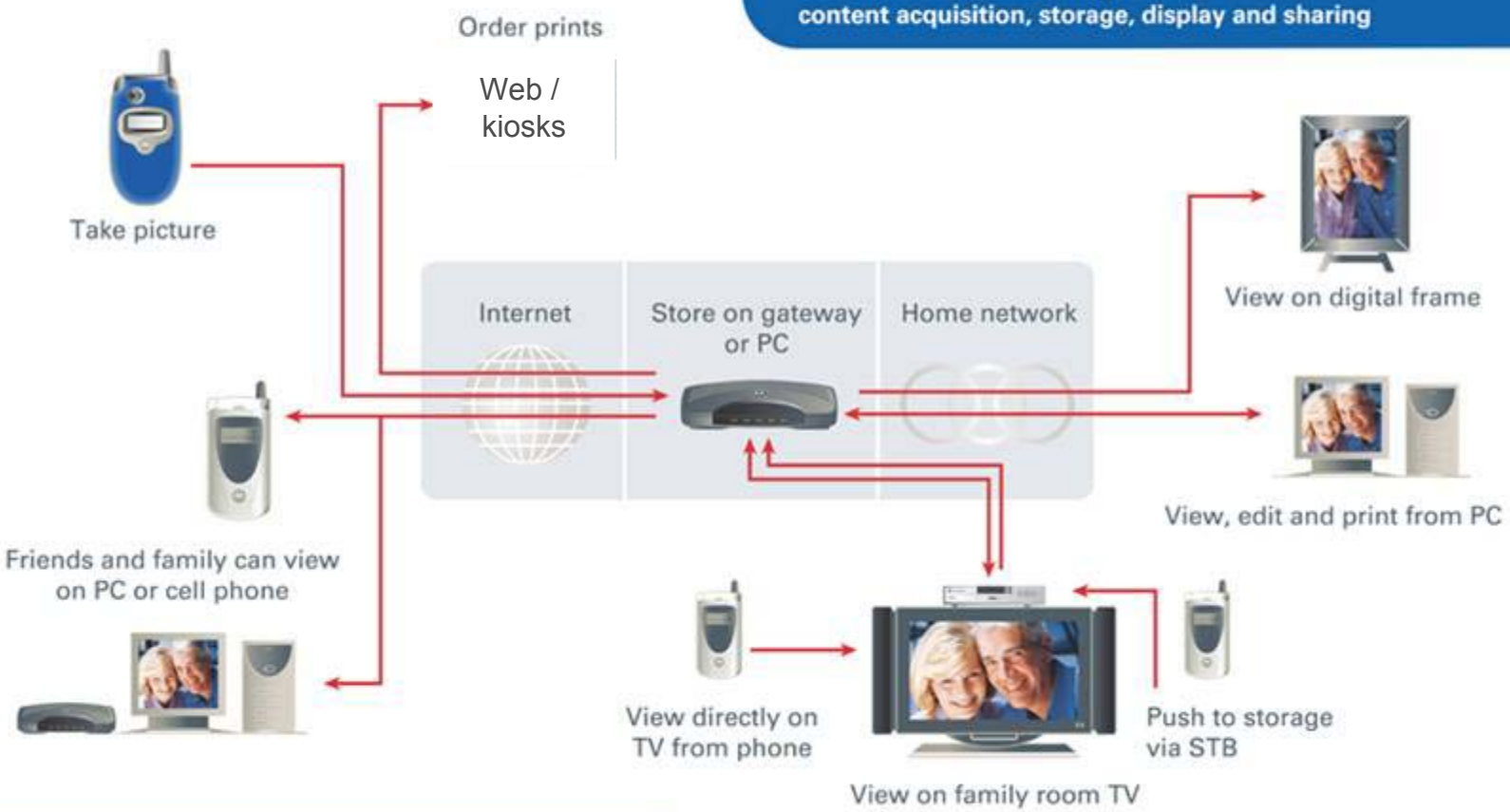
Connected anywhere, anytime, to anything in any way you choose.

Always on. No worrying about networks, devices, protocols, providers.

MOTOROLA

PHOTO MANAGEMENT EXPERIENCE

Solutions that connect together:
content acquisition, storage, display and sharing



CONNECTMEMOTO

Why seamless mobility is difficult

Competing objectives -- who is our customer?

- **End users?**
- **Carriers (cable and cellular) ?**
- **Enterprise?**

Interoperability

- **Between devices offered by a carrier**
- **Between different carriers**
- **Mobile device and accessories**
- **Mobile device and other user devices (PC, printers)**
- **Other devices and systems in the ecosystem**

Cost

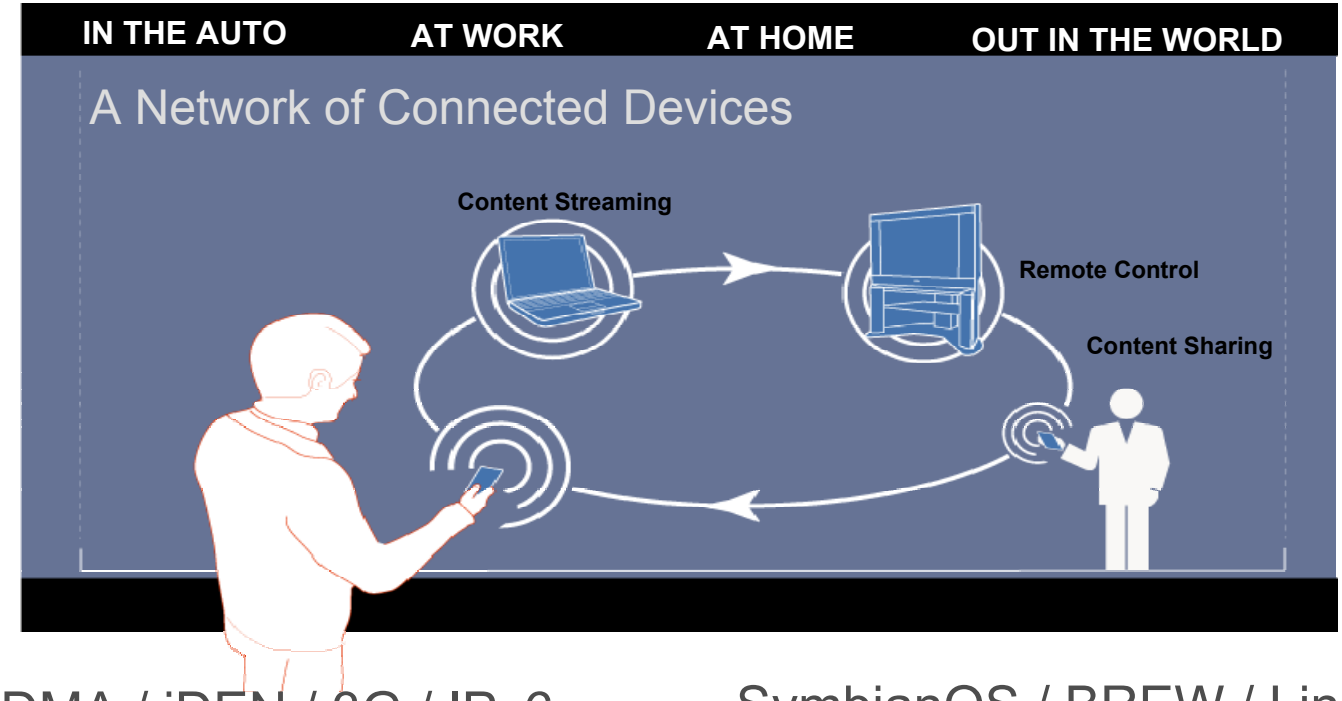
- **Mobile devices are highly constrained by power consumption, size, and cost**

Ease of use

- **Consistency vs. variety of devices embodied in a mobile device**
- **Interactivity constrained by display and device physical size**

Need to prove *value* of metadata to carriers and end-users

International Standards Enhance Seamless Mobility:



GSM / CDMA / iDEN / 3G / IPv6

WAP/MMS J2ME/MIDP/MMAPI

USB, Bluetooth, and WiFi

IP Multimedia Subsystem (IMS)

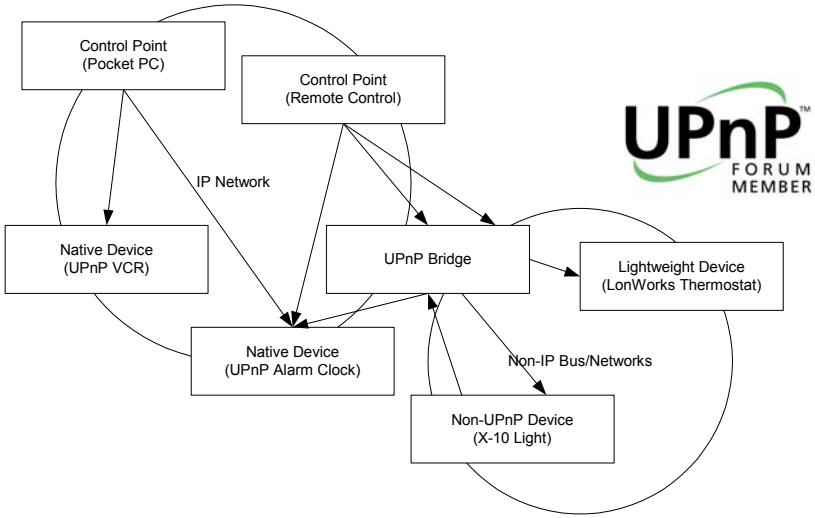
SymbianOS / BREW / Linux / WinCE

EXIF JPEG, MPEG 2/4/7

DLNA – Media interoperability

UPnP – device interoperability

Future Directions: DLNA and UPnP



DLNA – DLNA is a framework of interoperability seeking to bridge three domains within the home, PC/Internet, Mobile Devices, and Consumer Electronics, to enhance the distribution of digital media.

The framework consists of Interoperability Guidelines, Key Technologies and Standards:

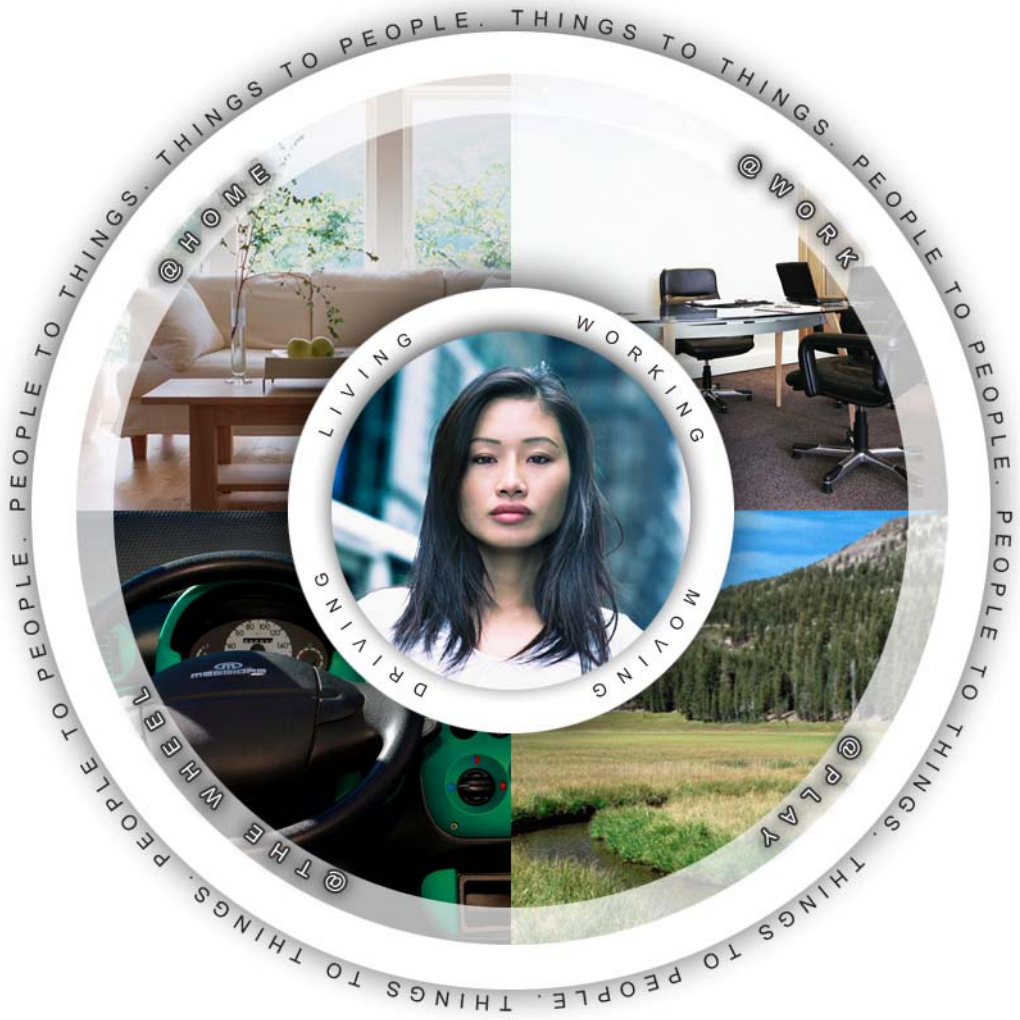
Media Formats	**(i.e. JPEG)**
Media Management	**(UPnP AV)**
Device Discovery & Control	**(UPnP 1.0)**
Media Transport	**(HTTP)**
Network Protocol Suite	**(i.e. iPv6)**
Physical Network	**(i.e. 802.11g)**

UPnP – UPnP is a flexible architecture of standardized protocols designed for zero-configuration, transparent networking, and automatic discovery.

The flexible nature of the architecture supports a wide range of applications:

- **Home Automation**
- **Audio/Video Entertainment**
- **Automobile Networks**
- **Network Peripherals**
- **Printing and Imaging**

Thank You


PEOPLE TO PEOPLE. THINGS TO THINGS. PEOPLE TO THINGS. THINGS TO PEOPLE. PEOPLE TO PEOPLE. THINGS TO THINGS. PEOPLE TO THINGS. THINGS TO PEOPLE. PEOPLE TO PEOPLE.
@HOME
@WORK
@PLAY
@THE WHEEL
LIVING
WORKING
MOVING
DRIVING