More than TV – simplier as Web: Insights and outlooks on iDTV
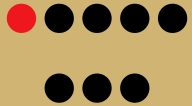
Motto

Interactive television

is no vision but a challenge for

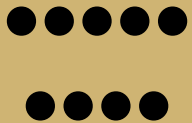electronic media
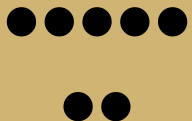
Multimedia technologies

- Animations (animated GIF)

- VRML

- Streaming (Real, MMP, Quicktime, the MPEG family, …)
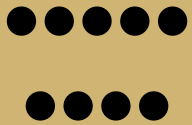
- A/V download

- A/V integration (Flash …)

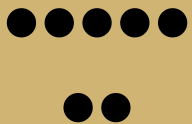# Do technologies match with the content?

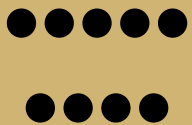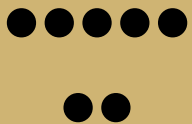|	Web (narrow)	Web (broad)	TV
Text	xx	xx	–
Images (stills)	x	x	x
Animations	xx	xx	xx
Audio	–	x	xx
Video	—	x	xxx

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Attacks on viewers

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Quicktime commercial:

visibility 15 %

Source: http://www.fif.de/Default.asp?URL=http://www.fif.de/videogal.htm
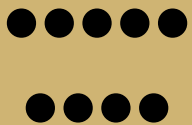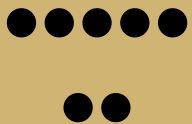
Optimization of artifacts
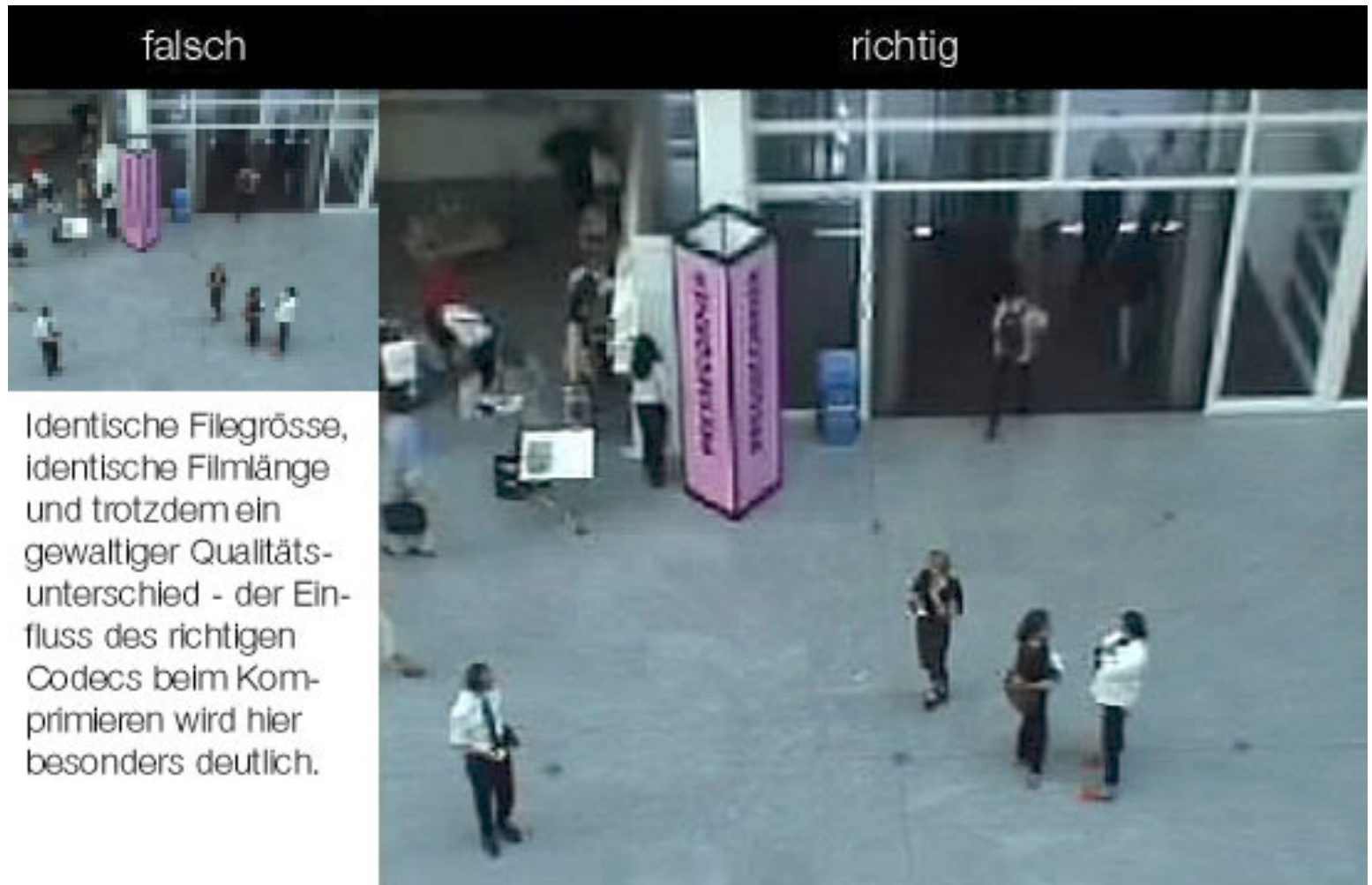
Source: http://www.solutionpark.ch/pages/streaming_compression.html

Low bandwidth web

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ca 45 kbps

High bandwidth web

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300 kbps !

Low-level usage

Results from the online studies of ARD and ZDF (April 2000) show low interest in streaming content

	I am interested	I did already use
Live streams	26%	59%
Radio/TV programs on demand	20%	59%
in comparison to		
World news	64%	73%
Regional news	50%	62%
Service information (stock market …)	50%	78%

Codec engineering

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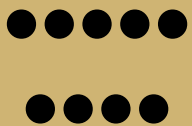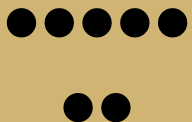
[Real Networks Real System 8.0]

Just for fun, we tested some of the more outrageous claims in the company's press release, finding significant reality buried in the hype. At 500 Kbps, where RealNetworks claimed "VHS quality," RS8 was clearly superior to MPEG-1 video encoded to VideoCD rates, a standard that is often equated with VHS.

More impressively, at 1 Mbps, where RealNetworks claimed "full-motion near-DVD quality," RealNetworks was generally artifact-free and clearly superior to MPEG-2 video encoded to the same bit rate. Simply stated, we've never seen a video codec that could compete so strongly at such a diverse range of delivery bandwidths.

PC Magazine

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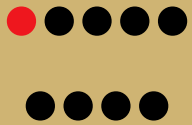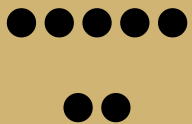
Two interactive devices – two business models
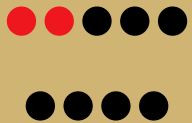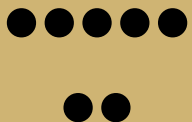
Interactivity potential

Multiple Platforms to Be Interactive in Europe

Television: 11 | 137

Mobile Phone: 140 | 1

PC: 22 | 30

Households (in millions)

■ Online/WAP/DTV
□ Not Interactive

Source: Jupiter Communications
© 2000 Jupiter Communications

pub. 2/00
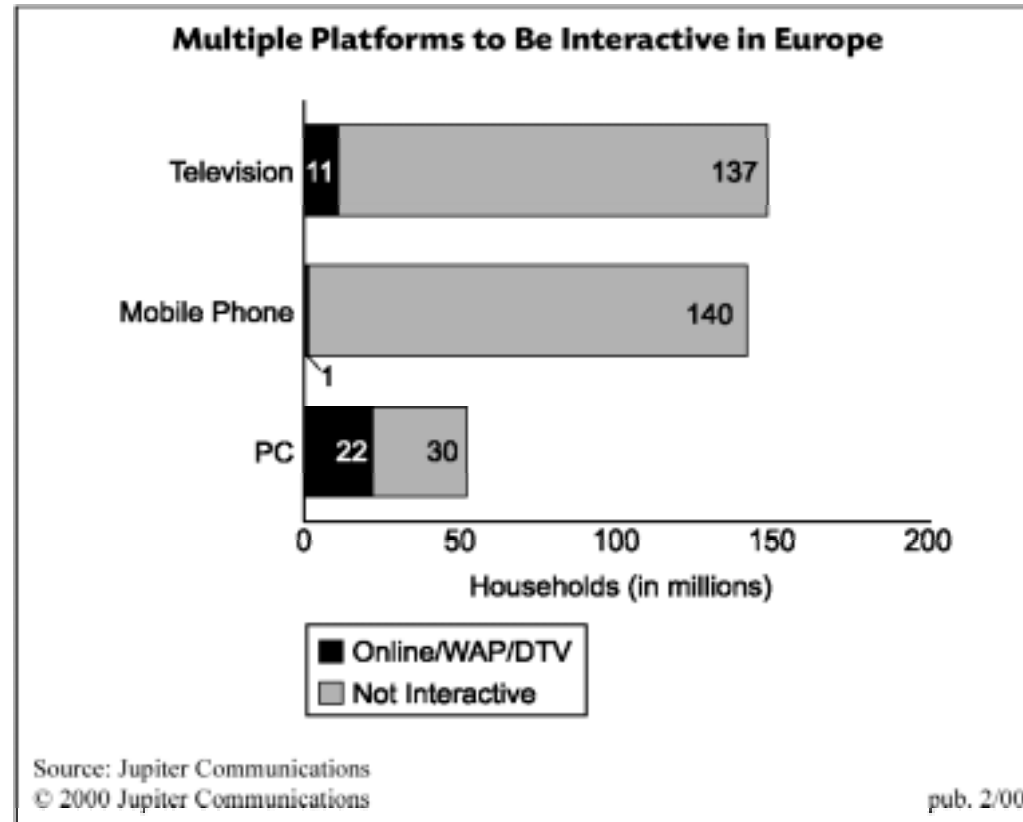
The user environment
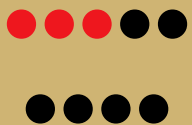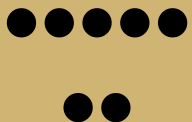
„Lazy interactivity" = leasure oriented

Living room, not home office

Communication with family and friends

Comprehensive from the beginning

Relative low cost efforts

High acceptance, great trust
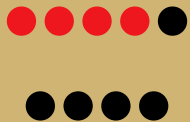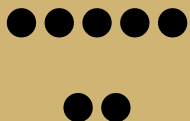
Why stay offliners offline?

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I would be interested to go into the internet, if

it would be as easy to connect as radio / TV	82%
it would be as easy to handle as the remote control	82%
there would be free training and courses	78%
PC equipment would be cheaper	75%
one could it use on the TV set	74%
there would be radio and tv programs on demand	50%
one could use internet on the mobile phone	45%
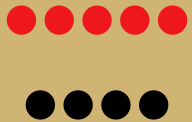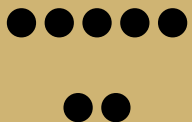
Convergence of technologies

IP-based connections

Multicast

…

- T-Commerce

- T-Banking

- T-Government

- T-Education

are using web technology
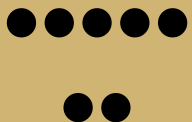
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Divergence of contents

European Interactive TV Is Not the Web on TV

TV — Web

© 1999 Jupiter Com...

Interactive Digital TV Is More Like Enhanced Teletext than the Web on TV

Simple Navigation →

Advertisin...

Source: Teletext Ltd
© 1999 Jupiter Com...

iDTV Is Designed for the TV Not the PC

WOOLWORTHS Entertainment
COMING SOON
NEW RELEASES
MUSIC
VIDEOS
MULTIMEDIA
BOOKS
DISNEY
SPECIAL OFFER

Live Audio and Video →

Simple Navigation →

→ Transactional

Open....

Instantly On

© 1999 Jupiter Communications   pub. 12/99

iDTV in Germany

- Digitalisation of the cable network
- Set-up of regional cable companies
- Selection of interactive platform (PC versus TV set)
- iDTV standard decision (MHP?)
- Search for killer applications
  - building management / security?
  - pay-per-view channels (porn / sports / interest groups)?
  - T-commerce?
  - T-government?
  - ...

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iDTV in Great Britain
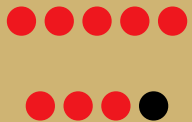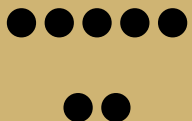
- Two third of the former DTV subscribers are using the interactive packages.
- Interactivity is the full realization of the possibilities of DTV.
- Simple games and e-mail is popular on iDTV too.
- Banking und shopping are more comfortable than on the internet PC.
- Interactive advertising is successfull (click-through-rate of 9 % in comparison of 2 % in the internet).

Public TV
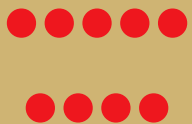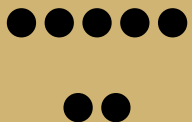
• At least in Germany the public broadcasters play a special role in the development of the new media:

- enough money but legal restrictions
- large audience but no possibility to create subscriptions
- and therefore no commercial partnership with manufacturers

• They are not allowed to produce more than 50% online content which is not closely tied on the radio and tv programming.

• No advertisement, no e-commerce

• Does that mean: restriction in the development of interactive formats?
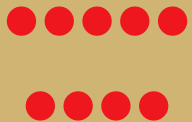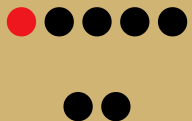
The turn to interactive media

• More users of interactive TV than internet users in 2005.

• 2001: 5 mill. units with MediaHighway, 6 mill. units with OpenTV and 3 mill. units with Betanova, Liberate TV Navigator and Microsoft TV. MHP will begin to sell in 2001 and gain market share in the following years.

• Internet access will be cheaper but restricted in bandwidth in comparison to digital cable. As soon as this problem is solved there could be another turn in 2008/10.

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Supplier platform or user platform?
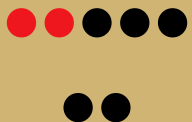
Media development follows a simple rule:

- Technology first

- Development of business models

- Development of content

- Study and research of the user situation

Content Management

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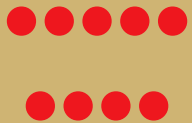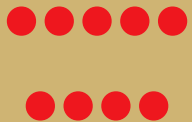
Outlooks

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- Broadcasters have to think about the multimedial distribution of digital content.
- Multimedial products force multimodal producing
- Identical content for several play-out platforms?
- How to produce appropriate content for different media and formats?
- What is the purpose of content management systems?
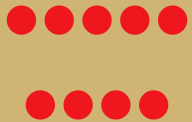
Skills and qualifications

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- The interactive future of TV demands a new set of skills and qualifications in the domain of electronic publishing
- Application development will be a part of format development
- Multimodal / multimedial production is an economic need

Forms of interactivity
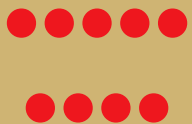
simple interactions:

- Multiple choice

- Input fields and simple forms

- order forms

communicative functions:

- E-mail?

- SMS

- Multi user games

- Chat

interventive functions:

- MUD

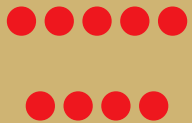- control of actions in live programs

- …

Digital cable

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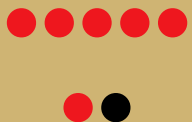**Insights**
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Digitalisation of the cable network plus implementation of switches, proxy servers and other means for the interactive operation of the cable network.

Video on demand over cable modem ist the target installation

Multimedia Home Platform (MHP)

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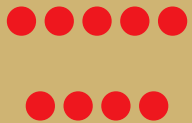●●●

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iDTV with or without TV?
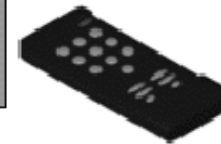

Interactive Content Will Supplement, Not Replace, Video Entertainment

Complementary Data and Commodity Information, not Original Programming

Remote Control Navigation

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pub. 12/99

Thank you

– for your attention, the highest value in the world of the media economy.

mailto:Hermann.Rotermund@goldmedia.de