Interactive and IP...

“a past and a future”
HELLO

GARY HAYES

“One of many children playing with crude, caveman-like tools of interactive communication at the beginning of the 21st century.”

“Past, present and future of Advanced Interactive TV”
MY TALK

“Those who cannot remember the past are condemned to repeat it.”

George Santayana (1863 - 1952)
<table>
<thead>
<tr>
<th>Year</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994-1996</td>
<td>The Pioneering Days. Prototypes pre DTV awareness</td>
</tr>
<tr>
<td>1996-1998</td>
<td>Early prototypes and also developing the platform - eg: MHEG</td>
</tr>
<tr>
<td>1998-2000</td>
<td>After soft platform launches developing pilots alongside Production</td>
</tr>
<tr>
<td>2000-2001</td>
<td>Multistream services begin. Guarantee the success of BBC iTV. 5 million</td>
</tr>
<tr>
<td>2001-2002</td>
<td>Synchronisation creates audience focused services. 8 million</td>
</tr>
<tr>
<td>2002-2003</td>
<td>Return path provides communication services for the audience. 10 million</td>
</tr>
<tr>
<td>2003-2004</td>
<td>Broadcast apps begin to emulate on-demand using MS. 10 million</td>
</tr>
<tr>
<td>2004-2005</td>
<td>BBC post DSL trials moves into broadband distribution. 13 million + 8 mill</td>
</tr>
<tr>
<td>2005-2007</td>
<td>Transition from broadcast to on-demand, PVR to IPTV</td>
</tr>
<tr>
<td>2007-2010</td>
<td>BBC begins to distribute all services via broadband IPTV like pipes</td>
</tr>
</tbody>
</table>

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THE PIONEERING DAYS 94-96

All new ideas pass through three stages.
First, they are ridiculed.
Second, they are violently opposed.
Third, they are accepted as being self-evident

Schopenhauer (miss quote)
CAREFUL WHAT YOU WISH FOR

MAKING 1st PILOTS WITH PRODUCTION 1998-2000

“The best way to predict the future is to invent it.”

Alan Kay

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WHICH ONES PINK?

The Technology Acceptance Model (TAM, Davis, 1993) has helped to understand the importance of designing for usability. Thus, the concepts of ‘usefulness’, ‘ease of use’ and ‘satisfaction’ are addressed. Where goals are unclear, usefulness seems less important, but ease of use and satisfaction gain much greater prominence. Designers face a fundamental difficulty in resolving the switching between goal-based and goal-less interaction, thus simplicity and transparency of operation are essential. i-TV is not intended for just PC ‘savvy’ users but the general public, who must be able to see what is available, and how to access it, and so develop a usable mental model. The complexity of interactivity is further compounded by the restriction to a remote control, and the much poorer resolution.

Satisfaction, or the aesthetic design elements, becomes crucial as the design will influence enjoyment. Furthermore, maintaining engagement by users of i-TV is vital. Interactivity can create interruptions to the narrative ‘flow’ (Green, 1998), but this is an essential component of storytelling that has made TV so successful. To address this, work studying the role of pace and interactivity for games (e.g. Neal, 1990; Malone, 1982), drama and individual engagement (Jagodzinski, Turley & Rogers, 1999), and of course fun are being used to help design.

Guy Winter (Behavioral scientist BBC R&D) & Jo Hooper (Lead designer iTV BBC 1998-2001)
WHAT! WE CAN’T DO THAT!

GETTING REAL 24 / 7 - 1997-2001

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ChChChCHANGES

THE BIG MULTISTREAMS 2000-2004

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ChChChChChCHANGES

THE BIG MULTISTREAMS 2000-2004

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DIFFERENT PATHS

INNOVATION TENSION

1 Maturity - Doing something we know about more often
2 Growing up - doing something we know about better
3 Nurturing & playing with the new born - Doing something somewhat different
4 Giving birth - Doing something altogether different

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MAKING IT UP AS WE GO ALONG

THE BIG SYNCH PLAYALONGS 2002-
“One small step in tech, one giant leap for editorial”

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MIXING THINGS UP

THE BIG PARTICIPATION 2002 -

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HOW DID IT GO?

METRICS - MEASURING SUCCESS

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## The Good, The Bad & The Indifferent

% of available audience, BBC iTV 2001 onwards

<table>
<thead>
<tr>
<th>35-60%</th>
<th>0-19%</th>
<th>20-34%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wimbledon</td>
<td>Great Britons</td>
<td>Fame Academy</td>
</tr>
<tr>
<td>Olympics 60%</td>
<td>Antiques Roadshow</td>
<td>Winter Olympics</td>
</tr>
<tr>
<td>World Cup</td>
<td>Pyramids</td>
<td>FA Cup</td>
</tr>
<tr>
<td>Commonwealth Games</td>
<td>Saturday Show</td>
<td>Golf</td>
</tr>
<tr>
<td>6 Nations</td>
<td>Abyss</td>
<td>Test the Nation 2</td>
</tr>
<tr>
<td>Chelsea Flower Show</td>
<td>Last Night Proms</td>
<td>Test the Nation 1</td>
</tr>
<tr>
<td>Test the Nation 1</td>
<td>Diners 6%</td>
<td></td>
</tr>
</tbody>
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LET THE GAMES BEGIN

IN 2003 -
the BBC broadcast over 80
programme-related iTV services
reaching 8.5 million viewers
Between June and November 2003,
over 3000 hours of extra video within
iTV services
Viewer response rates averaged 17%
or 1 in 5 viewers watching a
programme with interactivity available
pressed red.
Every TV genre supported by the BBC
- even interactive Shakespeare with
Richard II in October

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LET THE GAMES BEGIN

PARALLEL VIDEO QUESTS 2002 - ARCADE GAMES AND EVERYONE ELSE

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MOVING FORWARD

PRODUCTION TOOLS FOR CROSS PLATFORM

PLAN B - not making everything interactive

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MOVING FORWARD

DEMANDING ON-DEMAND 2003 - XCreatures of Innovation
The BBC predicts broadband to 15 and 20 million homes by 2016
The BBC expects that by 2016, seven in ten homes will be able to schedule their viewing and listening at a time that suits them best – PVR & broadband

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WHAT HAVE WE LEARNED?

SOME LESSONS FROM BROADCAST iTV
Pre launch build service prototypes everyone can see and buy into
Inspire people with possibilities they can see
Don’t silo too early
It is hard work being first!
Progress is slower and always more expensive than imagined
Make sure Production are bought in
Audiences will be…audiences

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WHAT HAVE WE LEARNED?

SOME CURRENT VOD WORK

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OFF WE GO AGAIN

“The future, according to some scientists, will be exactly like the past, only far more expensive.”
John Sladek

VOICE - TV - DATA
down one pipe the great triple play

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OFF WE GO AGAIN

Telcos will deploy VOD services to 19 million homes by 2007 - InStat/MDR  
Speeds at moment of 4Mbs down 0.5Mbs back up to 10Mbs on fiber  
The US home broadband audience will double from about 55 million individuals in 2004 to about 108 million by 2009  

IPTV SERVICES  
• Broadcast TV  
• Premium Channels  
• Movie Channels  
• Pay-Per-View  
• Video on Demand  
• Virtual PVR (Personal Video Recorder)  
• Advanced Interactive Services & gaming (video & gambling)  
• Ad-Insertion (directed advertising)
THE FUTURE IS...IN THE FUTURE

Where next?
Democratization of interactive production
Creative democratization - films, music, stories
Life sharing experiences
BUT:
Standards for IPTV browsers & VOD implementation
Interface standards
Commerciality balanced with edu & innovation

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