TV 2020
The Future
of Television

A Z_punkt
Trend Study
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TV 2020

Just now that we've gotten used to social networks and web-enabled smartphones, our living rooms are about to lose their cosiness. TV, the dominant media, has been dethroned, Bill Gates even considers it to be at death's door. Actually, however, TV is upgrading and changing into a super medium: highly networked, social and interactive, occasionally in 3D, ubiquitous, multi-functional, and individually tailored. On the following pages we will outline what we may expect for the future.

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1

CHANGING TIMES: THE TRANS- FORMATION OF TV

In 2010, the average German spent 223 minutes each day watching TV – yet again wasting more time in front of the often-reviled, ardently loved boob tube than the year before. The more things change, the more they remain the same, one might think: TV remains a growth media. Yet the raw numbers hide comprehensive structural transformations which have been under way for quite some time.

New Patterns of Use

More and more people opt to do without a TV set. They rely on new channels to consume moving images, channels which have become available over the past decade. The Internet makes it possible to receive TV on computers and mobile end devices (smartphones, tablets, notebooks), paving the way for two new developments: TV as a mobile experience becomes reality; and the simultaneous use of TV and Internet is increasing. Coincident media use skyrocketed in recent years (22 percent of all Europeans regularly use the Web and TV at the same time; the numbers of media multi-taskers have grown by 38 percent in Europe since 2006 (EIAA)), demonstrating a need for additional information during the TV experience. Usage patterns established on the Internet cross over to television. Compared to the diverse services connected to moving images on the Internet, the linear TV programme we are familiar with leaves a rather quaint impression.

Convergence, the Main Driver

At the heart of this transformation is the gradual merging of Internet and TV. The convergence of Web and TV has two aspects: Firstly, a changeover from the broadcast model to the Internet infrastructure, and secondly, the integration of the moving image into the World Wide Web's

information and communication space. This change makes new services possible, and in this way leads to a comprehensively transformed media experience: users making their own programmes; moving images closely linked to the Web's information offers; personalisation, interactivity, and "social TV" becoming more important. Analogue video recorders had already made viewers independent of programming schedules; recording with digital video recorders (DVRs) provided new freedoms such as pausing transmissions and time-shifted reception. The world of the on-demand era is literally schedule-free. Also, future TV end devices will be multi-functional. In the digital era, hardware will transcend singular functionality assignments. The TV will be the centre of home intelligence, a game centre, a conference system.

The Nimbus of Uniqueness

In the age of convergence, TV as a technical infrastructure will lose its autonomy. Yet this, precisely, will make the TV experience something special. In addition to active media usage on the Web, users will decide to consume passively, to consciously let the TV wash over them. The fact that the medium of TV is limited to a single source, at a specific time, and one issue will make it more attractive, will create an aura of uniqueness. More and more people feel a need to experience TV shows together with others. Mediated live experiences have in no way made the Internet, the "electronic campfire of the global village" (Marshall McLuhan), obsolete. This is most evident in the public viewing phenomenon – not only during football world championships, but also on a smaller scale, e.g. when watching the Sunday whodunit in the pub. And viewers follow, parallel to the show, the reaction of others to the broadcast on twitter.

An End to Stagnation

We posit that Bill Gates sombre forecast of the "death of TV" misses the heart of the matter (see Chapter 3, Towards the Super Medium). What is the case, however, is that TV will take on a radically new form. Compared to the fast-paced increase in the intelligence of electronic everyday devices such as PCs and smartphones, the abilities of a TV set have hardly changed over the past decades. The times of convergence will soon put an end to this stagnation: the trias of TV set, remote control, and programming guide will very soon be on the way out. The industry agrees: Tomorrow's TV will be totally different. Existing potentials for change are enormous and will create completely new viewing qualities (see Chapter 2, TV Trends 2020, for more detail). This means: when it comes to tying viewers to the medium, the old recipes will no longer suffice. A reshuffling of the deck will bring new ac-

tors to the fore who will begin to have a lasting influence on the market. Those who stonewall innovation will find it hard to maintain their position.

	Today	Technology Enablers	Tomorrow
Sending Model	Broadcast	Internet	Narrowcast
Receiving Situation	Stationary TV	Mobile broadband LTE; tablets	Dynamic TV
Experience	Limited interface	Display technologies, motion control, sensors	Expanded interface
Comfort	Programmed TV	Intelligent algorithms, semantic web, filter	Personalised TV
Functionality	Functionality focused on entertainment, news	New content formats	Expanded functionalities, gaming, conferencing, shopping

Increased intelligence, interaction, and converging infrastructures will make tomorrow's TV an element in a novel media use situation.

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2

TV TRENDS 2020

CONNECTED TV
The Merging of TV and Web

SOCIAL TV
Virtual Get-Togethers in Your Living Room

IMMERSIVE TV
3D Intensity and Gaming

MOBILE TV
TV Anywhere

SERVICE TV
Managing Everyday Life with Your TV

PERSONAL TV
Made-to-Measure Programming

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2.1   CONNECTED TV
The Merging of TV and Web

The music and print industries have long since been impacted by the Internet's transformative power. Industry outsiders have entered the market, e.g. Apple with iTunes and Amazon with the Kindle e-book reader, and established sales channels which are both innovative and successful, making life hard for traditional actors. In recent years, major changes have also affected video content, funny clips on YouTube just as much as blockbusters. In the future, web-based services will naturally also be available on the TV set. Analysts forecast that by 2015, some 500 million TV sets worldwide will be web-enabled, either as a default option or supported by a set-top box (In-Stat 2011). These will differ in two basic aspects from traditional TV: movies and livestreams can be assessed as desired, also available are a large number of new services, functionalities, and Apps.

Service Integration and App Universe

Convergence of TV and Internet has been achieved wherever the Web has been seamlessly integrated into the viewer's TV experience. With only a single click, viewers access additional information on a show, chats, expert hotlines, addresses, or a feedback channel. Connected TV means merging the TV's zapping principle and the Web's clicking principle: stock prices and more detailed information on a movie can be accessed without forcing users to change devices. Connected TV makes the App world available on one's large-screen TV in the living room – from weather forecasts to stock exchange news to local bargain offers. Today, the services provided by the platform Yahoo! Connected TV already include the video hosting service Vimeo, the photo-sharing platform Joomeo, as well as sports and Home Shopping Network (HSN) services.

The App universe captures the TV screen. Yahoo! Connected TV with an inserted financial App. Web functionalities on the TV make switching between devices unnecessary. A whole new level is reached once services connect data streams to something novel, e.g. if, based on automatic speech recognition of the audio stream, relevant wikipedia articles are provided. Image: zatznotfunny.com

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Competition from the Net

Video-hosting platforms on the Net compete with traditional content providers for the consumers' media budget. YouTube, the world's largest video portal, has brought lasting change to the relationship between consumer and moving pictures. Every day, users access three billion videos on this platform alone, a growing percentage of these comes with a commercial; for the coming year, YouTube expects its turnover to cross, for the very first time, the one billion USD threshold. Connected TV makes it possible to make even better use of the Internet's distribution structures. New providers enter the market with video-on-demand, invoicing is either based on individual transactions (T-VOD) or on a subscription model (S-VOD).

A HIGHLY COMPETITIVE MARKET ONLINE VIDEO

Catch-Up TV	Videoportale
E.g. BBC iPlayer Watch later, at your leisure 157 m page impressions/ month	**Bsp. YouTube** Largest and best-known portal 450m users/month 2016: 700m
T-VoD	**S-VoD**
E.g. Amazon Instant Video Trusted online retailer Access to more than 50,000 films and shows	**E.g. Hulu** Streaming pioneer 903m video streams/month Monat (January 2010)

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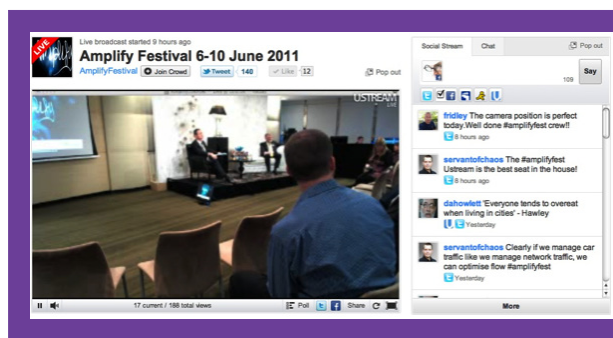
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2.2   SOCIAL TV
Virtual Get-Togethers
in Your Living Room

TV goes social – The Web as a Trailblazer

When compared to YouTube or Vimeo, traditional TV lacks a lively social communication channel. Users of video platforms comment uploaded videos, share them on Facebook, or produce a video response within minutes. Television in the traditional sense of the word, on the other hand, appears to be almost "socially amputated", neither featuring a backchannel for comments and recommendations, nor able to match the liveliness of chat communication. Here, Connected TV makes it possible to upgrade the traditional TV setting.

On the Web, paralleling a video stream with social interaction is often considered natural. Conferences which livestream increase viewer engagement with chatboxes or twitter feeds. On video platforms such as YouTube, ratings and comments are common and contribute to a feeling of community. *Image: amplifyfestival.com.au*

TV-Broadcasters Experiment with the Social Web

CBS is producing a news show called What's Trending which picks up issues that trend on Twitter or current viral videos on YouTube and debates these with studio guests. Cross-media conversations are also provided by Al Jazeera's format "The Stream": An English-speaking social media community produces its own daily TV programme.
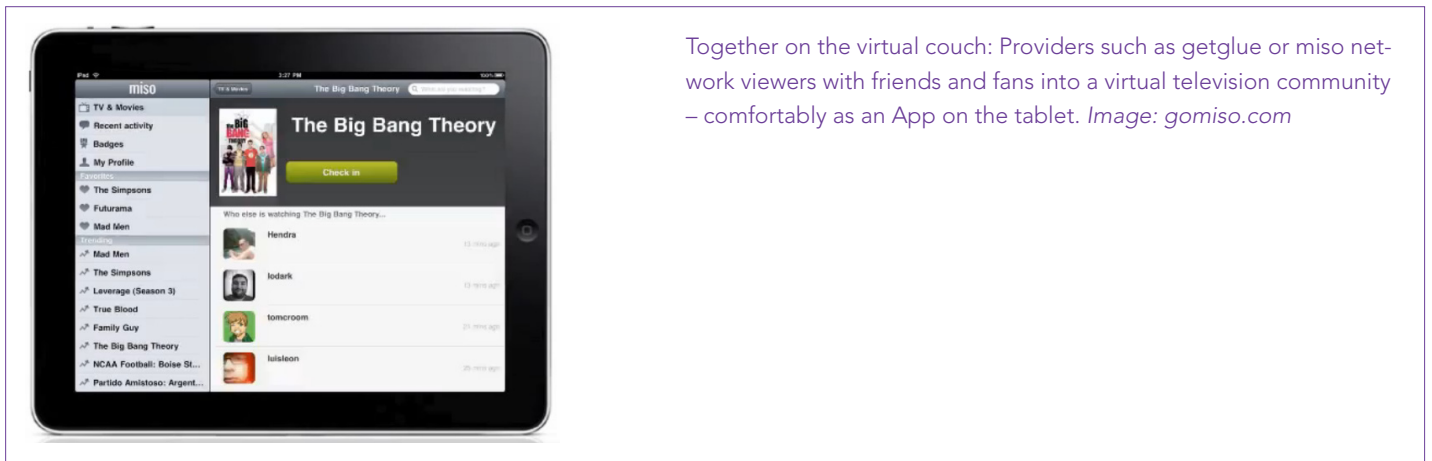

In the news show "What's Trending", CBS looks at the issues of the day on the Web and in this way tries to keep up with the new dominating medium, the Internet. *Image: cbsnews.com*

Virtual Viewer Communities

TV consumption which adds a social to the TV experience, i.e. offers social interaction, is referred to as "Social TV". Straightforward implementations include service platforms such as getglue.com which lets friends see each other's favourites and what others are currently watching. The users enjoy a connected TV experience and are able to chat – be

it about talk show topics, referee decisions, or a game show host's wardrobe. The result is a virtual viewer community with a shared experience. The platform getglue.com considers itself a "social network for entertainment" and claims more than one million users. The iPhone App of its competitor IntoNow even lets users do without actually checking into a show. The smartphone analyses the current audio stream, identifies, e.g., an episode of Dr. House, and the user is immediately connected to the Dr. House community and may chat with his friends there. In the future, social functionalities such as these will, on the one hand, be integrated into TV sets, yet on the other hand, social networks will also provide easy-to-use "TV-CheckIns" and integrate the TV into one's everyday life.

Together on the virtual couch: Providers such as getglue or miso network viewers with friends and fans into a virtual television community – comfortably as an App on the tablet. *Image: gomiso.com*

From Social to Participative TV

If users interact with each other through a platform while watching TV, this is structurally similar to chatting on a couch about what you see. This is also referred to as horizontal participation. Interaction with what you see adds another quality to this experience. Viewers are able to influence the medium with their feedback, they join in, become participants. Voting systems in casting shows which use text messages or phone numbers are common examples for this so-called vertical participation. In the future, an increasing number of TV sets will be equipped with cameras – just as laptops are today. This will make new formats for shows and variations of interactive games possible which will turn a part of the audience into active contestants. The boundaries between horizontal and vertical participation often overlap. Until 2020, new formats of community TV will emerge. These may be developed towards participative TV formats: viewers networked with each other will themselves become part of the programme.

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Vertical participation	2010: Hardly any forms of participation	2020: Social TV formats
High	**Call-In TV** *Quiz TV, shopping TV* Viewers who call in	**Participative TV** *Interactive involvement* Viewers are activated
Low	**Classic TV** *Leanback TV* "Couch Potato"	**Social TV** *TV with a conversation* Recommendations, chat
	Low	High
	Horizontal participation	

Newly emerging TV formats may be classified according to the dimensions broadcaster engagement (vertical interactions) and self-engagement of the viewers with each other (horizontal interactions)

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2.3   IMMERSIVE TV
3D Intensity and Gaming

TV Becomes an Intensive Experience

Once HD has been fully implemented, 3D in sports and movies will be much more common by 2015, higher production costs notwithstanding. But the trend towards using the TV screen for gaming and exercise will also continue (Wii Sport, Kinect). Traditional remote controls will soon be a thing of the past and be replaced by touchpads or motion control.

Interaction with large-screen TVs opens up potentials of intensive experience. Not only in entertainment, e-sports, and gaming, but also for the world of reading and learning. Image: Wikipedia

Immersed in the Action with 3D

The blockbuster Avatar gave the film-going public a first experience of the feeling of 3D. Now, not only eminent Hollywood directors such as Steven Spielberg, Martin Scorsese, and Ridley Scott are taken with the new medium, and 3D has begun to establish itself. There remains, however, a small hitch to the pleasure of 3D – just as in cinemas, people have to wear special glasses to have the perception of 3D depth. The real breakthrough for 3D TV will only occur with 3D sans glasses, the majority of consumers will then be enthusiastic about 3D in their living rooms, and the subjective immersion into a scene will become standard. Currently, e.g., HTC is already marketing a 3D cell phone (Gizmodo 2011), Toshiba is developing a 3D notebook, and LG will soon offer a 3D monitor which uses eye tracking to deliver 3D without glasses (Golem 2011).

The TV Set Used for Gaming und E-Exercise Programmes

TV sets are increasingly used for gaming and exercise – couch potatoes become active gamers and living-room athletes. The Wii console alone sold more than 86 million units since its launch in 2006. The gaming functionality for TV sets opened a huge market, 65 percent of all households in the US play video games this way. Last year, 500 million games were sold worldwide, and 10 percent of all web-enabled devices are used primarily for gaming purposes (Gameinformer

2011). Games continue to boom: analysts of the consulting firm Gartner forecast a turnover of 74 billion USD for 2011 and 112 billion USD for 2015 (Gartner 2011).

Motion Control and Tablet Replace the Remote

For a long time, the interface between TV and man was defined by the button-operated remote control with functions primarily directed towards switching between different channels. Once thousands of channels are available, and video subscriptions and Apps have to be managed, this form of control offers too little flexibility and not enough comfort. New control concepts will take its place – such as the tablet or motion control modelled on Microsoft's Kinect.

2.4   MOBILE TV
TV Anywhere

Living rooms have become unimaginable without TVs. In this respect, nothing will change. Futhermore, the propagation of end devices will continue. Once children hit puberty, at the latest, finding a consensus on what to watch together becomes all but impossible. Second and third devices are also used for different parts of the home, e.g. kitchens or bath rooms. Furthermore, more and more PCs and laptops act as additional end devices for videos and TV.

However, only the next upgrade of mobile broadband will free TV from being shackled to specific locations. In many industrial nations, mobile LTE (Long Term Evolution) networks are currently being installed. LTE will actually bring lasting changes – and these will come before long. Today, a technological coverage of 88.1 percent of all households with an average data rate of 1 Mbit/s is already reported for Germany (BMWi 2011) – in the world of mobile video solutions, this represents a real quantum leap. Manufacturers have LTE-enabled end devices in the pipeline. The wish to watch one's favourite series also on tablet or smartphone, everywhere and seamlessly, will become reality for the first users as early as 2012.

Ambient TV, TV-to-Go on the tablet and eyewear: today, small screens proliferate in bathrooms and kitchens, e.g. integrated into mirrors. Upon demand, the LTE broadband standard will deliver video streams anywhere. The eyewear is already able to deliver 3D movies. Image: Vuzix.

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2.5   SERVICE TV
Managing Everyday Life
with Your TV

T-Commerce 2.0:
From TV Commercials to Integrated Points of Sale

For the marketing and sales world, connecting the TV setting with the opportunities of the Web amounts to a real revolution. In the era of broadcast TV, knowledge about the actual individual viewer was extremely hazy, an issue which the use of complex target group patterns helped to hide rather than solve. All efforts to the contrary notwithstanding, there remains enormous waste coverage in traditional TV advertising. The Web, by contrast, allows for much more precise forms of commercial communication, tailored to the user's interest profile. Connected TV adapts the Web's tried and tested e-commerce logic for television. The increased precision will not only delight advertisers, but also viewers. Who wouldn't be happy about offers which are actually relevant? For targeted advertising in the context of electronic programming guides (EPG), e.g., astonishing click rates of 13 percent are reported, a ten-fold increase over ordinary banner advertising (MediaTel 2011).

This, however, does not solve the core problem of advertising: It is still not considered a value-added offer, but a necessary evil which – depending on the medium – has to be zapped away, skipped, or clicked away. Some 66 percent of all owners of TV hard disk recorders say that the ability to skip commercial breaks is an advantage (Wyman 2009). Second only to considerations of comfort, this functionality is one of the most important reasons for their purchase. Providers with advertising-based business models have now developed advertising formats which cannot be skipped, e.g. by using inserts during the show. The basic trend, however, remains.

From the perspective of advertising-sponsored TV providers, the growing number of refusals is a full-bore attack on their business model. But what if the customer himself became active if he was interested in an item, and a complete advertising and sales chain was tied to this object? This, precisely, is the idea of embedded advertising: any item which appears in a video stream is a potential object of desire. A click on the hero's mobile opens a pop-up window providing product information. The next click could already by the actual purchase, similar to Amazon's one-click shopping. The advertising process is turned on its head: Viewers follow their interests rather than having to feel hounded by advertising. Realising this process, however, remains a challenge. This novel, interest-driven advertising format is currently field tested.

The embedded advertising approach is currently field tested. It makes it possible to replace the little-loved commercial breaks with self-controlled access to information. If, e.g., you're interested in James Bond's mobile, you can immediately find out more and may purchase it with a second click. *Image: Future Media GmbH*

T-Commerce 3.0:
Augmented Shopping and Support Dialogues

In the future, TV sets will naturally come equipped with a small webcam, just as notebooks do today. This will make new functionalities possible which are already available on the Web today – the additional sensory input provided by augmented reality (AR). AR technologies supplement the real-world environment with data objects, creating a novel use experience merging the virtual and reality. Together, both levels let users experience an augmented reality. Today, webcam-based AR is occasionally used in e-commerce, making it possible to virtually try on watches or apparel and choose between makes, colours, and shapes. Why should this use scenario not be transferred to future TV screens and video walls, life-sized and in high resolution?

The existing platforms for video chats can be used to develop new sales and support models. Farsighted, the 1999 Cluetrain Manifesto already proclaimed markets to be conversations. After capturing the Web, the principle of conversation will also take the TV environment and deliver new product experiences. The support assistant of a home centre will then be able to demonstrate, via video chat, live at the actual object how to correctly set up a recently purchased flatpack furniture.

The online retailer Banana Flame has recently begun to use technology provided by Zugara to offer customers a virtual fitting room. Only on the TV screen, however, will augmented reality be possible (almost) life-sized. *Image: venturebeat.com*

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**Smart Home, Sweet Home –
The TV-Set as a Video Centre**

Connected TV ultimately allows for connecting any data or video source to the TV screen. It makes sense to open the end device for functionalities which would otherwise be executed on the smaller screens of computers or tablets. Now, a family can get together comfortably on the couch when wishing auntie in the US a happy birthday. Similarly, the videophone in nursery or the camera at the door could be superimposed at any time while following a tennis tournament. Demographic change could make the scenario Assisted-Living TV attractive for a growing part of the population. This would not only cut the number of cost-intensive doctor's home calls, friends and caregivers would also be able to "drop in" without having to spend time in the commute. The elderly would not have to face new technology, but would use the familiar TV set with its integrated camera and robust voice or motion control.

In many professional environments, video conferencing has long since become an everyday occurrence. The proliferation of video chats on the PC will make chatting on the Connected TV a matter of course, for instance on Google's new platform Hangout. *Image: Google*

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2.6   PERSONAL TV
Made-to-Measure
Programming

More Intelligent Navigation Using Connected TV

The TV landscape is becoming increasingly "niched". In the US, 237 special interest channels already capture almost one-half of all viewers. Here, Connected TV really fits the bill - opening new ways of managing the abundance of programme offers. Not only do background information and updated broadcasting schemes boost this navigational intelligence, the collective intelligence of viewers with similar interest profiles will help to balance increased supply side complexity. If you are aware what your friends on Facebook are currently watching or have bookmarked in their TV schedule, you will find it easier to choose from dozens of movie premieres, thousands of live channels, and millions upon millions of video files (music videos, podcasts, educational videos, sports, fun). In this way, the social dimension of Connected TV supports decision-making. The point of Connected TV is simply that it re-combines into one device the complexity which users currently handle using two devices. The services which support users today in finding the right programme or downloading a suitable motion picture from the Web now entirely migrate to the TV set. Here, personalisation will be indispensable – being spoilt for choice ruins the fun in any media.

**Future of Personalisation:
Context-sensitive Butlers, Speedy Agents**

In the near future, intelligent algorithms and networks will support users' in their programming choices. A personalised best-choice service will, on the one hand, analyse the user's viewing habits, and on the other will access his expanded media history. Based on someone's browser history, the system will, e.g., assume that the user is presently interested in Tunisia as he is in the midst of choosing a holiday destination, and will hence suggest a list of current TV reports and messages on "Tunisia as a holiday destination". Once a booking has been taking place, no further personalised offers regarding this topic would be shown. Like a butler, the service would be aware of his employer's habits and discretely consider them.
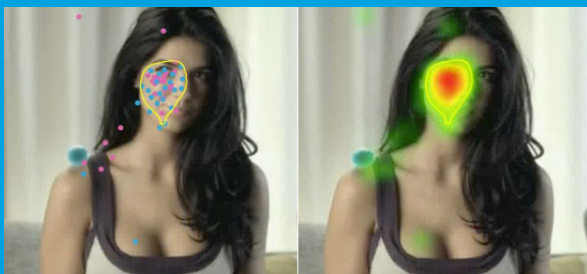
Another scenario is intelligent leisure management: Networked diaries make it possible to coordinate viewing behaviour and other leisure activities. The service will, e.g., consider the user's preference for live transmissions of football matches, will recognise and learn his habits and favourite teams. When selecting an evening for a bbq, users will upon checking their electronic diary also be made aware of TV transmission which are deemed interesting and have been entered automatically.

The personal TV diary scenario already has components which use simple artificial intelligence – the system learns

the user's preferences from his behaviour and, based on the former, handles filters and messages. By 2020, the semantic Web will have matured further, filtering will not only be smarter, but active agents will also be possible. These modules not only filter existing databases, but will explore the Web on their own to actively seek for anything interesting. This could be videos which remain "underneath the radar" of usual video searches because they have not been indexed. The agent would then search the most promising areas of the video web and would, e.g., sift through the video files' image material.

Your TV Is Watching You

Since webcams will soon be a standard component of TV sets, they can be used to create up-to-the-second interest profiles: Our TVs are watching us. If analysed together with the video stream, our posture and facial expressions provide information on what we find fascinating or boring. Here, the Internet of things could offer additional angles of attack: tiny sensors might analyse a user's movements on the couch, calculate breathing frequencies and heart rates, and help to further define user models. Viewers would be able to select programmes such as "couch potato", "my sports news", or "learning TV" and would be correspondingly observed and supplied.

The TV is watching us: Market research has long since been tracking eye movements of test buyers to better understand interests and the effects of advertising. These tracking systems can now be inconspicuously installed in monitors. In a few years, this technology could be implemented at low costs in living rooms. Thinking TVs would offer selection lists adapted to our emotional situation.
Image: Attention Tool®, iMotions®

As technology progresses, it might even be possible to analyse the focus of one's eyes, as professional market research does on a daily basis. In this case, a small eye tracker would be placed near the couch ready to anticipate our every wish from the movement of our eyes. If our eyes linger on an object or a word, this is a rather reliable indicator of increased interest. This situation might prove to be a boon to market research, but privacy advocates will also spring into action, and rightfully so. Even if the processed emotional data was guaranteed not to leave one's four walls and would merely be used to make programming suggestions, many people would be uncomfortable with this intrusion into our subjective selves.

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3

CONCLUSION: TOWARDS THE SUPER MEDIUM

More service

Greater social experience

More control

TV 2020

More intelligent

Higher intensity

More flexible

If we review the new qualities of TV 2020 described in the previous chapter, we notice that there is little reason to suspect that TV might be at death's door. Rather, TV is transformed into a Super Medium boasting a host of new viewing qualities. Tomorrow's television will be connected to the Web, one's friends, and the smart home's consumer electronics. It will be everywhere – anytime, anyplace. Media centres will offer access to any live video feeds and an unlimited archive of movies, series, event recordings, and teaching videos. Software agents help users choose. Video streams will often be provided in three dimensions and will be enriched with interactive elements. The webcam, which comes as a standard with end devices, lets viewers change to video chat at any time and switches from television to dialogue and telepresence modes. The camera's eye makes it possible to identify gestures, dispensing with the remote control and transforming the living room into a virtual gaming and exercising arena.

Unlimited Freedom?

Children growing up today occasionally ask their parents how earlier generations were able to achieve things without the Web, mobile phones, or Facebook – researching information, arranging dates, finding new friends. In 2020, the youngest generation will look in amazement at an era when one had to adhere to rigid programming schedules as a result of scarce frequencies and programming slots. We have, however, also to consider the costs of the Super TV era's unlimited freedom. As offers multiply, does media competence have to grow likewise? And might this freedom be only make believe? Google's personalised search engine relies on a user's search history and tends to show more pages which affirm his existing worldview, prejudices, and values. The ease of personalisation may thus lead to the comfort zone of mental monotony. The fact that almost unnoticeably
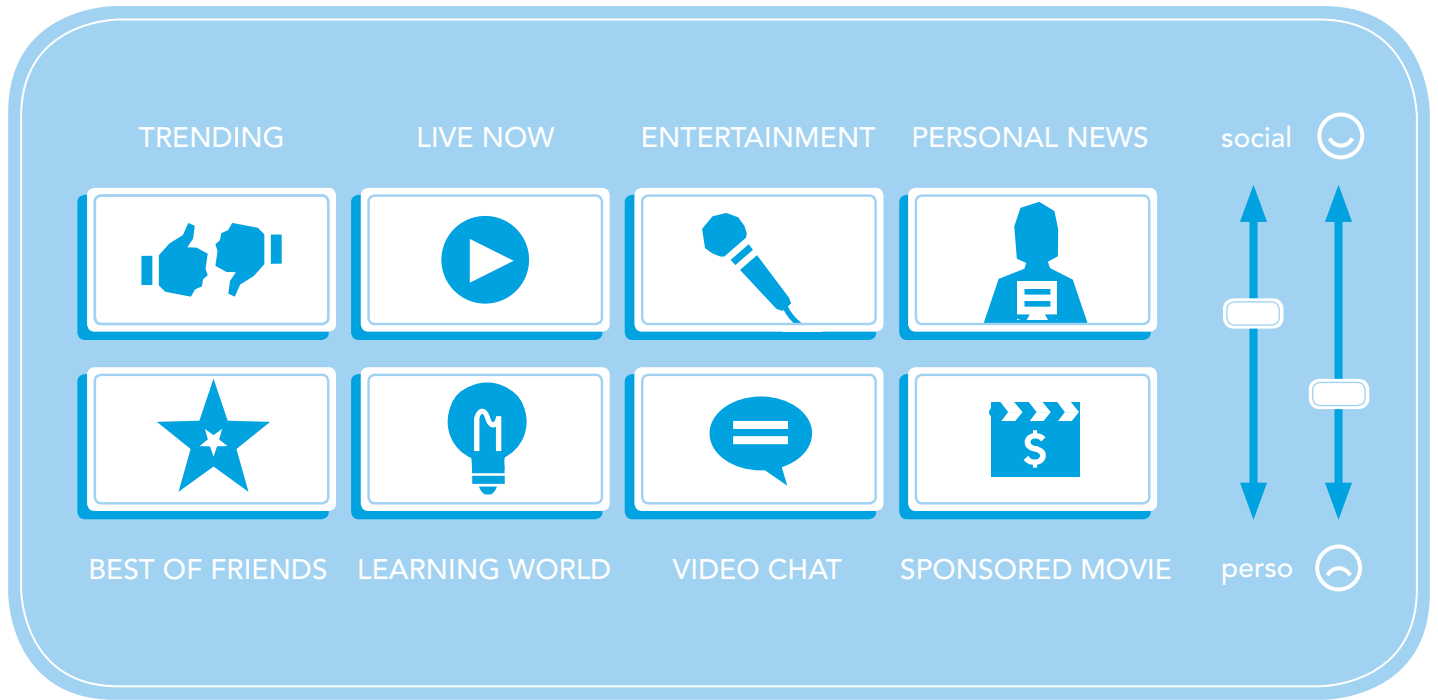
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and in ever-more areas of life, algorithms and not people make judgments on and decisions for us should in no way be considered to be unproblematic. This applies to profile and behaviour-based advertising on the Web just as to calculating one's credit rating based on socio-demographic data. These critical aspects of transparency and privacy have to be considered for the architecture of a future integrated TV universe, and not merely as acceptance factors, but as concrete design factors.

TV as an App

It will soon be necessary to re-define TV as a leisure-time activity. In the first stage, moving images were transferred to the Internet as video clips, with the audiovisual snack establishing itself as a common media format. Today, however, it is no longer a difficult to spend entire evenings trawling YouTube's video universe, whether one is looking for funny clips, recordings of conferences, or teaching videos for many knowledge areas and areas of life. If, thanks to Connected TV, this stream of images appears on domestic large screen TVs, most people today would still hesitate to speak of an evening spent watching TV. This linguistic uneasiness is clear evidence of a transformation on the factual level: "Is what I'm doing actually watching the telly?" some may enquire in view of the new medial crossovers and mergers. This applies even more to use cases such as Augmented Shopping, which has nothing in common with the medium of broadcast TV – here, the TV set is simply used like a PC.

In this context, TV in the traditional sense, distributed to households in customary linear programming schedules, loses its eminent position. Here, the analogy to mobile phones really sums things up: the world's most successful smartphone, Apple's iPhone, relegated the original core functionality Voice Call to the level of an App, on equal footing with a host of other services. The conceptual consequences of this step are hard to overestimate, after all, it ushered in a radical re-definition of what a telephone is and what it may do.

A similar development may be expected for the TV and television in general. We may say that TV 2020 is merely an App. At the same time, tomorrow's TV will be at the heart of our media consumption – and will thus become a Super Medium. It is precisely the combination of the strengths of the Web with the qualities of TV which could lead to the emergence of exciting new formats. The opportunity consists of transforming the TV set – using integrated services – from a mono to a multifunctional device which will continue to remain a core element in consumer electronics. By comparison to the PC, the TV set has traditionally belonged to the entire family. Wherever media consumption has a communal aspect, TV will be able to play to its strengths.

TRENDING   LIVE NOW   ENTERTAINMENT   PERSONAL NEWS   social

BEST OF FRIENDS   LEARNING WORLD   VIDEO CHAT   SPONSORED MOVIE   perso

Future operating concepts could replace fixed channels and program-ming guides with a permanently updated offer cloud based on the best-of principle. This makes it possible to handle an overwhelming supply. Based on moods and profiles, regulators filter which offers are currently listed. Media sovereignty becomes a key value.

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