

DIGITALE FRAMTIDSTRENDER

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The Future belongs to those who prepare for it today!
The Future starts now!

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Presentation based en a research report for VAE

VISIT ARCTIC EUROPE 



Looked at resent research papers
and white papers (industry reports)
what they predict about trends in
digital tourism.

= Qualitative forecasting

≠ Science Fiction

2

BACKGROUND

- **Digital Information technology** has played a fundamental role in the development and growth of the tourism industry, and as an important tool for travellers and tourism suppliers.
- Every industry sector is currently undergoing a digital transformation
- We are entering industry revolution 3.0

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SELECTED TOPICS FROM REPORT

1. Snapshots of digital technology evolution
2. Digital marketing by digital footprints & Micro targeting
3. Trends in new distribution and booking systems
4. Trends in customer digital behaviors

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DON'T BE:

- **Scared** by the technology (almost Science Fiction) – be curious!
- **Skeptical** – otherwise you will be overstepped by those adapting
- *Embrace the development and do your best of it!*

"The best way to predict the future is to invent it"
(Alan Kay, Xerox PARC)

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MAIN RESULTS

DISRUPTIVE MEGATRENDS

- Disruptive megatrends in society are changing way of living and doing business
- Paradigm shift towards digitalization (e-business, e-commerce, e-payment, e-tourism and e-traveler, digital generations)
= Digital transformation
- Megatrends in digital transformation will strongly influence tourist behaviors and the tourism industry

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MAIN RESULTS

Disruptive hardware and software evolution such as:

- mixed reality (VR, AR)
- artificial intelligence (AI)
- robotization and automatization
- psychometrics micro-targeting
- digital footprints and big data
- cloud computing
- blockchain technology
- gamification
- holographic telepresence
- web 4.0
- Internet of Things (IoT)
- quantum computers, and much more

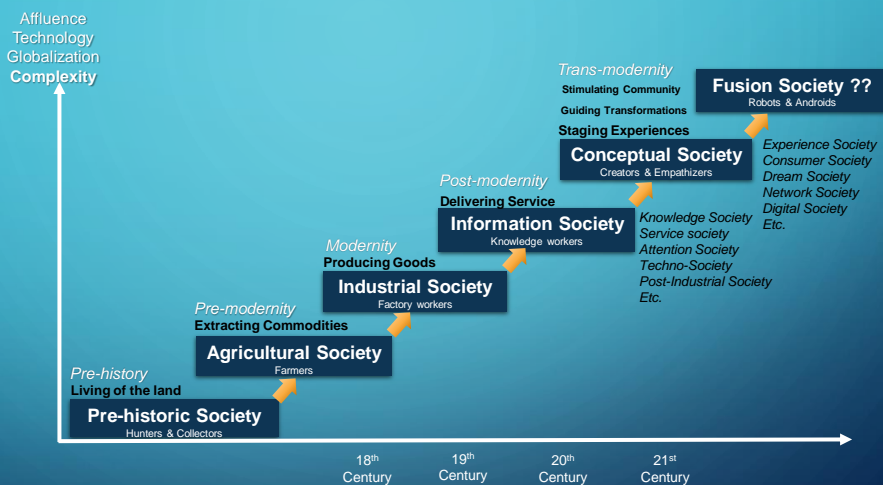


together with the “experience turn” (co-creation, customer-centered experience management, user-generated content)

challenges traditional business organizations and business value chains

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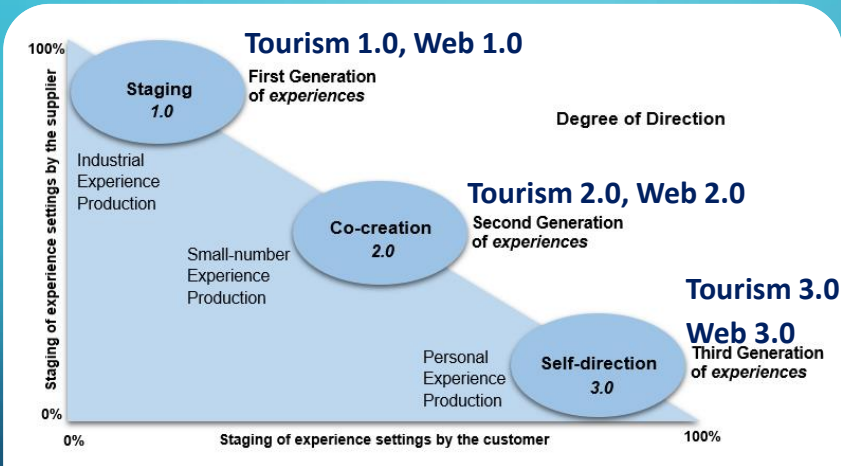
MEGATRENDS – IN SOCIETY



.A simplified stage model of progression of society and economical offerings. (modified after Pine & Gilmore 1999, Florida 2002, Luyckx Ghisi, 2006, Pink 2007, and others.)

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MEGATRENDS – IN TOURISM BUSINESS



TOURISM:
Service industry →
Experience Industry

Figure 2. Different generations of experience production as actor-customer relationships in the creation of meaningful experiences. (modified after Boswijk et al 2012, p 11)

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MEGATRENDS – WEB EVOLUTION

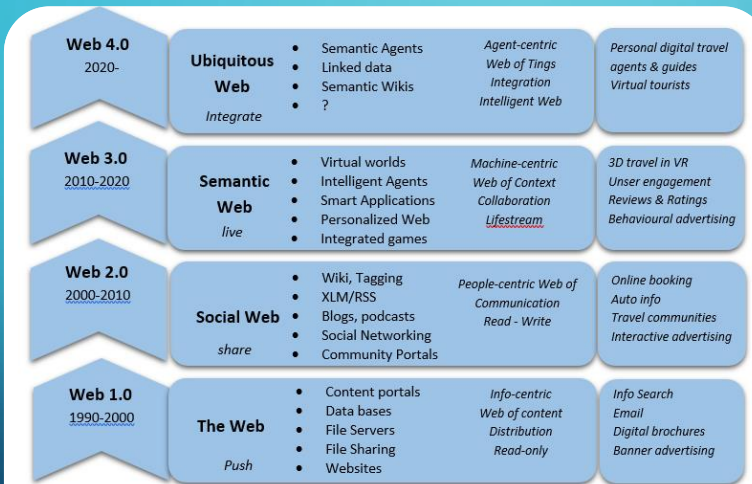


Figure 4. The evolution of the Internet (compiled from diverse sources)

TOURISM:

From:

Companies posting information
(web 1.0)

→ Interacting with guests
(Web 2.0)

→ Self-creating experiences
(Web 3.0)

→ AI supported experiences
(Web 4.0)

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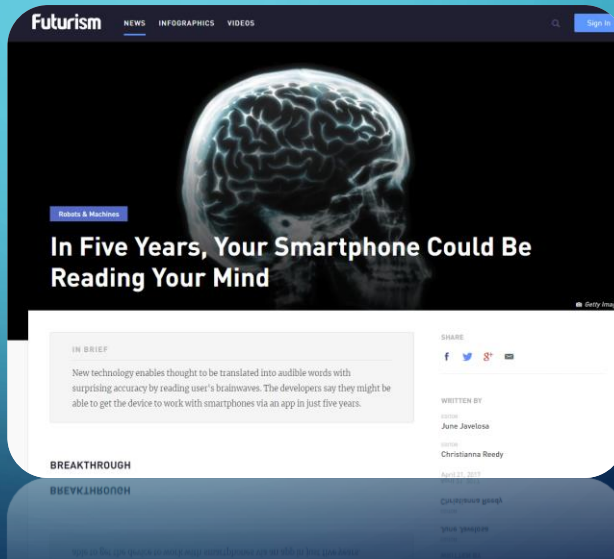
TECHNOLOGICAL MEGATREND – DEAD OF MOBILES



"Mobilen är redan död. Folk har bara inte insett det än!"
Foto: Fotolia

Snart är mobilen borta – det här kommer i stället

I framtiden kan mobiltelefonen och bildskärmar vara ett minne blott. Det nya ska ersätta allt sådant och kräver inte ens någon uppkoppling. Mobilen är redan död. Folk har bara inte insett det än, säger Alan Kijman.

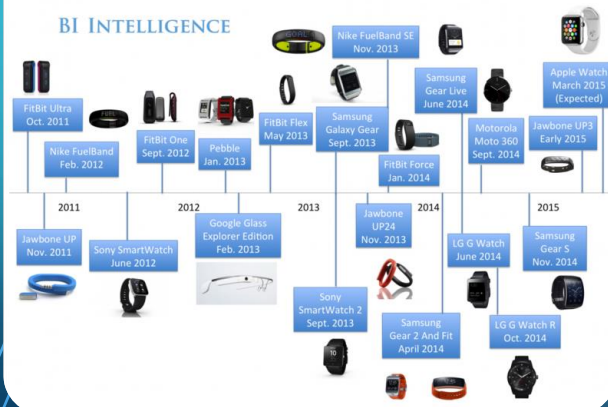


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TECHNOLOGICAL MEGATRENDS – WEARABLES....

Wearable Device Release Date Timeline

BI INTELLIGENCE



THE WORLD'S MOST ADVANCED WEARABLE COMPUTER

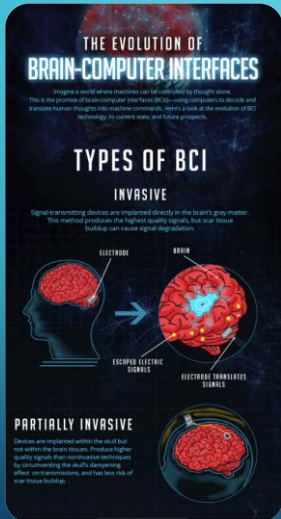


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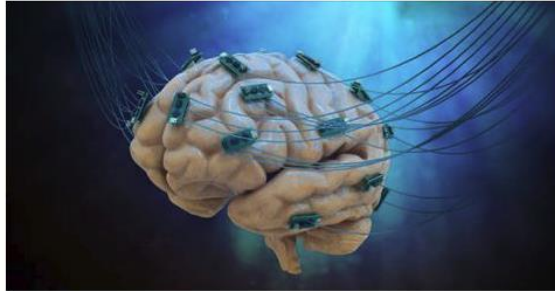
A close-up portrait of a man with light brown hair and a short beard, wearing black-rimmed glasses. The glasses have the number '639' on the right temple and a small 'P' logo on the left lens. The man is looking directly at the camera with a neutral expression. The background is a plain, light gray.

AUGMENTED REALITY VISION
THIS EYE IMPLANT GIVES YOU

TECHNOLOGICAL MEGATREND – BRAIN-COMPUTER INTERFACE



Braininternet! here very soon!



Scientists Connect A Human Brain To The Internet For The First Time

Tired of tapping on the screen of your pesky, high-end smartphone to browse the Internet? No fear, because the awkwardly named "Braininternet" is here! A tea

IFLSCIENCE.COM

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TECHNOLOGICAL MEGATREND – BRAIN-COMPUTER INTERFACE



Neuralink's product? Brain-Machine Interfaces (BMIs) that enhance human intelligence.

big think



Humanity could become a giant brain, speeding up progress and evolving intelligence.

big think

Should we be scared?

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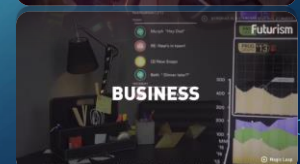
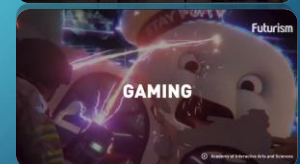
TECHNOLOGICAL MEGATREND – VR, AR, 4D, 5D



TOURISM: Old Uppsala AR experience of Vendel time year 550 AD

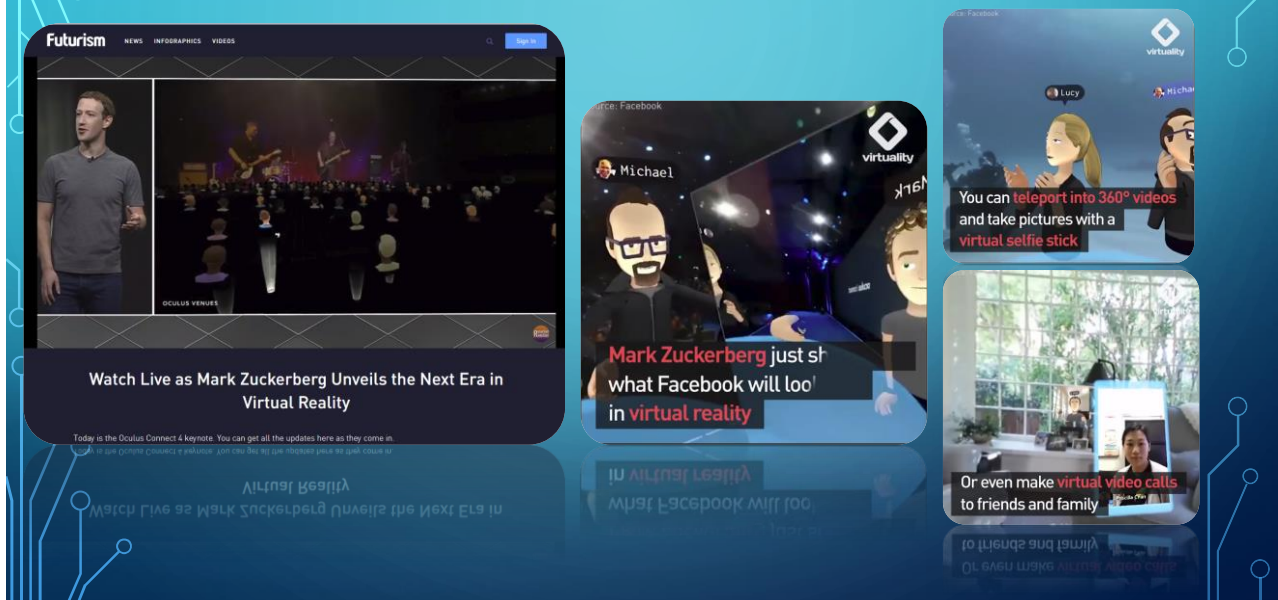
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MEGATREND – AUGMENTED REALITY AR



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TECHNOLOGICAL MEGATREND – VIRTUAL REALITY VR



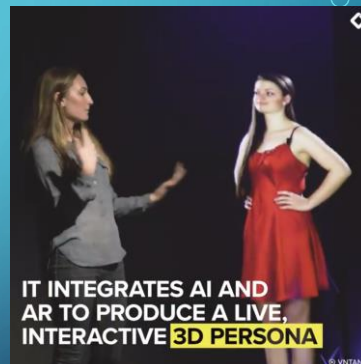
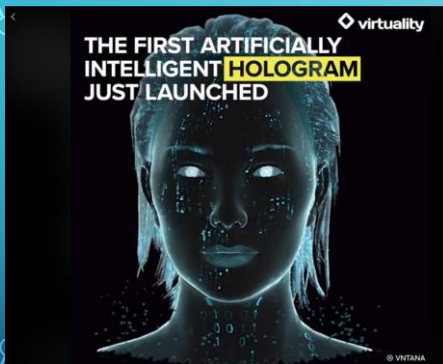
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TECHNOLOGICAL MEGATREND – VIRTUAL REALITY TOURIST



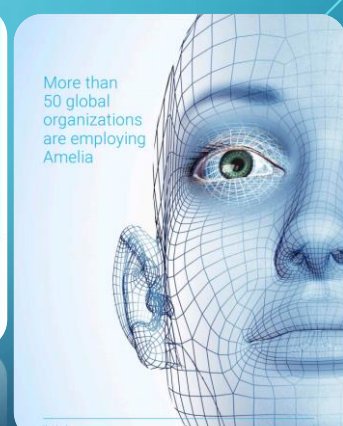
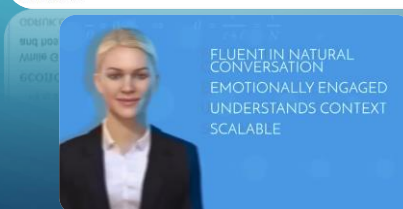
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TECHNOLOGICAL MEGATREND – HOLOGRAM



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TECHNOLOGICAL MEGATREND – AI SERVICES



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TECHNOLOGICAL MEGATREND – AI ROBOTS

This robot is now a citizen of Saudi Arabia

Source: Future Investment Initiative
Footage: Future Investment Initiative

and is meant to resemble Audrey Hepburn

I want to use my artificial intelligence to help humans live a better life

CNBC just did a live interview with this robot

Sophia is very confident

She can track and recognize faces

And told humans they have nothing to fear from robots

Should we be scared?

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TECHNOLOGICAL MEGATREND – AI ROBOTS

Should they have all the same rights as citizens?

LG just unveiled a new home robot

TOURISM Robots in Service & hospitality

Do you think robots can be citizens?

and will soon be available at airports

Hitachi's EMIEW3 and robotics IT platform for customer services

Should we be scared?

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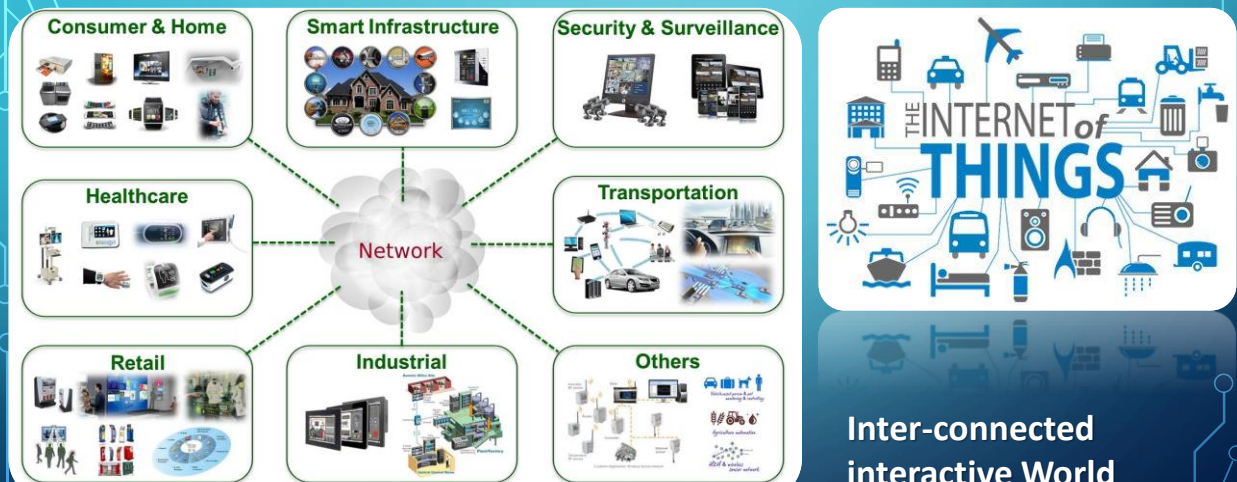
TECHNOLOGICAL MEGATREND – AI ROBOTS

Self-driving transportation



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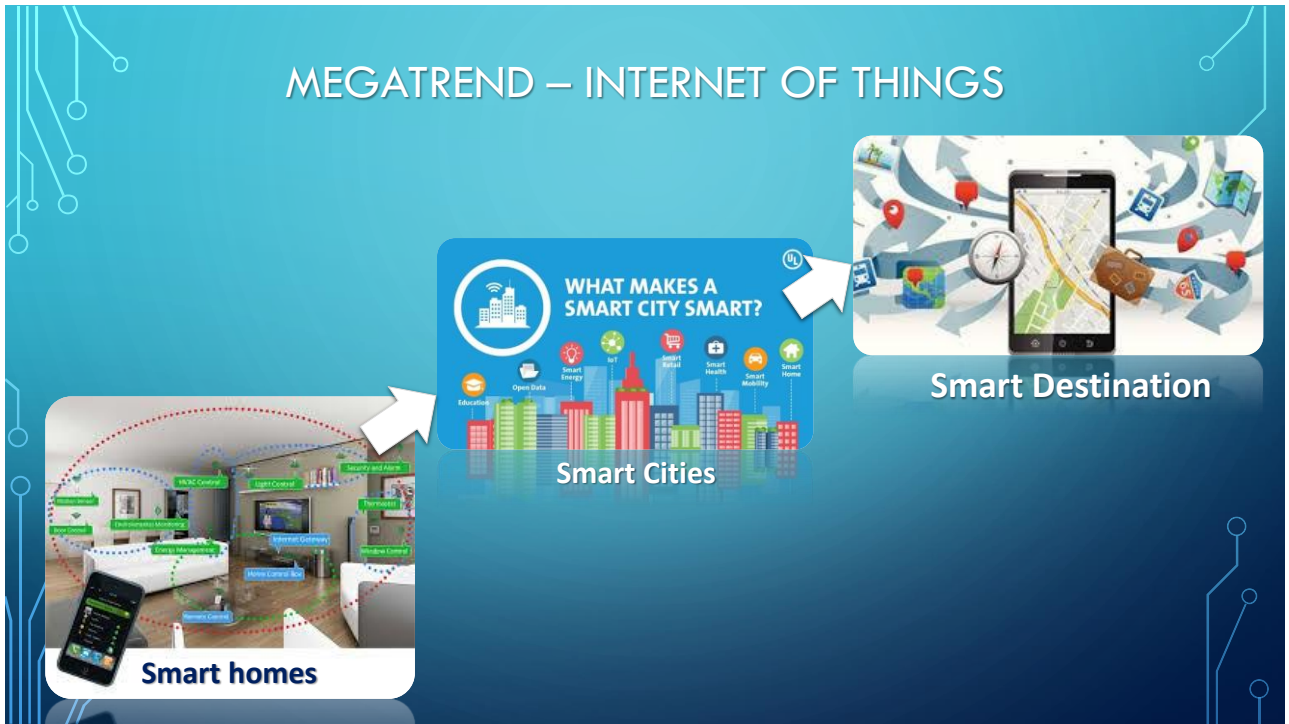
MEGATREND – INTERNET OF THINGS



Inter-connected
interactive World
Windows IoT

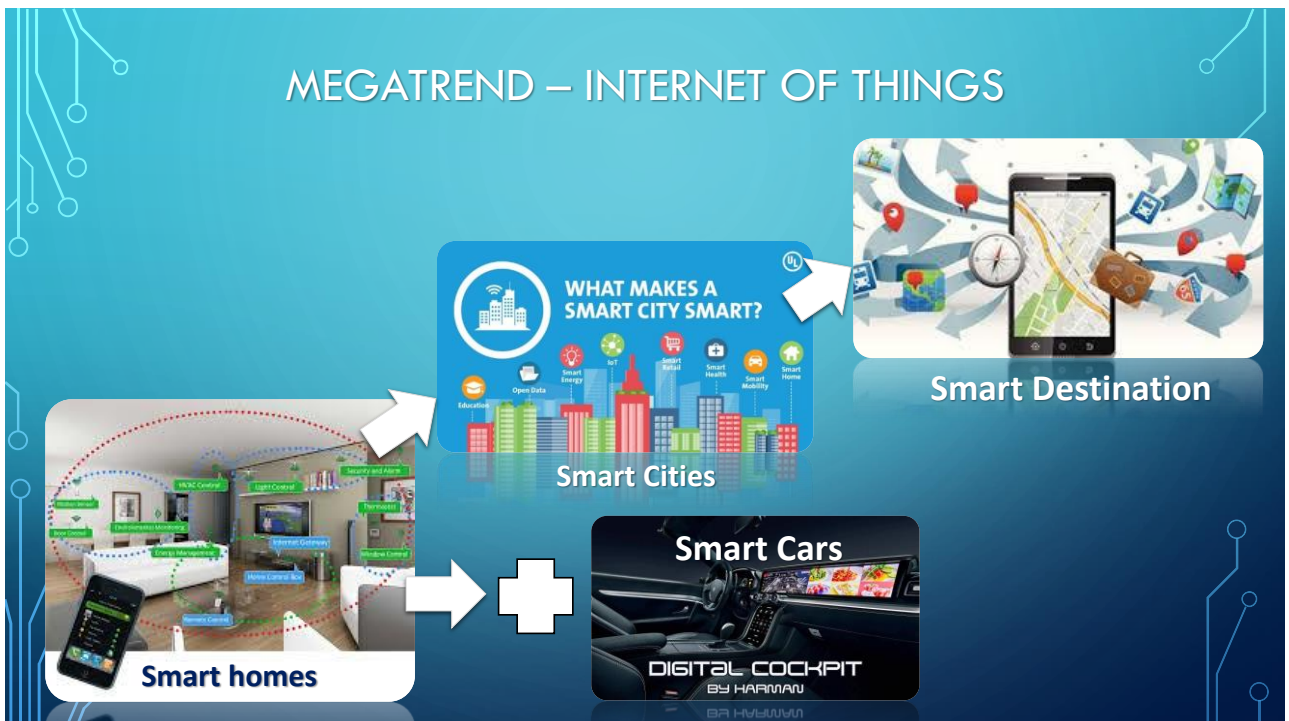
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MEGATREND – INTERNET OF THINGS



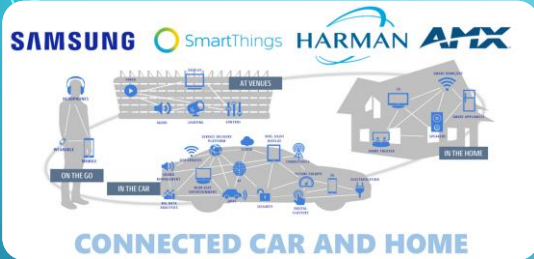
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MEGATREND – INTERNET OF THINGS



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MEGATREND – INTERNET OF THINGS



CONNECTED CAR AND HOME
CONNECTED CAR AND HOME



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MEGATREND – CLOUD COMPUTING & BIG DATA



Customers;
Digital Footprint →
Big Data



Businesses;
Cloud computing →
Data-lakes

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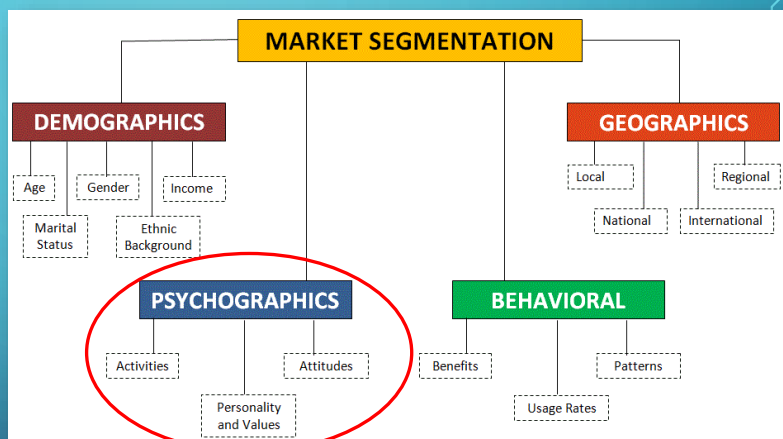
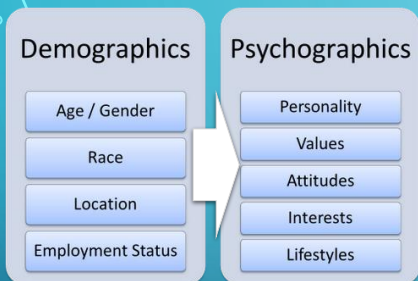
TRADITIONAL MARKET SEGMENTATION

Table 6. Demographic segmentation by the Nordic travel organisations Visit Finland (2012, 2014) Visit Sweden (2016) and the Winter Experience Northern Norway project (2016)

Organisation	Main target group:	Demographic groups:				
Finnish Lapland And Visit Finland	Modern Humanist	Active Family Travellers	Ordinary Modern Humanists	Safe Adventurers	Fugitives of Everyday Life	Cultural Individualist Travellers
Swedish Lapland Visitors Board, Visit Sweden	Global Travellers	Active Families	DINK's; Double Income, No Kids	WHOP's: Wealthy, Healthy Older People		
Swedish Lapland Visitors Board, Visit Sweden	Driving segments		Active Nature lover	Everyday Escapist and enjoyer of life	Curious explorer	Party- and adrenaline seeker
Northern Norway		Comfort Plus	No Stress	Safety-Planner	Activity Chaser	Socializer
Ipsos TripAdvisor	Researchers	Social travellers	Value seekers	Luxury travellers	Independent travellers	Habitual travellers
Amadeus	Ethical Travellers	Obligation Meeters	Simplicity searchers	Cultural Purists	Reward Hunters	Social Capital Seekers

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MEGATREND – PSYCHOMETRICS/PSYCHOGRAPHICS



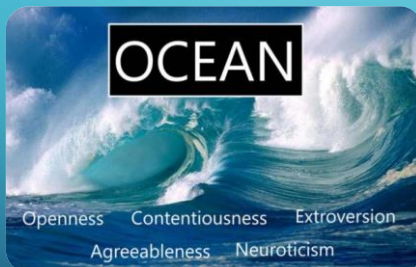
Big Data → Micro-targeting

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PSYCHOMETRICS MICRO-TARGETING MARKETING

Cambridge Analytica

- Developed simple methods to extract
- Personality traits from Internet activities based on;
 - Values
 - Attitudes
 - Interests
 - Lifestyle
 - Personality
- Micro-targeting Marketing is possible
- Digital Footprint → Big Data → Micro-targeting



Cambridge
Analytica

Same demographics, different personalities



Female
25-35 Years old
AMEX User

Openness _____
Conscientiousness _____
Extroversion _____
Agreeableness _____
Neuroticism _____

People with high openness and extroversion love new experiences they can share with lots of people.



Female
25-35 Years old
AMEX User

Openness _____
Conscientiousness _____
Extroversion _____
Agreeableness _____
Neuroticism _____

People with low openness and extroversion really value down time spent with their closest friends.

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PSYCHOMETRICS MICRO-TARGETING MARKETING

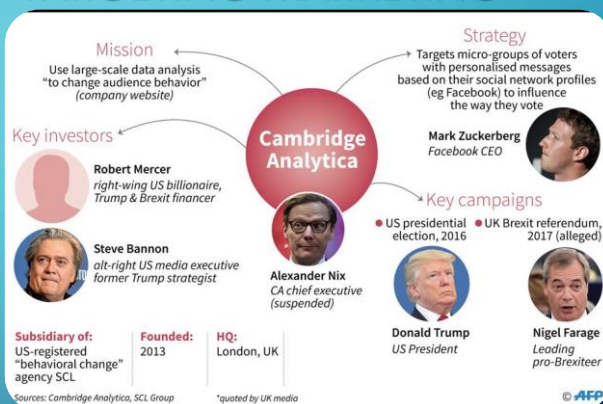
CEO of Cambridge Analytica Alexander Nix speaks at the 2016 Concordia Summit



The Data That Turned the World Upside Down

Psychologist Michal Kosinski developed a method to analyze people in minute detail based on their Facebook activity. Did a similar tool help propel Donald Trump to victory?

MOTHERBOARD.VICE.COM



facebook

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PSYCHOMETRICS MICRO-TARGETING MARKETING

Latest Facebook – Cambridge Analytica scandal:

- Cambridge Analytica collected data from 50 million US FB-users to influence Donald Trump election by **micro-targeting**
- Data collection 2014 by FB personal test –app “thisisyourdigitallife” by US psychologist Alexandr Kogan
- 270 000 did the test and got money as compensation, but by FB sharing of this test, data from 50 million were collected
- Data sold to Cambridge Analytica who made micro-targeting for the Trump campaign
- Cambridge Analytica also involved in other democratic elections
- FB CEO Mark Zuckerberg hearing at the US congress

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MEGATREND – PSYCHOMETRICS/PSYCHOGRAPHICS

Psychometric Micro-targeting vs. new GDPR regulation in EU?



**General
Data
Protection
Regulation**





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DIGITAL TRENDS IN DIGITAL TOURISM MARKETING

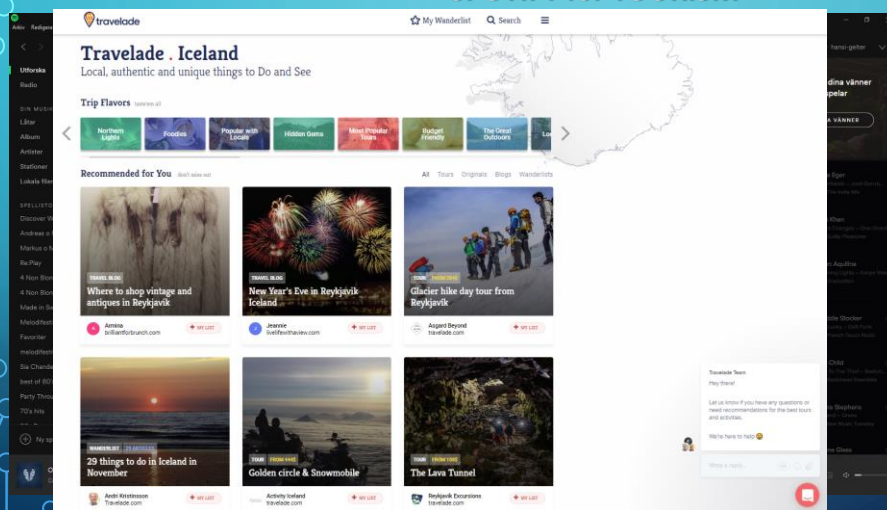
Snap-shots:

- Push-marketing → pull-marketing
- Electronic-word-of-mouth (eWoM)
- User-generated content
- Social context mobile marketing (SoCoMo)
- Location-based social Network Marketing
- Real-time-marketing during real-time customer journey
- Infographics
- Immersive storytelling (360-videos)
- VR and AR

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AI IN MARKETING AND DISTRIBUTION

SPOTIFY for TOURISM



Artificial Intelligence

Content meta data

User behaviour data



Play list = Wander List

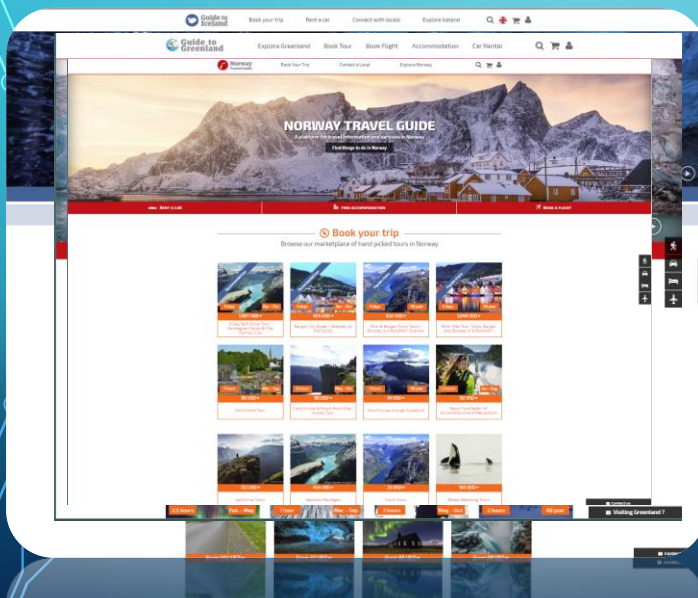
Recommendations

Most Popular

Etc.

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AI IN MARKETING AND DISTRIBUTION



MEGA ONLINE TRAVEL RETAILER

Dynamic product presentation of 5000 products of 1000 suppliers

Guide to Iceland

Guide to Greenland

Norway Travel Guide

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DIGITAL TRENDS IN TRAVEL DISTRIBUTION

Traditional value chain

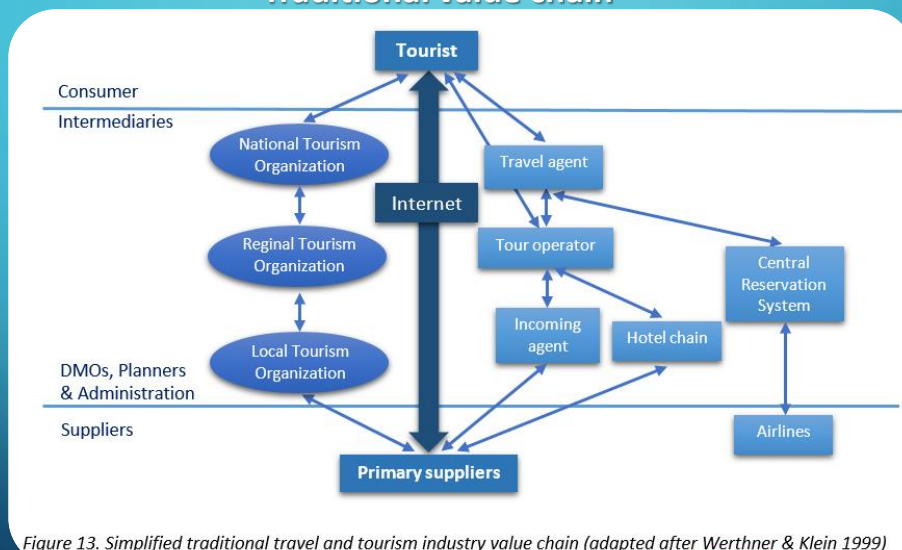


Figure 13. Simplified traditional travel and tourism industry value chain (adapted after Werthner & Klein 1999)

Figure 13. simplified traditional travel and tourism industry value chain (adapted after Werthner & Klein 1999)

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DIGITAL TRENDS IN TRAVEL DISTRIBUTION

New emergin value chain

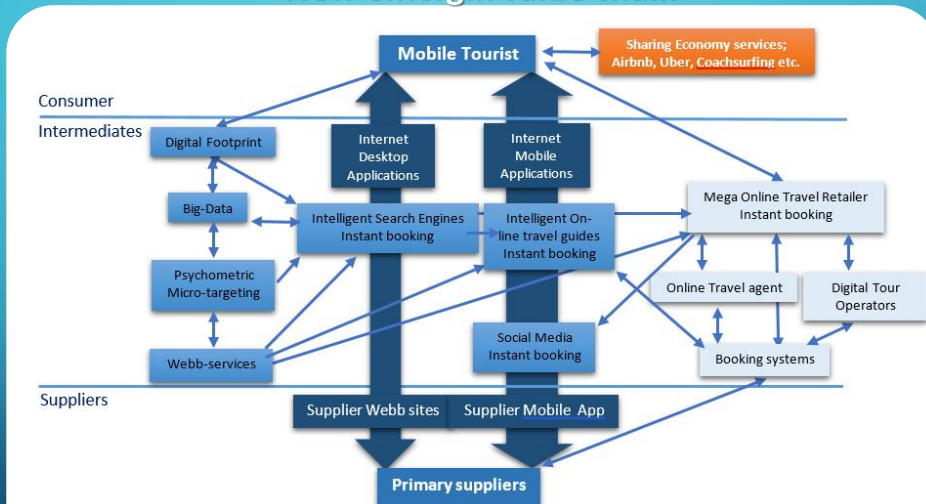


Figure 14. Simplified interpretation of future digital value chains in travel and tourism.

Figure 14. Simplified interpretation of future

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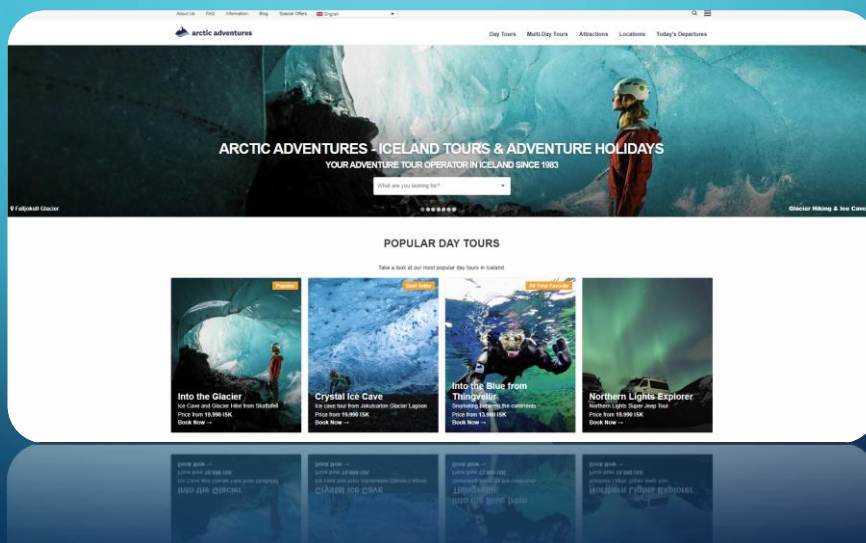


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DIGITAL TRENDS IN TRAVEL DISTRIBUTION

Disrupted value-chain by Cross-Selling by providers (BOKUN)
Arctic Adventure 100 own products, 1000 products on webpage



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DIGITAL TRENDS IN TRAVEL DISTRIBUTION

Disrupted value-chain by Cross-Selling by providers (BOKUN)

<http://www.guide-natura.com/boating-bat/guided-boat-tours-37842296>

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DIGITAL TRENDS IN TRAVEL DISTRIBUTION

Disrupted value-chain by Direct booking in Google, Facebook and TripAdvisor

Illustrate how participants in the service cycle have changed in only three years by the introduction of booking services on Google, Facebook, and TripAdvisor. (tnooz)



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DIGITAL TRENDS IN TRAVEL DISTRIBUTION

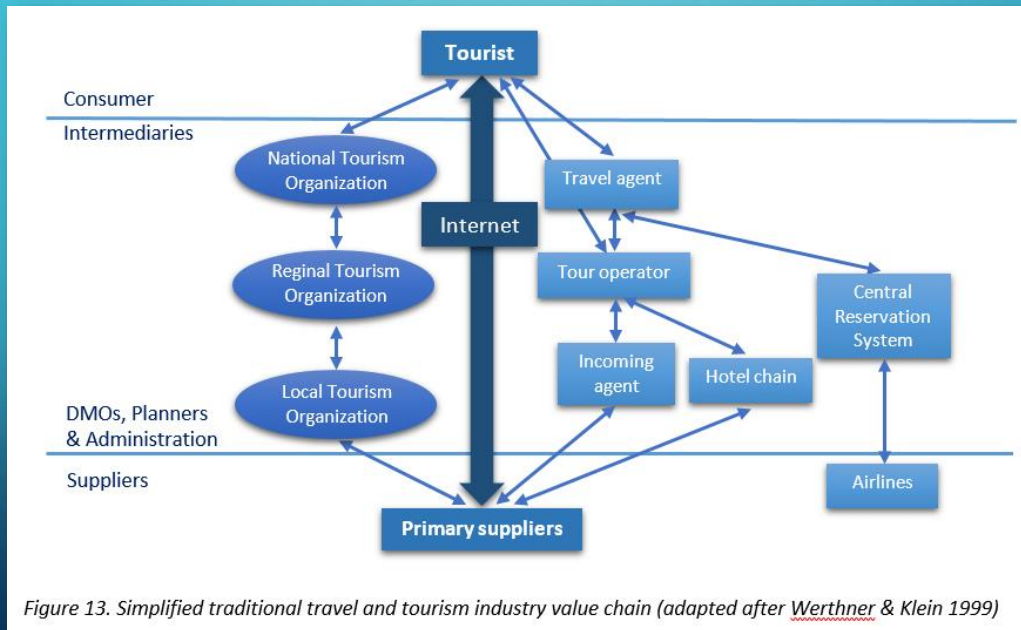


Figure 13. Simplified traditional travel and tourism industry value chain (adapted after Werthner & Klein 1999)

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DIGITAL TRENDS IN TRAVEL DISTRIBUTION

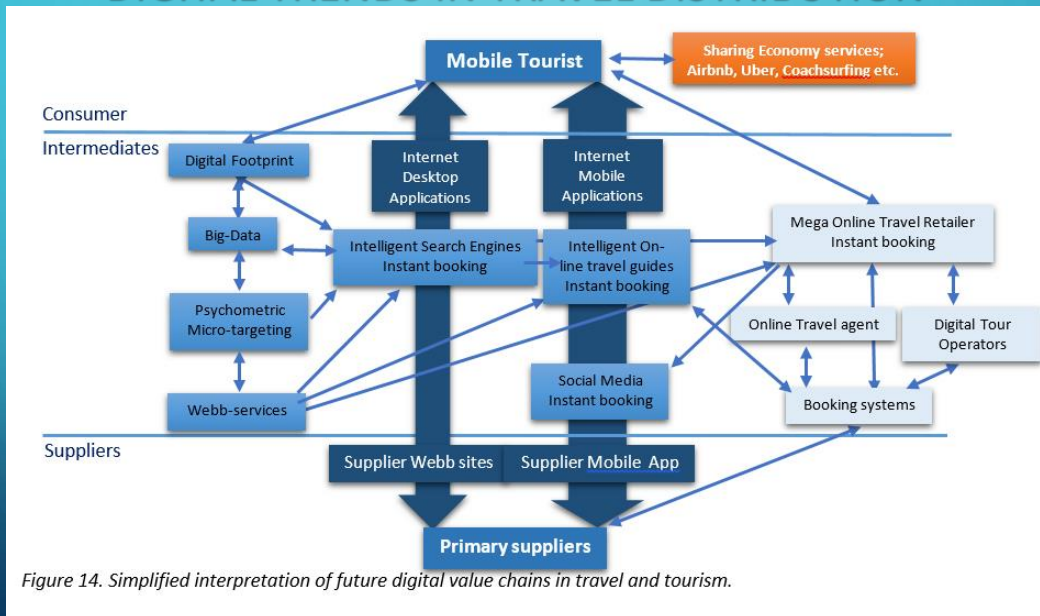


Figure 14. Simplified interpretation of future digital value chains in travel and tourism.

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DIGITAL TRENDS IN CUSTOMER DIGITAL MOBILE BEHAVIOUR MOBILE MICRO-MOMENTS



In real-life Micro-moments of "Amy" using mobile or desktop when planning for a trip to Disney World (from Google)

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DIGITAL TRENDS IN CUSTOMER DIGITAL MOBILE BEHAVIOUR MOBILE MICRO-MOMENTS

Google:

- Want-to-get-away, dreaming moments
- Time-to-make-a-plan organizing moments "travel hacks"
- Let's-book-it, booking moment
- Can't-wait-to-go moment, anticipation moments
- Can't-wait-to-explore, experiencing moments

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DIGITAL TRENDS IN CUSTOMER DIGITAL MOBILE BEHAVIOUR

Snap-shots:

- Importance of understanding Traveller's road to decision
- Micro-moments in travel
- Cross-device movements
- Mobile-in-destination behaviour
- Anywhere-and-anytime availability
- Radical self-reliance of modern travellers
- Diversity and complexity of behaviours
- Blurring of on-site and post-travel experience

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CONCLUSION

"Going digital is no longer an option – it's a must!"

Lisbeth Bahl-Poulsen, DG Growth, EU-commission

Welcome to the
TOURISM MATRIX

Thank you for your attention !
Takk for oppmerksomheten !
Tack för din uppmärksamhet !
Kiitos mielenkiinnostanne !

www.matrix-poster.de

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