



ICT Challenges in Tourism Destinations on the 21st Century

The trends, behaviors, and social influences
affecting the tourism industry today

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CICTourGUNE

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Technology

Evolution of Devices

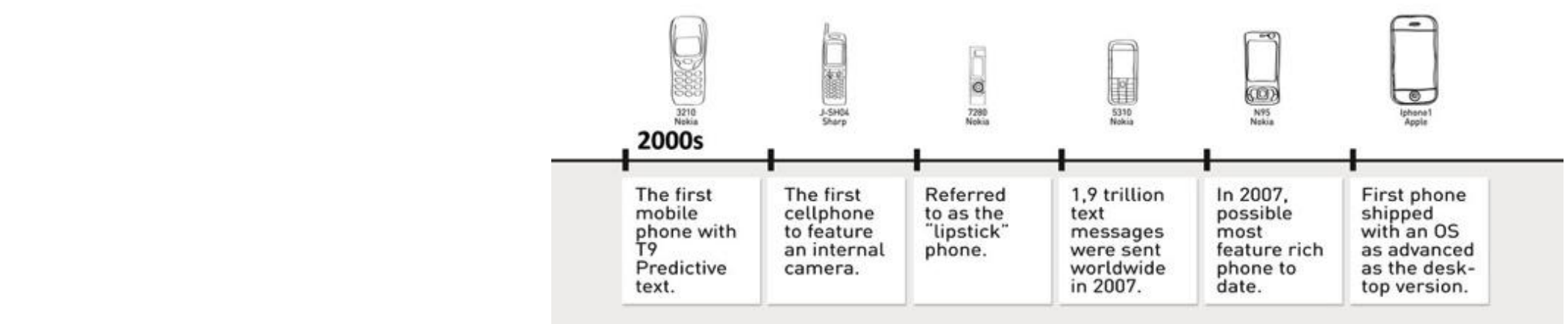
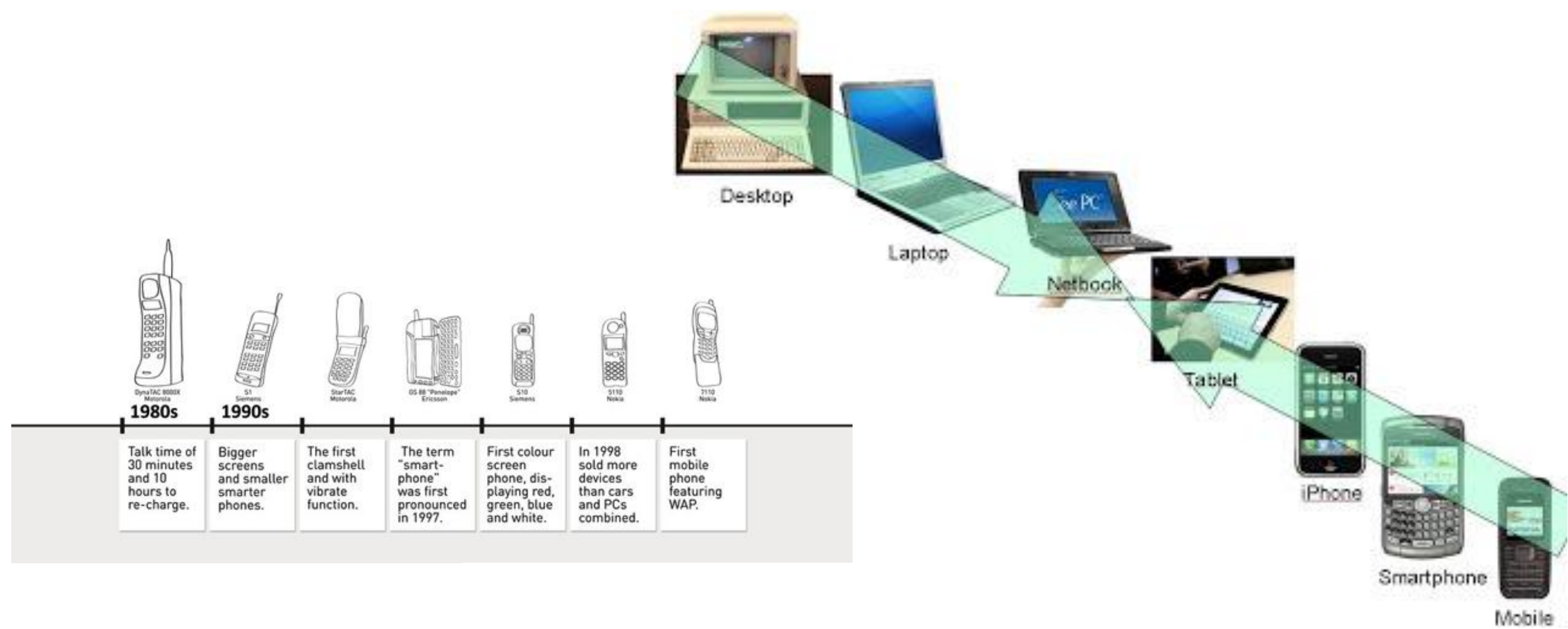


Motorola DynaTAC 8000X

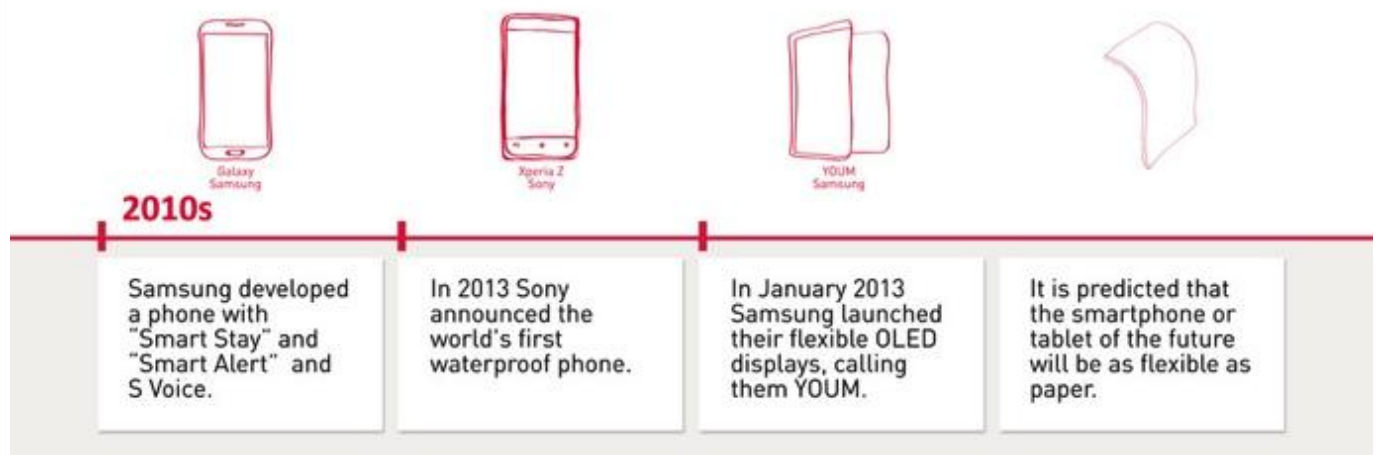


Invented by Dr. Martin Cooper





Source: Barcelona Mobile Capital



Mobile Technology

- Around 69% of world population will have a mobile device in 2014 (eMarketer)
- 1.75 billion of smart phones in 2014 (eMarketer)
- Annual growth of around 6%
- Samsung: more than 63 million devices sold Q4, 2012. 40 high level
- Samsung sold more than 200 million devices in the world
- Apple, second, sold more than 48 million units in Q4
- Nokia, 6.6 million
- More than 106 million tablets delivered in 2012
- 234 million Americans have mobile devices: 53% smartphones
- Gartner foresees 1,9 billion mobile device sell, of which 1 billion will be smart

Mobile Technology

- Q1 2013: The first time ever that smartphone surpasses feature phone
- Samsung still number 1, (24,9% of market) Source: IDC, 2014 Q2

Period	Samsung	Apple	Huawei	Lenovo	LG	Others
Q2 2014	24.9%	11.7%	6.7%	5.2%	4.8%	46.7%
Q2 2013	32.2%	13.0%	4.3%	4.7%	5.1%	40.7%
Q2 2012	32.2%	16.6%	4.1%	3.1%	3.7%	40.2%
Q2 2011	17.0%	18.8%	2.5%	0.2%	5.7%	55.7%



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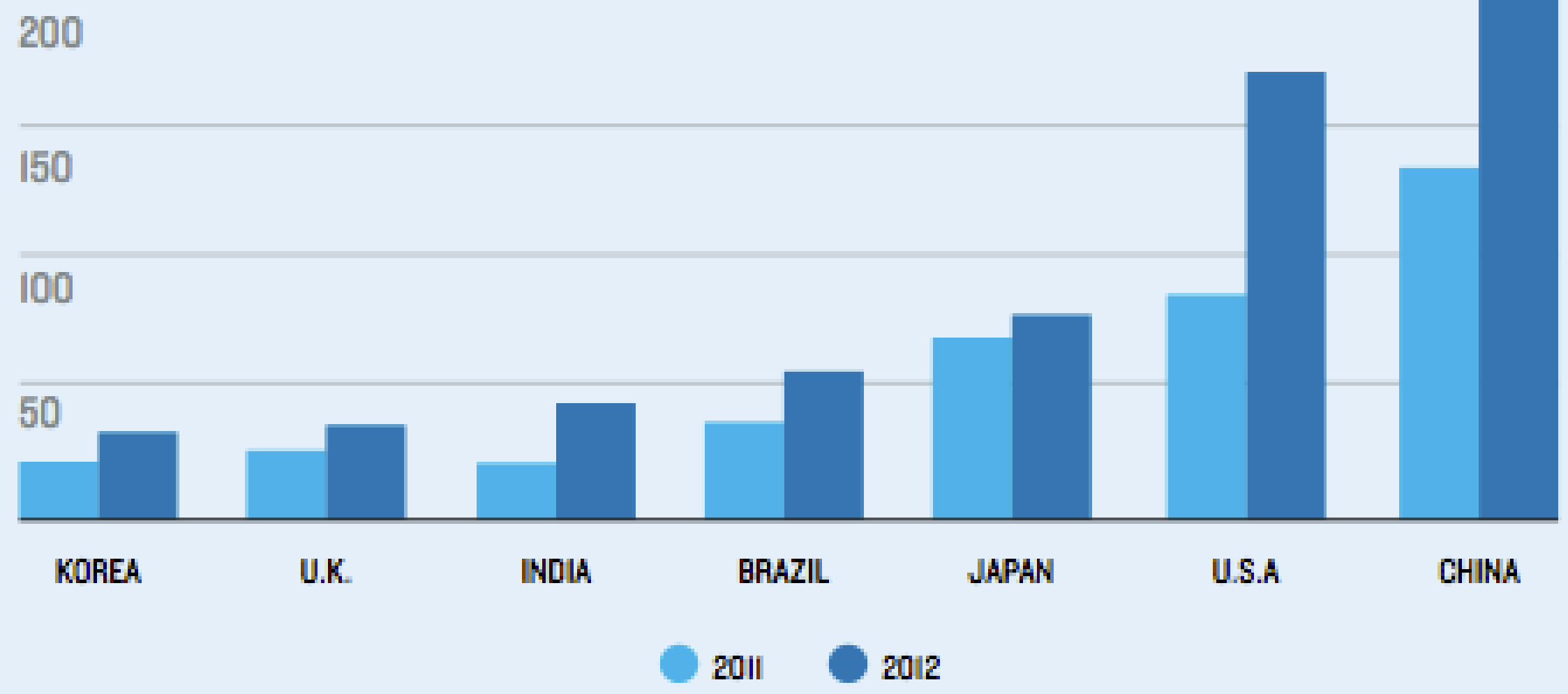
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More to Grow

The world's seven largest markets for smartphone subscriptions

250 MILLION SMARTPHONES



Source: Gartner

Mobile Technology



Facts & Figures



Without my cell phone, I wouldn't:

1. know what time it is
2. be able to solve a math
question
3. know a single phone number
4. know the date
5. be able to text my friend
when I'm at their house
6. take a snap shot at a picture
perfect time
7. be able to wake up from an
alarm in the morning
8. find my way in the dark





THEIR VALUE

What we're willing to give up for a month to keep our smartphones



Beer

43%



Chocolate

36%



Super Bowl tickets

34%



High heels

26%



Cable TV

20%

Evolution of Connectivity Technologies



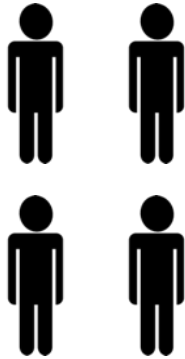
WORLD INTERNET USERS

2008



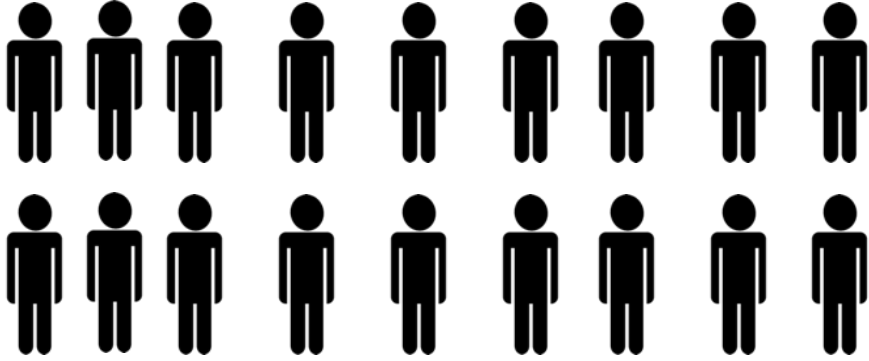
1.000.000.000

2013



2.400.000.000

2020



5.000.000.000



The population of people connected to the Internet is growing 150% faster than the world population



THE WAY THAT WE ACCESS THE INTERNET HAS CHANGED



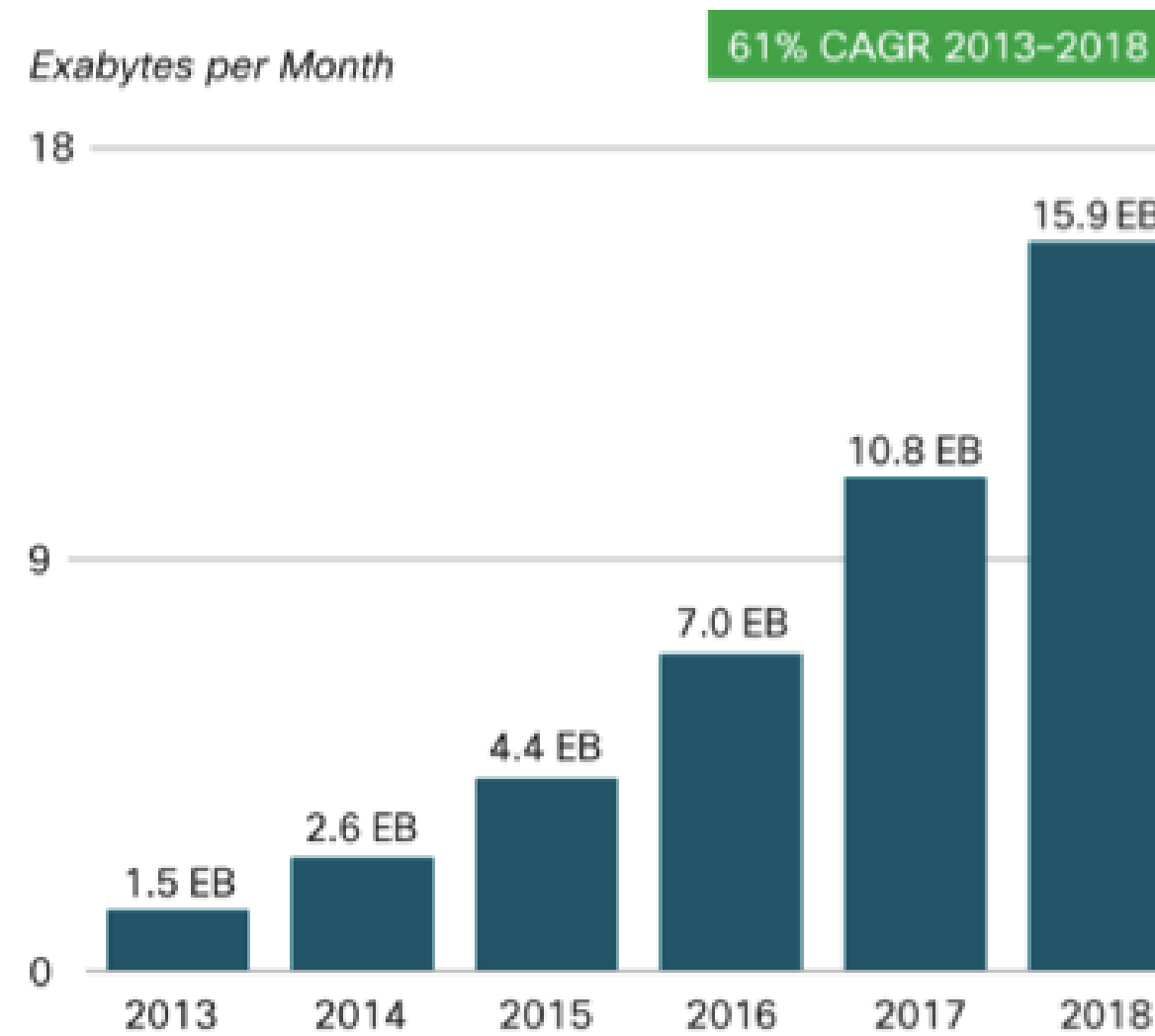


FOR 2020, 50 BILLIONS OF OBJECTS
CONNECTED TO THE INTERNET, ALLOWING
TO CREATE A SMARTER WORLD



Mobile Data

- Global mobile data grew 81% in 2013
- December 2013: 1.5 exabytes – December 2012: 820 petabytes
- Mobile data in 2013 was 18x Internet data in 2000



Facts & Figures

Evolution of content



Mobile apps

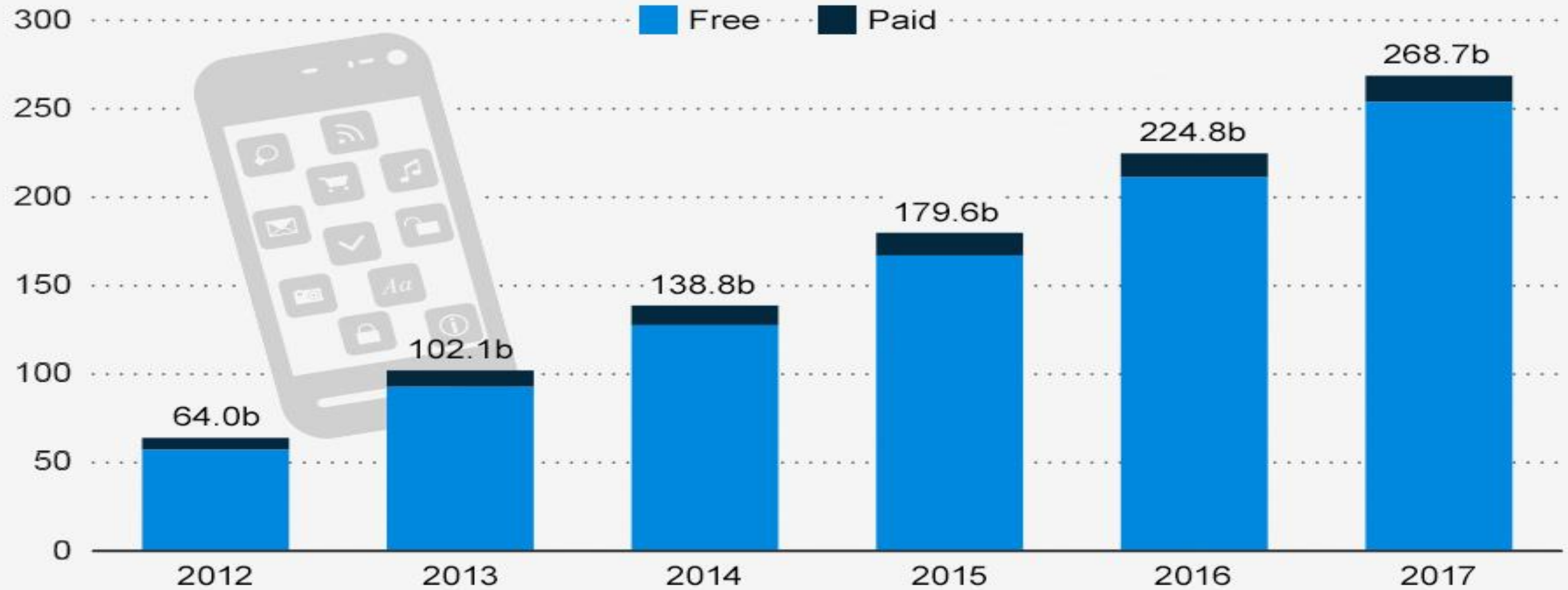
Mobile App Store Downloads, Worldwide, 2010-2016 (Millions of Downloads). Source: Gartner (September 2013)

	2012	2013	2014	2015	2016	2017
Free Downloads	57,331	92,876	127,704	167,054	211,313	253,914
Paid-for Downloads	6,654	9,186	11,105	12,574	13,488	14,778
Total Downloads	63,985	102,062	138,809	179,628	224,801	268,692
Free Downloads %	89.6	91.0	92.0	93.0	94.0	94.5

Mobile apps

Global App Downloads to Pass 100 Billion This Year

Estimated mobile app downloads worldwide (in billions)



statista
The Statistics Portal

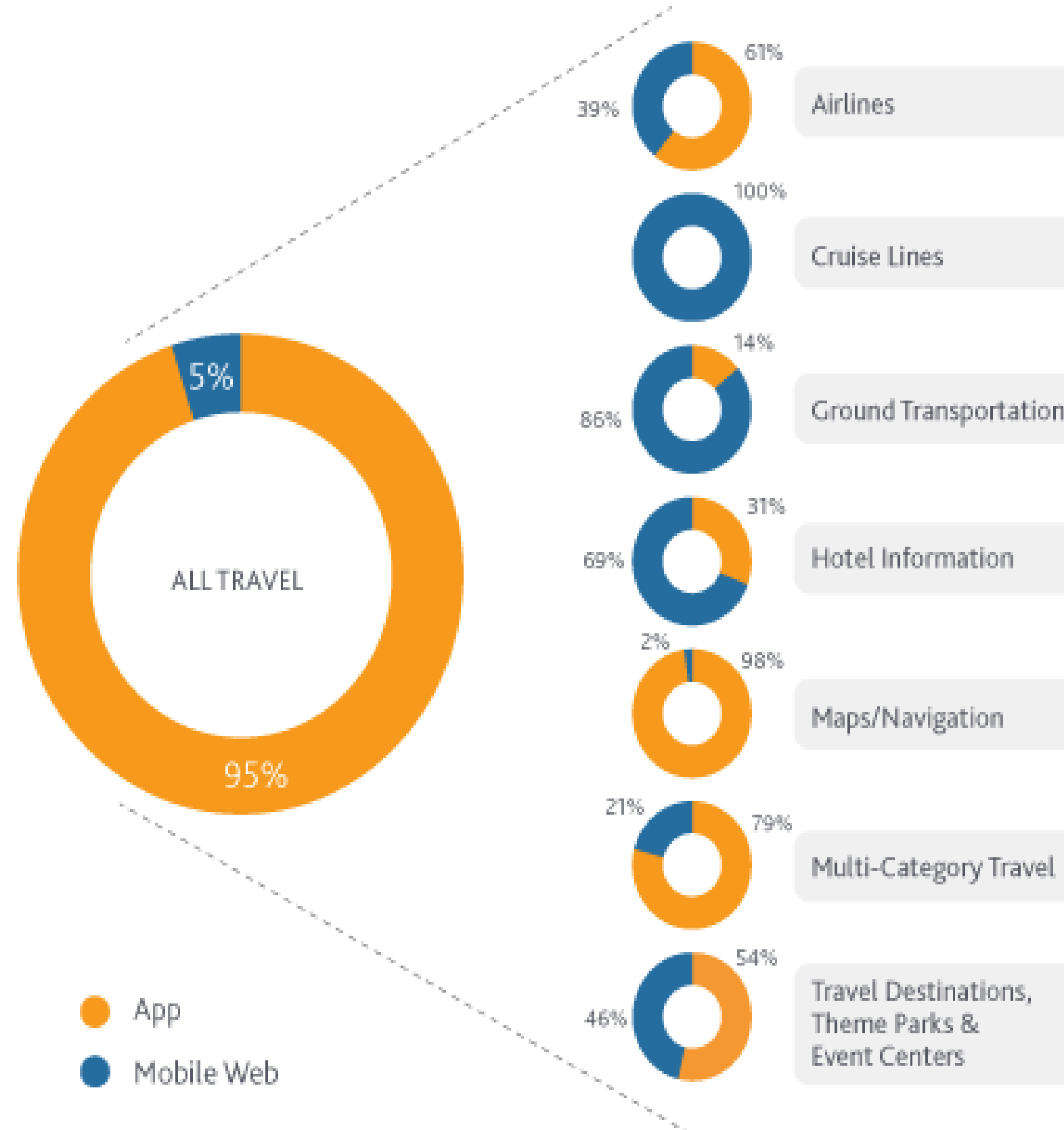
Mashable

Source: Gartner

Local apps vs. Web apps?

Distribution of Time Spent on Travel, Apps v. Mobile Web

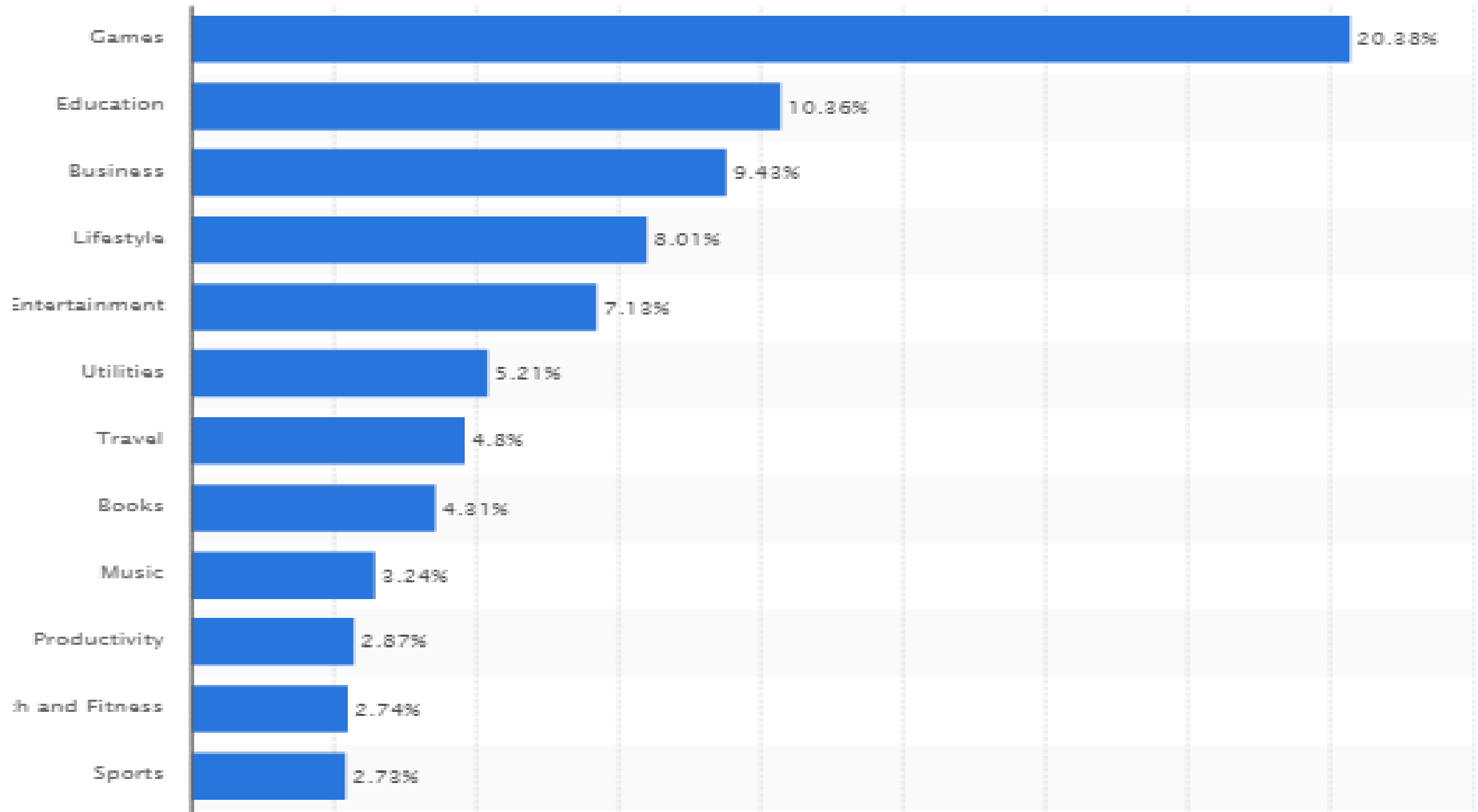
U.S. Android and iOS users, June 2012



Nature of info

Types of apps

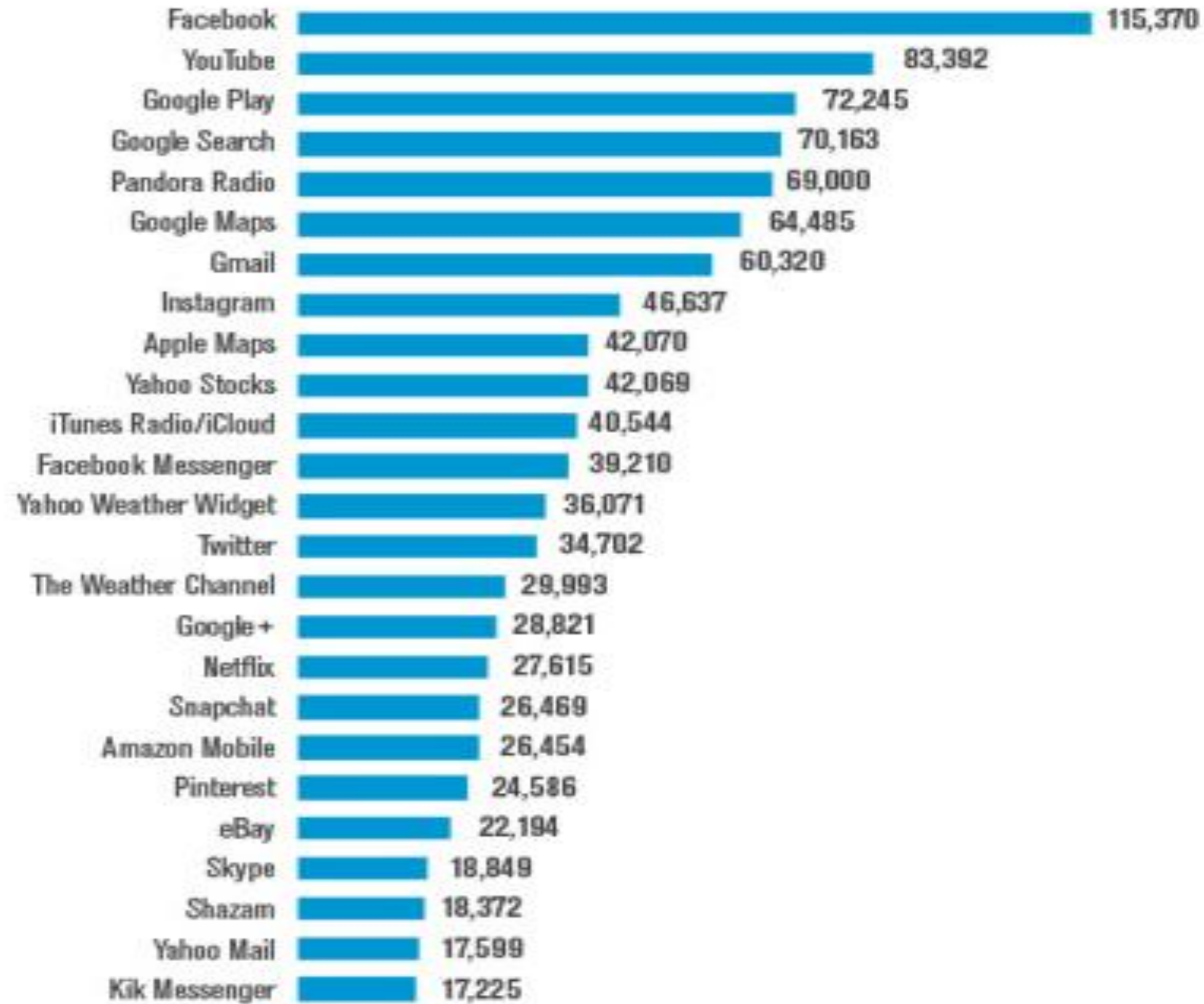
Most popular Apple App Store categories in September 2014. Source: <http://www.statista.com>



Most popular apps

Top 25 Mobile Apps by Unique Visitors (000)

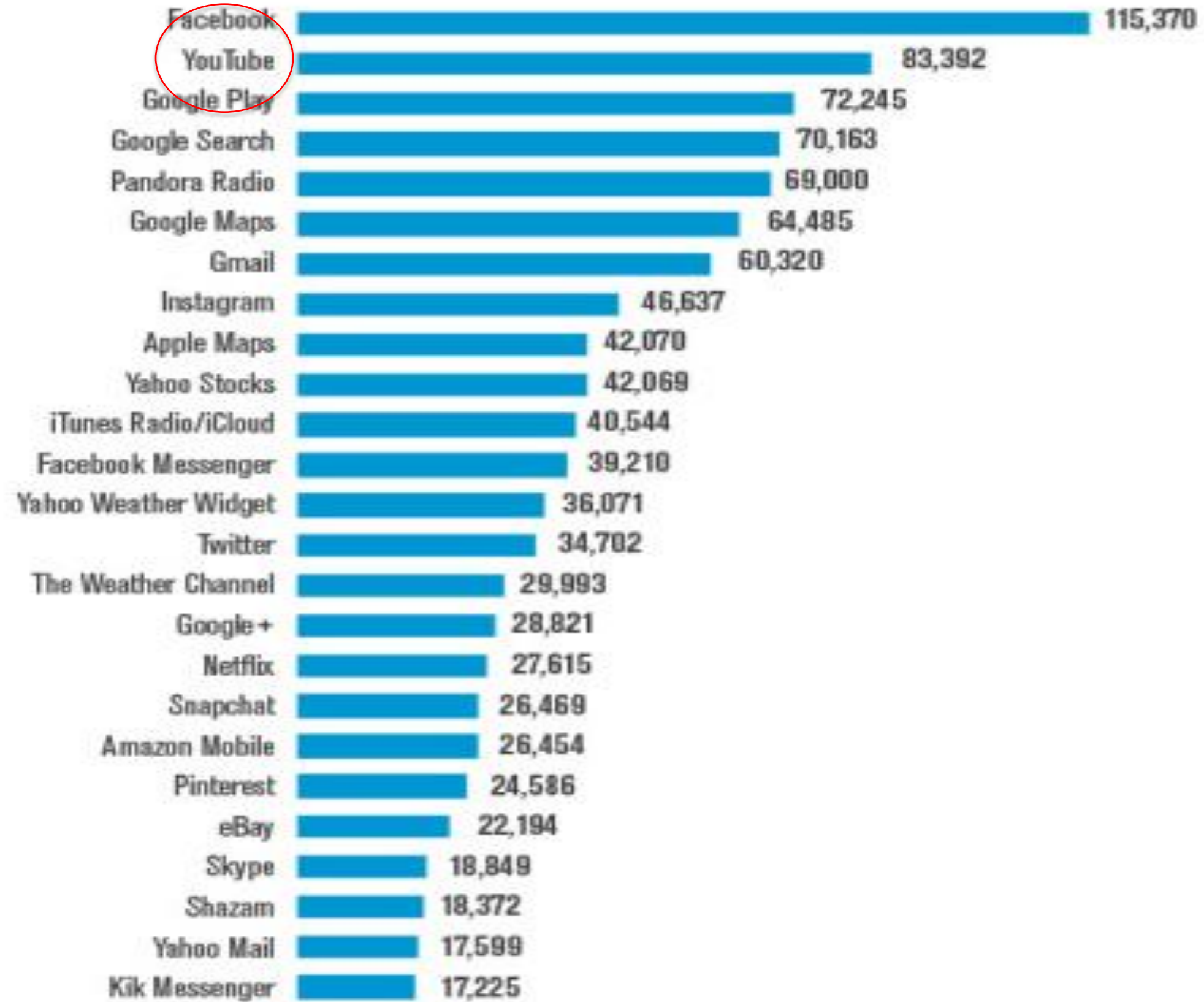
Source: comScore Mobile Metrix, U.S., Age 18+, June 2014



Most popular apps

Top 25 Mobile Apps by Unique Visitors (000)

Source: comScore Mobile Metrix, U.S., Age 18+, June 2014



Most popular apps

Top 25 Mobile Apps by Unique Visitors (000)

Source: comScore Mobile Metrix, U.S., Age 18+, June 2014



How travellers use their travel apps



% OF LEISURE TRAVELLERS USE THEIR SMARTPHONE WHILE ABROAD



% HAVE USED MOBILE APPS TO FIND HOTEL DEALS



% HAVE DOWNLOADED MOBILE APPS SPECIFIC TO UPCOMING VACATION



% POST VACATION PHOTOS ON A SOCIAL NETWORK



% CHECK IN TO A LOCATION WHILE ON HOLIDAY

Source: Tourism & Mobile (AppsBuilder)

Most popular travel apps

- triplT
 - Social network to share and schedule trips
 - You can play with your friends to see who is travelling further
 - Context key here
- Wikitude
 - Augmented reality app
 - Overprinting info on top of what you see
 - Context
- Flightware
 - Flight tracker

Most popular travel apps

- Postgram
 - Sending instagram, twitter, facebook pictures instantly
- Trailhead
 - Outdoor trekking
 - Outdoor events
- Kayak
 - Flight tracker and booker
 - It maps tracking real-time flight position
- Allsubway
 - Information of subway line maps of major cities

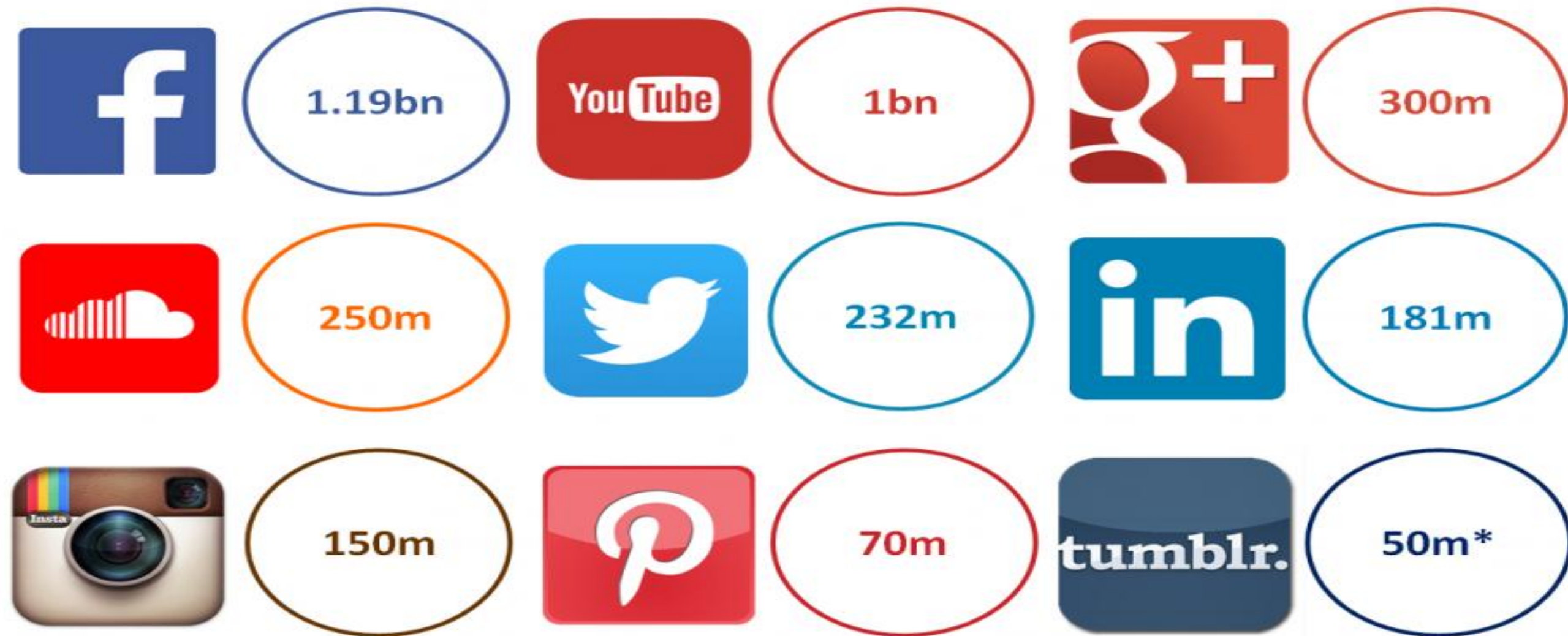
Most popular travel apps

- Yelp
 - Helps you find places to eat, shop, drink, relax and play
 - Links the foreign and local communities
- Sitorsquat
 - An app that helps you find a public toilet
- Tripjournal
 - Trip tracking and documenting

Source: <http://www.turismoytecnologia.com/>

Social Media

Active Monthly Users of the 'Big 9'



As at 15 November 2013 (multiple sources cited)

*Tumblr does not release active monthly user data and this figure is based on an estimate from BusinessInsider.com. It does reveal that the site and its domains receives 300m visits per month.

kamber

Source: <http://kamber.com.au/>

Social Adoption





- 90% of young people, check their smartphones before wake up.
 - 80% has the Smartphone connected while sleeping
- We spent 2.7 hours socializing via Smartphones
- 50% of people ensure that their social life would be worst without their Smartphones

IN 2013, THE SMARTPHONES HAVE BECAME EVERYDAY OBJECTS, LIKE SHOES OR SHIRTS



WHERE People use mobile phones everywhere.





The Modern Day Traveler

TECHNOLOGY IS A PART OF HOW WE TRAVEL

49%
of travelers will use social media more if they have free WiFi while traveling.

88%
of respondents take mobile devices with WiFi or 3G capabilities while on vacation.

68%
of travelers globally use mobile devices to connect with friends and family; 22% use them to do work-related tasks.

Over 50%
of travelers will "pack" travel apps on their devices before going on vacation.

Over 1/3
of travelers will share vacation-related online content if they think friends/family will enjoy seeing it.





In Today's Environment...



GLOBAL CONTEXT

- **87%** of travellers use the Internet for travel planning
- **62%** researched an upcoming trip
- **43%** read reviews from other travellers
- **31%** watched travel video

New **mobilities**

New
Framework
competition

City-Regions



GLOBAL CONTEXT

New mobilities

New
Framework
competition

City-Regions

One billion of the world population (1/7) is using a Smartphone.

- **70%** changed their *facebook* status while on holidays
- **52%** changed their original travel plans
- **50%** of travel companies agreed that bookings were coming from social media
- **46%** checked in location
- **33%** changed their hotel
- **85%** of leisure travellers use smartphones
- **30%** used mobile apps to find a hotel
- **29%** used mobile apps to find air deals
- **15%** have downloaded apps specific for their coming holidays

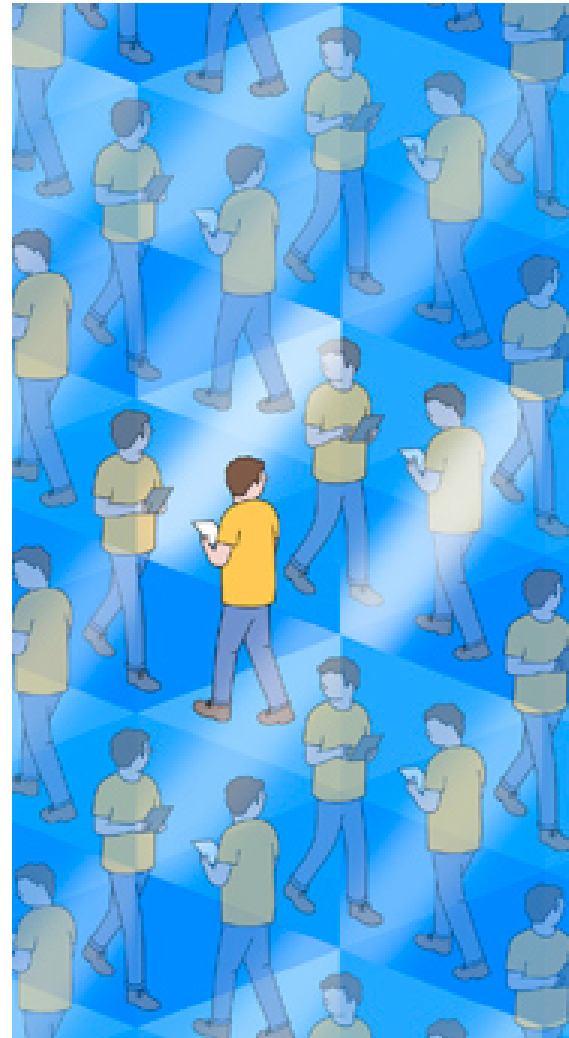
data, data, data...



The Data Made Me Do It

The next frontier for big data is the individual.

By Antonio Regalado on May 3, 2013



Would you trade your personal data for a peek into the future? Andreas Weigend did.

The former chief scientist of Amazon.com, now directing Stanford University's Social Data Lab, told me a story about awakening at dawn to catch a flight from Shanghai. That's when an app he'd begun using, Google Now, told him his flight was delayed.

The software scours a person's Gmail and calendar, as well as databases like maps and flight schedules. It had spotted the glitch in his travel plans and sent the warning that he shouldn't rush. When Weigend finally boarded, everyone else on the plane had been waiting for hours for a spare part to arrive.

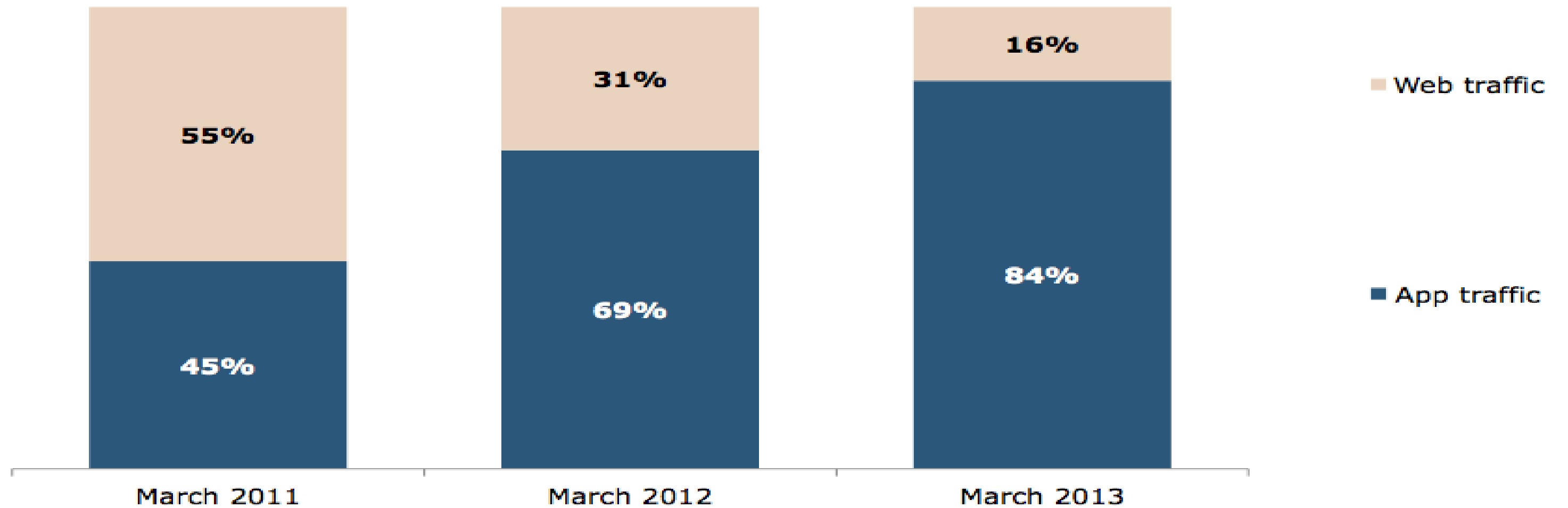
For Weigend, a fast-talking consultant and lecturer on consumer behavior, such episodes demonstrate "the power of a society based on 10 times as much data." If the last century was marked by the ability to observe the interactions of physical matter – think of technologies like x-ray and radar – this century, he says, is going to be defined by the ability to observe people through the data they share.

Web Mobile vs Apps

Mobile Traffic Trends

% share of network traffic

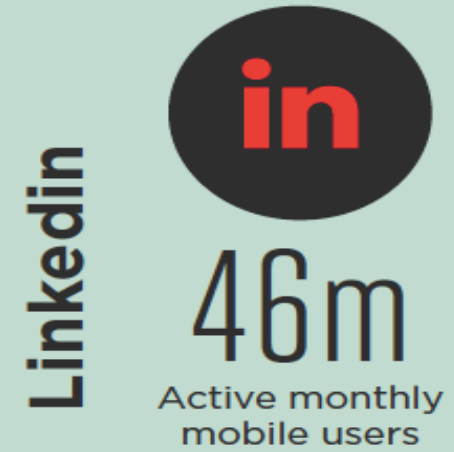
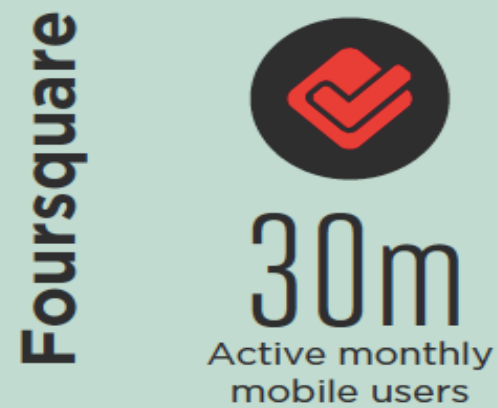
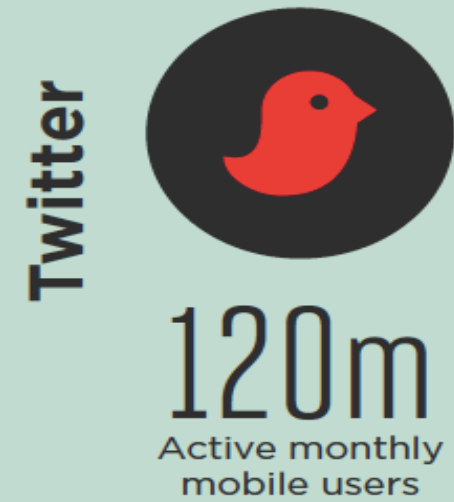
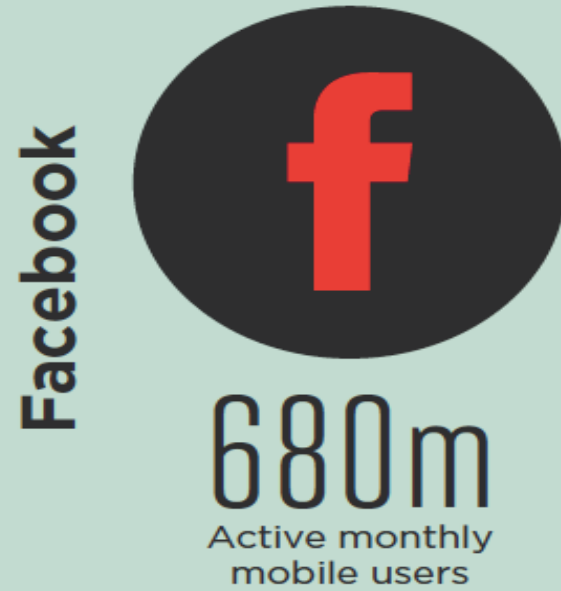
March 2011-March 2013



MARKETINGCHARTS.COM

Source: Jumtap

Explosion of Mobile Data Services and Social Media



The advent of the smartphone, combined with the widespread deployment of mobile broadband networks, has led to an explosion of mobile data services



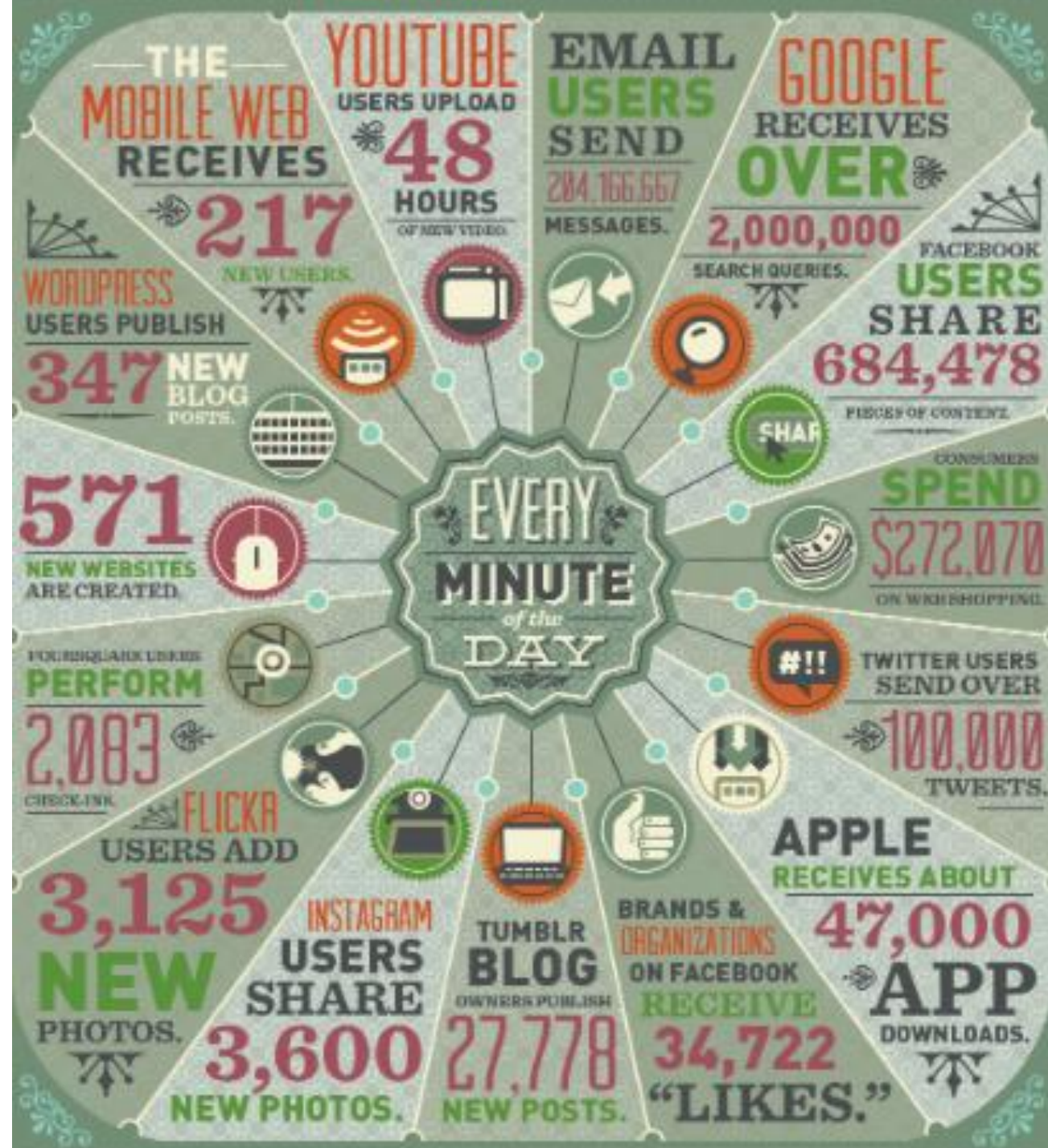
SOURCE: A.T. KEARNEY, CISCO 2013 MOBILE VNI STUDY, GSMA INTELLIGENCE



DATA NEVER SLEEPS

How Much Data Is Generated Every Minute?

Big data is not just a buzzword; it's a concrete reality in business and society. The fact is that the amount of data generated every minute is growing exponentially. This data is being created every minute of the day through the use of various devices and activities. From mobile devices to social media, the amount of data generated is growing exponentially. We have highlighted some of the most interesting data points below. We explore how much data is generated every minute in the infographic.



WITH NO SIGNS OF SLOWING, THE DATA KEEPS GROWING

There are just some of the more common ways that internet users set to the big data and, in turn, depending on the state of business you're in, there are several important ways that you can use this data to your advantage. Consider the following:

The global internet population grew 4.77 percent from 2010 to 2011 and now represents

2.1 BILLION PEOPLE.

These users are real, and they are out there leaving data trails everywhere they go. The team at Domo can help you make sense of this seemingly insurmountable heap of data, with solutions that help executives and managers bring all of their critical information together in one intuitive interface, and then use that insight to transform the way they run their business. To learn more, visit www.domo.com.

SOURCES: HTTP://WWW.PWORLD.COM, ROYAL PAPERWORK.COM, BLUE ZEPHYRUS.COM, BLOG.HUBSPOT.COM, INFO2EDITION.COM, PWORLD.COM, B2TECHMAGAZINE.COM, DDBBY.COM





DATA NEVER SLEEPS

How Much Data Is Generated Every Minute?

Big data is not just a buzzword; it's a concrete reality in business and society. The flood of data is the result of an avalanche of digital activity, pulsating through cables and servers across the world. This data is being created every minute of the day. Through the use of advanced analytics, we have begun to see the value of this data. But with every website viewed, status shared, or photo uploaded, we have also begun to see the volume of the data being generated. Every minute, we generate more data than you can imagine.



WITH NO SIGNS OF SLOWING, THE DATA KEEPS GROWING

There are just some of the more common ways that internet users set to the big data and, in turn, depending on the size of business you're in, there are several countless other ways that of course data to you also exist in. Consider the following:

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SOURCES: HTTP://WWW.FORTUNE.COM, REAL TIME/WWW.BUSINESSINSIDER.COM, BLOG.ZENDESK.COM, BLOG.HUBSPOT.COM, INFO2EDITION.COM, P9WORLD.COM, 3ETECHMAGAZINE.COM, DDBBY.COM



So...

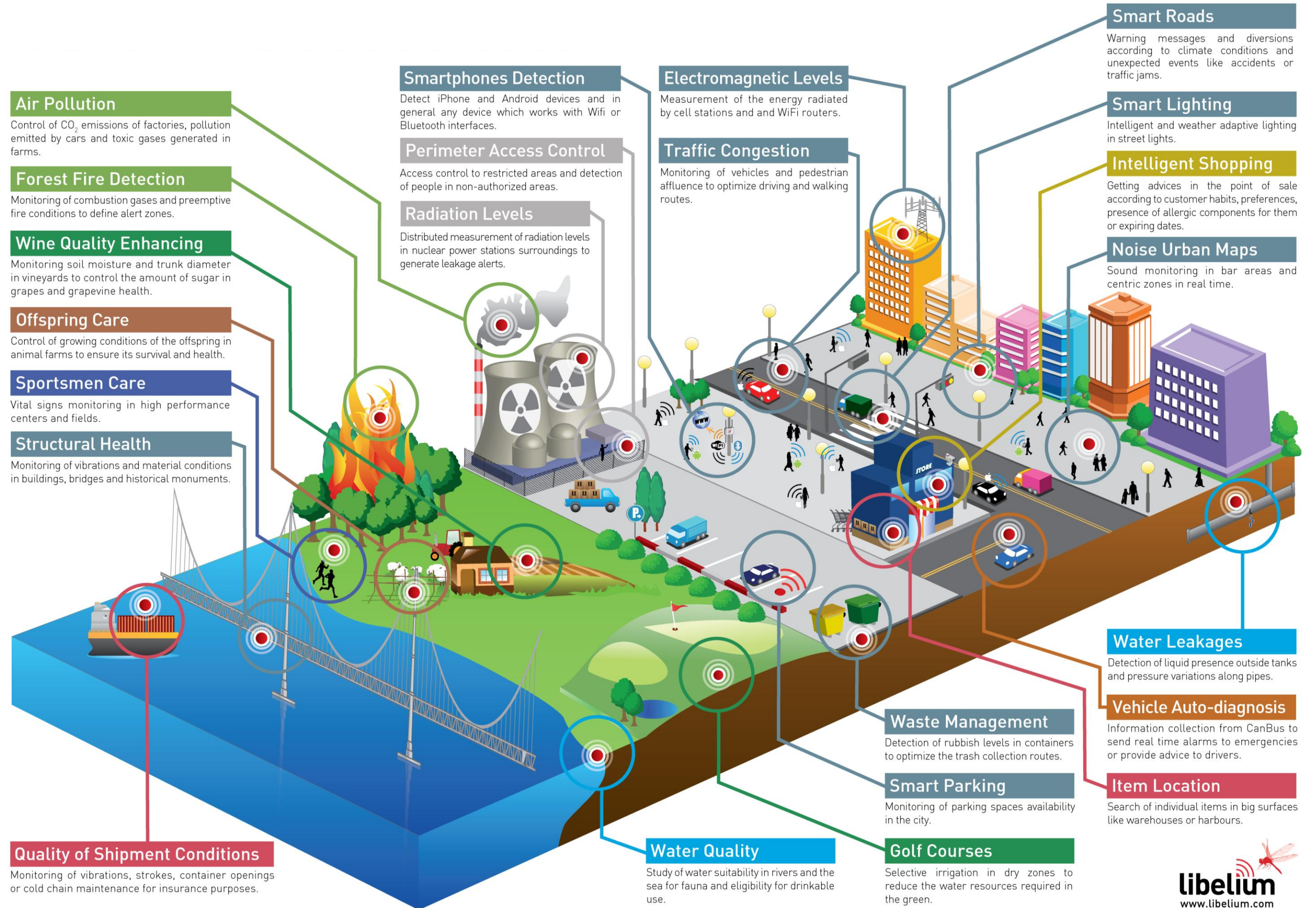


The World will be different in 2020

A New World is emerging as a Smart World, converging the Cyber, Social, and Physical Domains.

Business and destinations need the wholly new development principles, policies, processes, and objectives: sustainable world strategies, comprehensive planning, integrated models, and globally effective solutions.

Conceptualización Smart City



1st Idea



Smart Destinations

cictourGUNE



2nd Idea



Mobile Device
Usage

Personal Context-based Information and Services



Augmented
Spaces

m-Commerce
m-Marketing

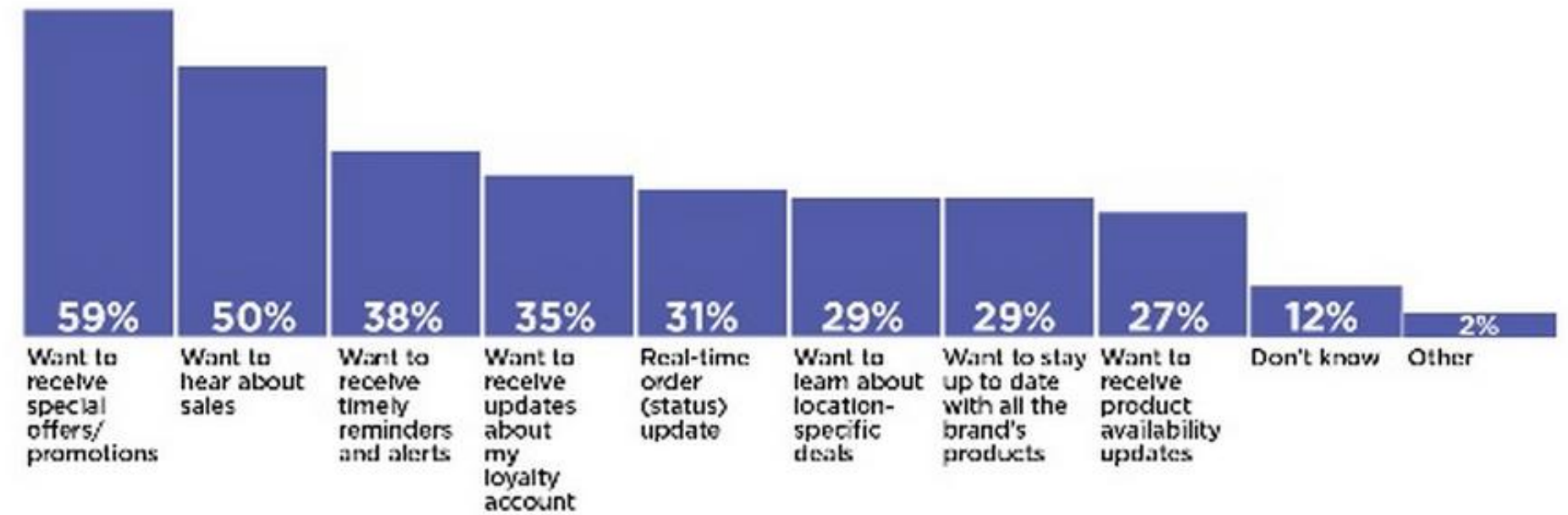


Consumer Trends



Consumer motivation to opt-in ties most strongly to special offers/promotions and notification of sales.

Opt-in reasons



Base: All Respondents
Q30: What are some of the reasons you have opted-in to receive marketing communications on your mobile device?

(Responsys)

- Promotional Value
- Specific & Relevant
- Extreme personalization
- Experience driven
- Personal Impact of involvement
- Social Media
- “Gamification” of the consumer experience

Travel Phases



PRE-TRAVEL

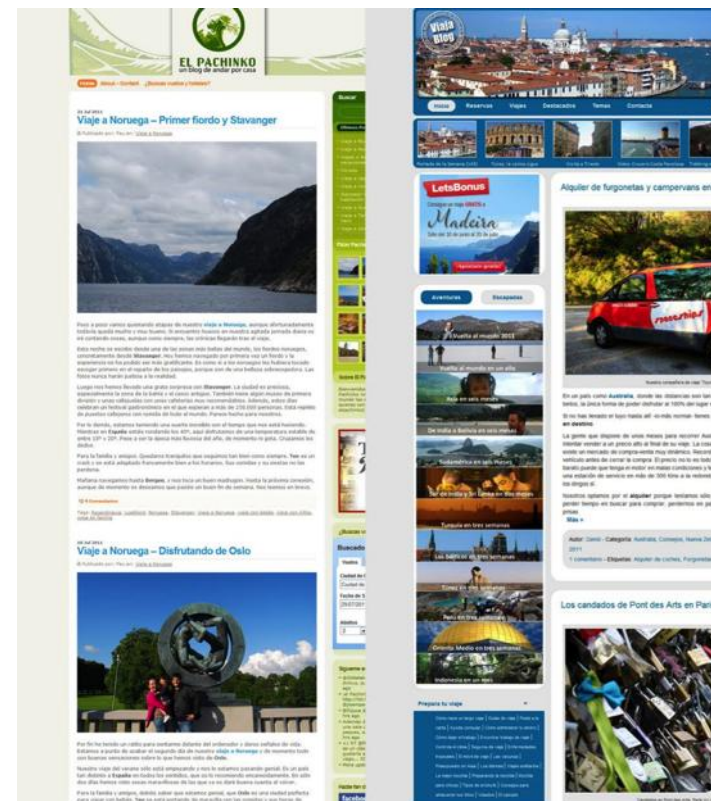
- Planning
- Decision-making
- Anticipation
- Transactions

TRAVEL

- Connection
- Navegation
- Real-Time

POST-TRAVEL

- Sharing
- Documentation
- Re-experiencing



Travel Trends

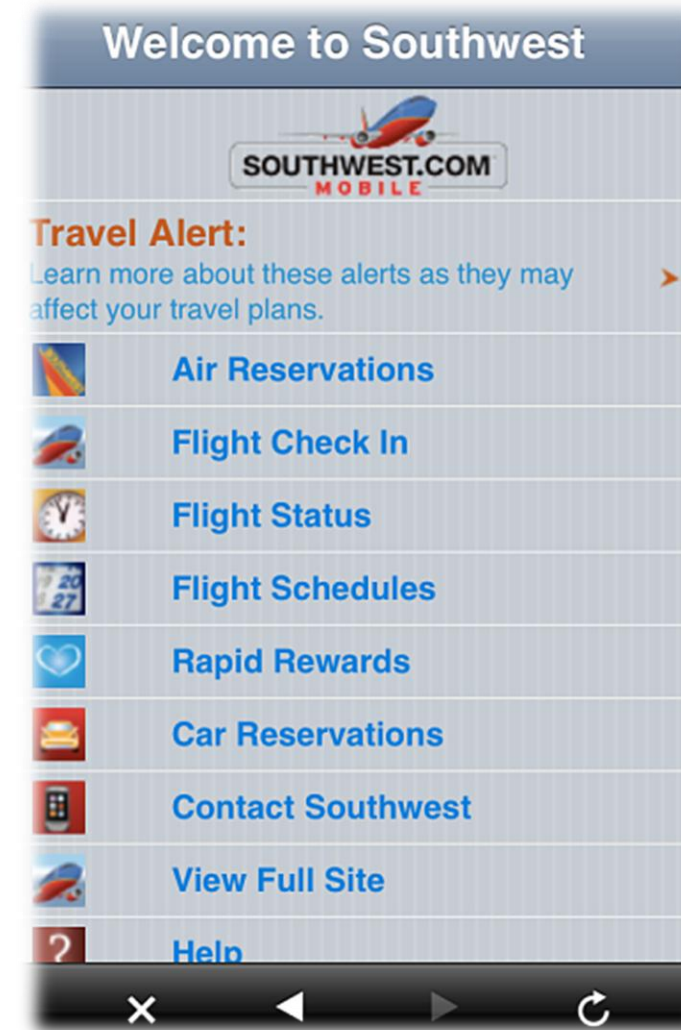
-Mobile, Mobile, and Mobile

-Personalisation

-Integration of loyalty programmes

-Tools for traveller

- Data collection



Tourism

GLOBAL
CONTEXT

WORLD POPULATION

New **mobilities**

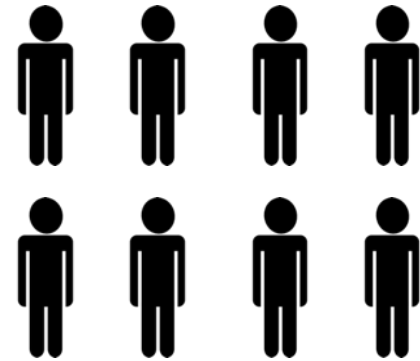
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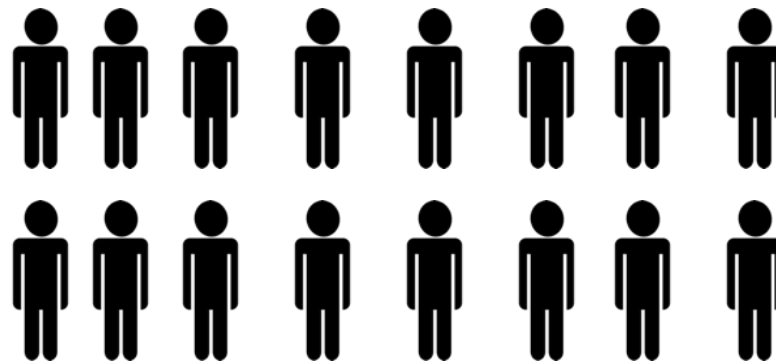
New
Framework
competition

1990



5.000.000.000

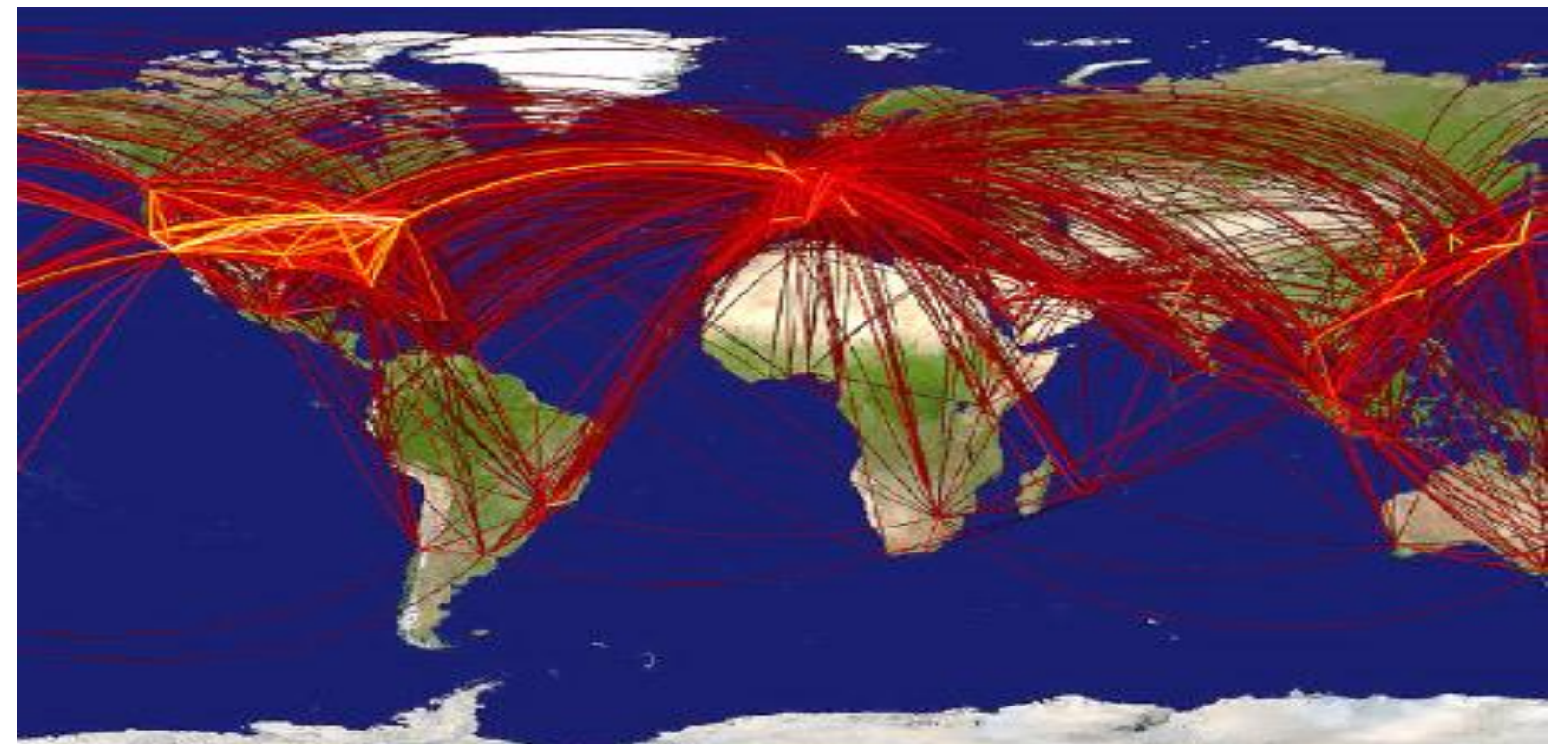
2014



7.270.000.000

Tourism Worldwide in 2013

- International arrivals worldwide: 1 billion people for the first time
 - 1.087 billion in 2013
 - Expected to reach 1.8 billion people by 2030
- Contribution to Global GDP: 9.2%
 - Expected to rise over 4% in the next ten years
- Contribution to global employment creation: 260 million
- Tourism is a growing industry



GLOBAL CONTEXT

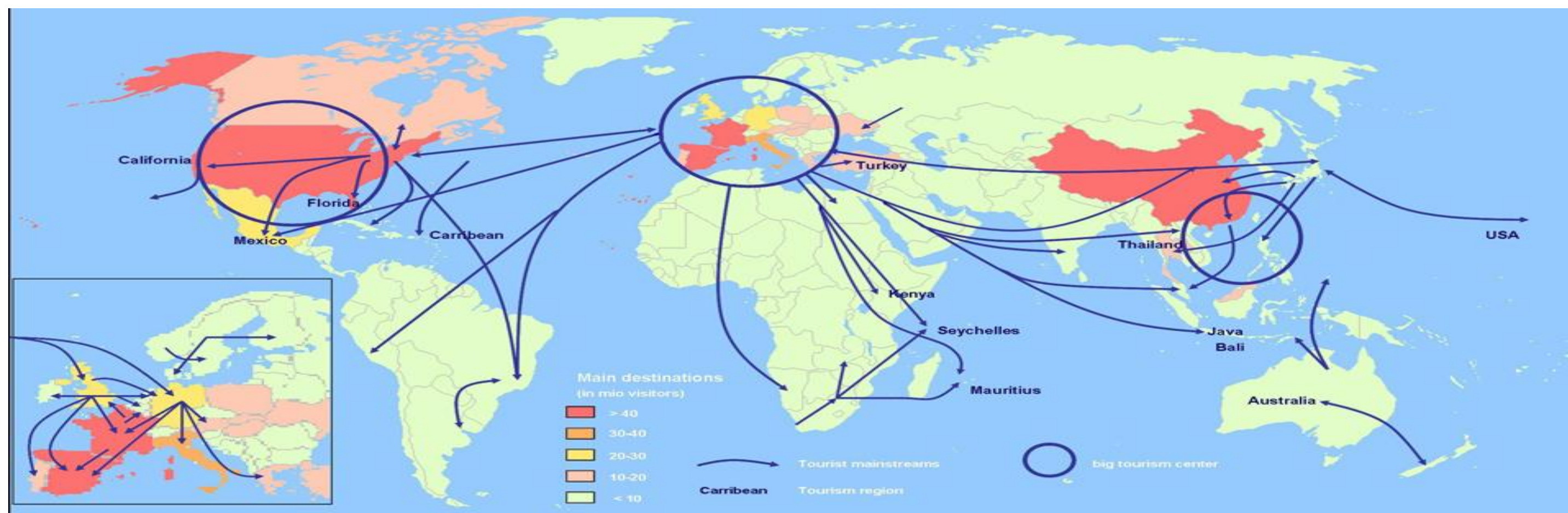
Receipts from international tourism in destinations around the world grew by 4% in 2012 reaching US\$ 1075 billion.

New mobilities

This growth is equal to the 4% increase in international tourist arrivals which reached 1035 million in 2012.

New Framework
competition

City-Regions



GLOBAL
CONTEXT

New mobilities

New
Framework
competition

City-Regions

- **93.000** flight daly
- **50** million p/km annually – EU (maritime)
- **400** million p/km annually – EU (railroad)
- **500** million p/km annually – EU (bus)



GLOBAL
CONTEXT

New mobilities

New
Framework
competition

City-Regions

Diversification of destinations

Rank	1950	Share	1970	Share	1990	Share	2011	Share
1	United States	71%	Italy	43%	France	39%	France	31%
2	Canada		Canada		United States		United States	
3	Italy		France		Spain		China	
4	France		Spain		Italy		Spain	
5	Switzerland		United States		Austria		Italy	
6	Ireland	17%	Austria	22%	Mexico	18%	United Kingdom	14%
7	Austria		Germany		Germany		Turkey	
8	Spain		Switzerland		United Kingdom		Germany	
9	Germany		Yugoslavia		Canada		Malaysia	
10	United Kingdom		United Kingdom		China		Mexico	
11	Norway	9%	Hungary	10%	Greece	9%	Austria	11%
12	Argentina		Czechoslovakia		Portugal		Ukraine	
13	Mexico		Belgium		Switzerland		Hong Kong (China)	
14	Netherlands		Bulgaria		Yugoslavia SFR		Russian Federation	
15	Denmark		Romania		Malaysia		Canada	
	Others	3%	Others	25%	Others	34%	Others	44%
Total	25 million		166 million		436 million		983 million	



NEW PARADIGM

Place Competitiveness

Stages of Tourism Development

Tourism activity based on the factors

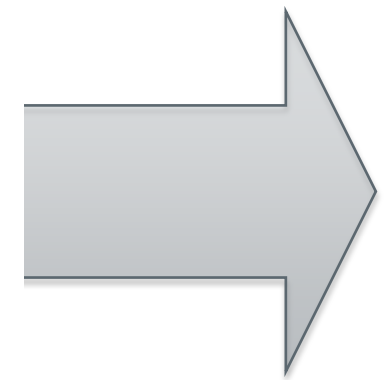
- Natural and cultural Resources, "commodities", represent the majority of exploitation
- No local demand.
- Weak infrastructures
- Destinations competing * in prices and they lack of direct access to consumers
- Activity based on cheap and intensive labor
- Local government as owner and promoter of resources
- Lack of tourism business structure allows international service providers to dominate market
- Tourism destination and activity is highly sensitive to change in geopolitics

Tourism activity based on Investment

- Creates localized business with capacity to produce standard goods and services of quality
- Sale of natural and cultural resources not as important as generating national product and territorial access
- Looking for strategic positioning and begins specialization phase
- State and Local government support heavy investments in efficient infrastructures; develop promotional planning according to modern production processes
- Begins generating local capacity to develop own technology tourism sector

Tourism activity based on Innovation

- Destination of unique value, in intelligently articulated territory.
- It is characterized by high productivity and efficiency of the sector.
- Advanced services: innovative products and services on the breaking path of global technology, as a catalyst of its competitive advantage
- The destinations are competing with unique strategies of global scope
- The "REGIONAL diamond" is characterized by strengths in all areas.



* Only in developing economies post the emergence of mass tourism. Previously characterized by elite tourism.

Nuevo Paradigma

Movilidades

Magnitud del Turismo

37 Industrias
7 grupos de actividad económica

Transporte de pasajeros

- 4910 Transporte interurbano de pasajeros por ferrocarril
- 4931 Transporte terrestre urbano y suburbano de pasajeros
- 4932 Transporte por taxi
- 4939 Otros tipos de transporte terrestre de pasajeros n.c.o.p.
- 5010 Transporte marítimo de pasajeros
- 5030 Transporte de pasajeros por vías navegables interiores
- 5110 Transporte aéreo de pasajeros
- 5221 Actividades anexas al transporte terrestre
- 5222 Actividades anexas al transporte marítimo y por vías navegables interiores
- 5223 Actividades anexas al transporte aéreo
- 5229 Otras actividades anexas al transporte

Servicios de alojamiento

- 5510 Hoteles y alojamientos similares
- 5520 Alojamientos turísticos y otros alojamientos de corta estancia
- 5530 Camping y aparcamientos para caravanas
- 5590 Otros alojamientos

Restaurante y similares

- 5610 Restaurantes y puestos de comidas
- 5629 Otros servicios de comidas
- 5630 Establecimientos de bebidas

Actividades recreativas y culturales

- 7721 Alquiler de artículos de ocio y deportivos
- 9102 Actividades de museos
- 9103 Gestión de lugares y edificios históricos
- 9104 Actividades de los jardines botánicos, parques s y reservas
- 9200 Actividades de juegos de azar y apuestas
- 9311 Gestión de instalaciones deportivas
- 9313 Actividades de los gimnasios
- 9319 Otras actividades deportivas
- 9321 Actividades de los parques de atracciones
- 9329 Otras actividades recreativas y de entretenimiento

Servicios de alquiler inmobiliario

- 6810 Compraventa de bienes inmobiliarios por cuenta propia
- 6820 Alquiler de bienes inmobiliarios por cuenta propia
- 6831 Agentes de la propiedad inmobiliaria
- 6832 Gestión y administración de la propiedad inmobiliaria

Alquiler de vehículos

- 7711 Alquiler de automóviles y vehículos de motor ligeros
- 7712 Alquiler de camiones

Agencias de viaje

- 7911 Actividades de las agencias de viajes
- 7912 Actividades de los operadores turísticos

NEW PARADIGM

Place Competitiveness

In the context of the growth of the mobility importance, **cities/regions will reach a bigger prominence.**

The key territories will be the ones which will be able to **design places** in order to become the ideal scene for **new life style and new businesses.**

Placemaking

In these design and building processes of the territory or *Placemaking*, it is mandatory to incorporate both meanings and relevance of the places for the citizens and visitors.

Places that facilitate **the undertaking** and **human growth.**

NEW PARADIGM

Place Competitiveness

A place competitiveness depends on the capacity of its industry to innovate and upgrade.

Places gain advantage against the world's best competitors because of pressure and challenge.

They benefit from having strong domestic rivals, aggressive home-base suppliers, and demanding local customer.

Competitive advantage is created and sustained through a highly localized process.

What are the challenges of ICTs?



- Keep on doing destination promotion but now, we need to make tourism become a real industrial activity
- Industrial activity becomes in economic activity
 - What kind of industry do we want for our destination?
 - Commerce, technology, innovation
 - Industry competitive intelligence
- The information about the tourism activity is disperse
 - We need to make it accessible and consumable by Public administrations who have a responsibility on destination management
 - We need to make it accessible to the agents, who generate economic activity in the territory



- The question of mobility, mobility patterns, and human behaviour is of immense importance in tourism research.
- A key output of the system of tourism statistics is statistical information on
 - Movements flows
 - Number of trips and nights spent away
 - Expenses ...
- Current existing methods lack accuracy
- We need to find out new measurement techniques to make significant advancements in the science of mobility



- Mobility studies are not just about how people move in a particular destination
- They are about how they consume the destination
 - How they use mobile apps
 - Their emotional behaviour
 - We need to generate the primary data
 - Then we need to correlate and aggregate that data with other data
- Have a deeper knowledge and understanding about the physiology of mobility
- We have to find the relationship between the Macro and the micro perspectives



- Measurement tools are strongly linked to technological development
- The depth of the measurement depends on the available technology

Need to have a deeper understanding

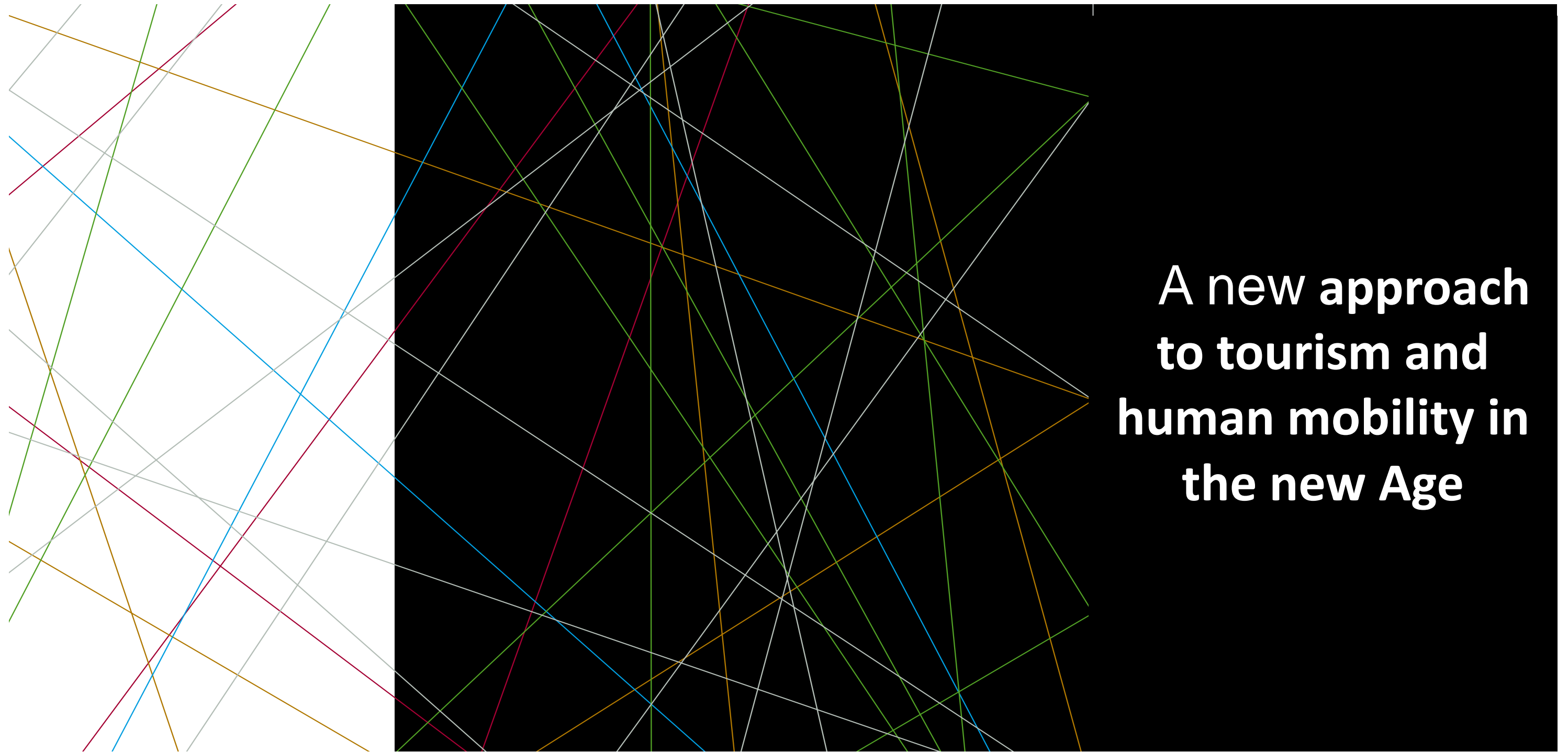
Need to have other measurement & comparison patterns

We need to observe to generate data

We need new observation techniques and instruments

What is not observed, cannot be analysed -> measured

What is not measured, cannot be managed



**A new approach
to tourism and
human mobility in
the new Age**

MACRO

Territorial Scale

Place making

Internal Connectivity

Transformation Axis
Suburban Train
Metro
Streetcar
Bus
Soft Car
Car Sharing
Micro-movility
*Advanced Traffic And Parking
Regulation Systems*
Pedestrian and Bicycles

External Connectivity

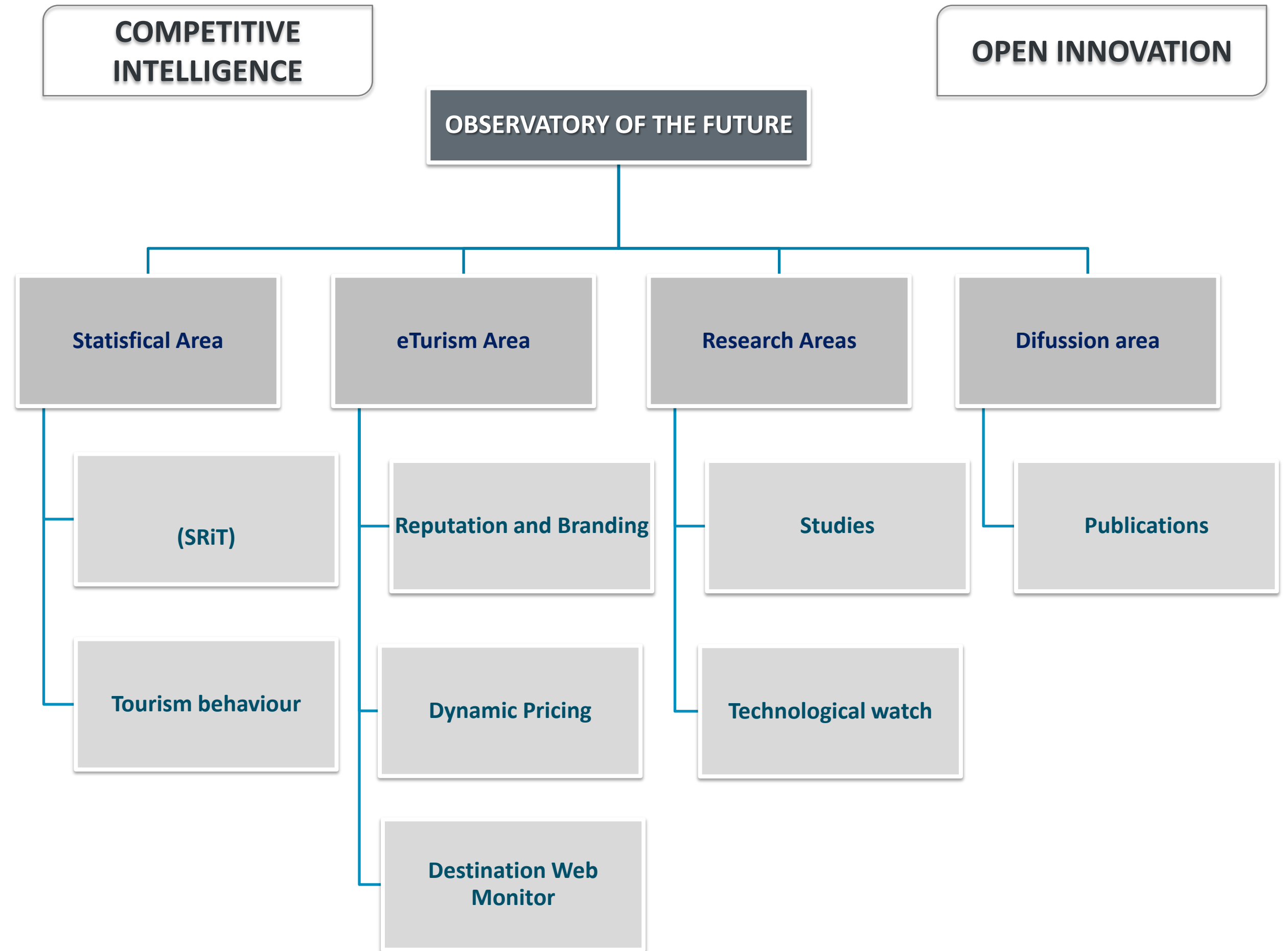
Airport
Port
High Speed Rail
Inter modality
Intelligent Logistics Systems

Advanced Movility System



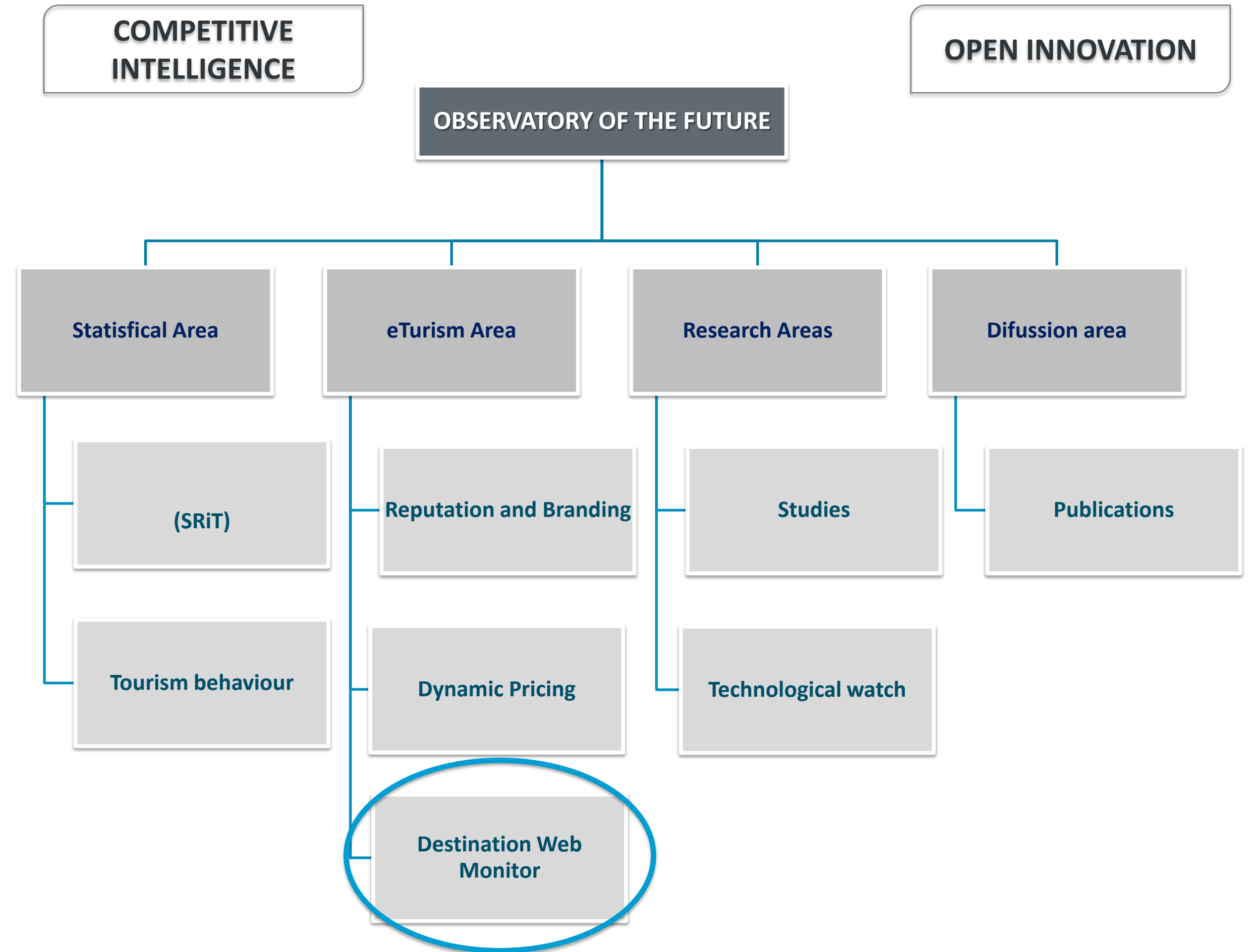
Tourism Intelligence

Advanced Observatory



Tourism Intelligence

Advanced Observatory



REGIONAL STATISTICAL SYSTEM

Visual Analytics /dashboards

Micro vs. Macro

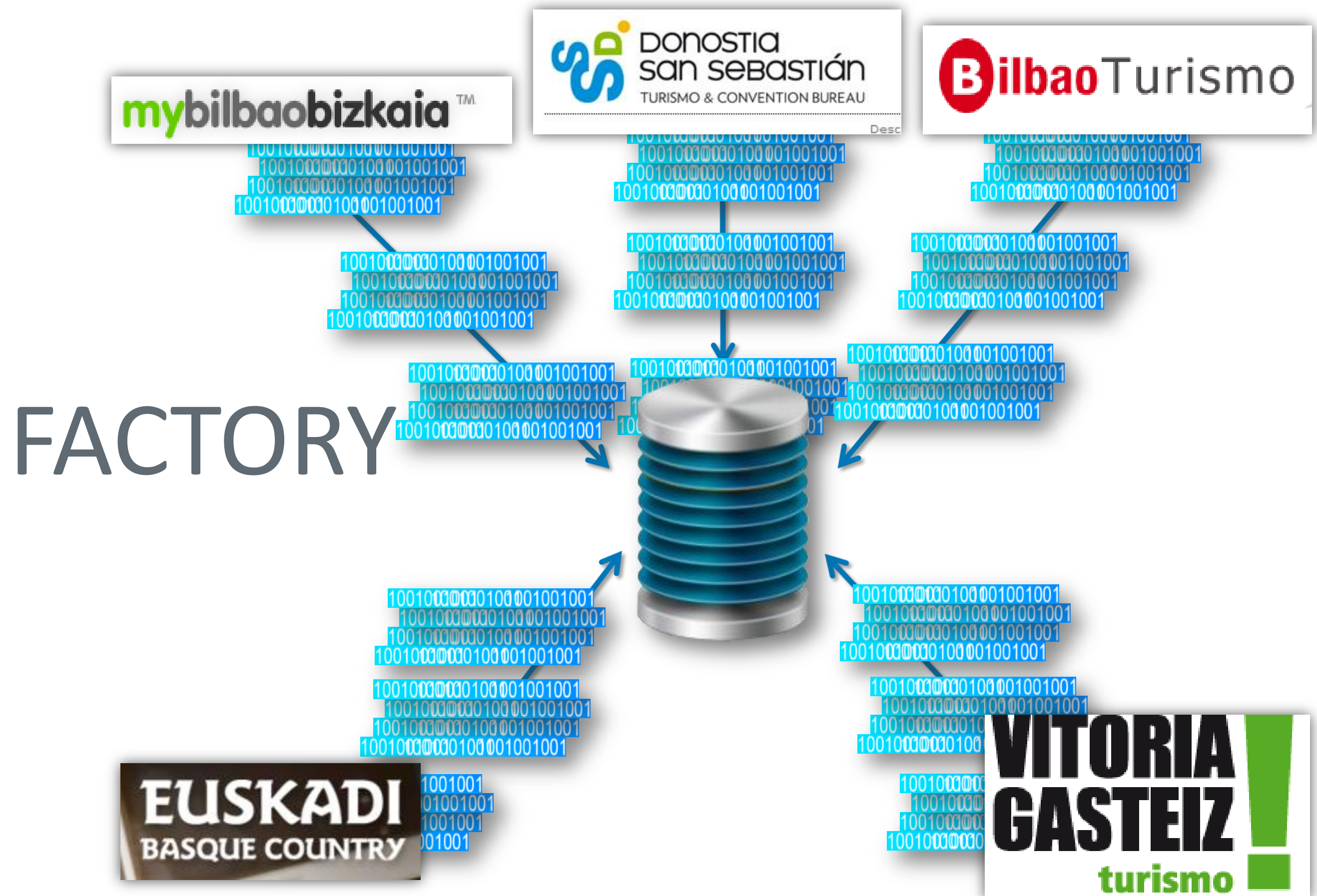
The dashboard displays several key components:

- Navigation:** Inicio, Estadísticas, Comportamientos Turísticos, Monitores, Publicaciones, Ayuda, Contacto.
- Último mes (Last Month):**

2013		2012	
Abril	Hotel	Abril	Hotel
Real	Objetivo	%	Tendencia
1,82	1,93	-6,1 %	
1,80	1,92	-6,7 %	
1,81	1,94	-6,8 %	
1,83	1,92	-4,4 %	
- Mapa de entradas en Euskadi por CCAA (2013):** A map of the Basque Country showing the number of entries from different Spanish regions.

CCAA	Entradas
Andalucía	4.141.338
Cataluña	4.001.578
Canarias	3.458.903
Madrid	2.913.851
Valencia	2.119.252
Castilla y León	1.128.233
Islas Baleares	895.218
Galicia	724.359
Aragón	677.714
Euskadi	648.440
Castilla-La Mancha	526.408
Extremadura	361.628
Murcia	331.795
Asturias	316.275
Navarra	237.476
Cantabria	234.009
La Rioja	151.135
Ceuta y Melilla	35.631
- Distribución de entradas por CA:** A stacked bar chart showing the distribution of entries by region (Estatal vs. Extranjero).
- Análisis estacional (Seasonal Analysis):** A line chart showing monthly trends for different accommodation types (Alojamiento, Apartamentos, Camping, Hotel) from January to September.
- Benchmarking de CCAA:** A grid of pie charts comparing the Basque Country's performance with other Spanish regions across different accommodation types.
- Index:** A central menu with options like 'Alojamiento', 'Boletín', 'Cuadro de Mandos (KPI)', 'Información Coyuntural', 'Evolución Histórica', 'Benchmarking de CCAA', 'Información de Análisis', 'Afluencia de Visitantes', 'Equipamientos culturales', 'Oficinas de Turismo', 'Tránsito de Viajeros', 'Aeropuertos', and 'Puertos'.

Monitor Web de Destino



Destination

Visitor

KPI



Destination Web
Monitor



- Content Personalisation / Adaptation
- Characteristics of Success Products

- Who is visiting us?
- How do they reach us?
- How do they behave?

InformeEuskadiTurismo_es : [Apartado de rendimiento](#) | [Apartado de comportamiento](#) | [Apartado de tendencias](#) | **Apartado de experiencias**

Apartado de Experiencias

Acciones | | | de 2 ? | Buscar Siguiente | **01/01/2014 – 28/01/2014**

Impact of Carnival Campaign

Nº de visitas totales:	13815
Top de experiencias por idioma: español	
Carnavales	471
Bizkaia	252
Gipuzkoa	198
La ruta de los pueblos con encanto	188
Temporada de sidrerías	168

French market focuses on San Sebastian

Nº de visitas totales:	3190
Top de experiencias por idioma: francés	
Zona de tiendas de San Sebastián	220
Donostia / San Sebastián	97
Tamborrada	92
Garbera	86
Aeropuerto de San Sebastián (EAS)	48



Basque Site captures little traffic

Nº de visitas totales:	430
Top de experiencias por idioma: euskera	
Tamborrada	14
Parque Natural de Gorbeia	9
Parque Natural Aiako Harria	9
ZINKOENEA	8
Santuario de Guadalupe	4

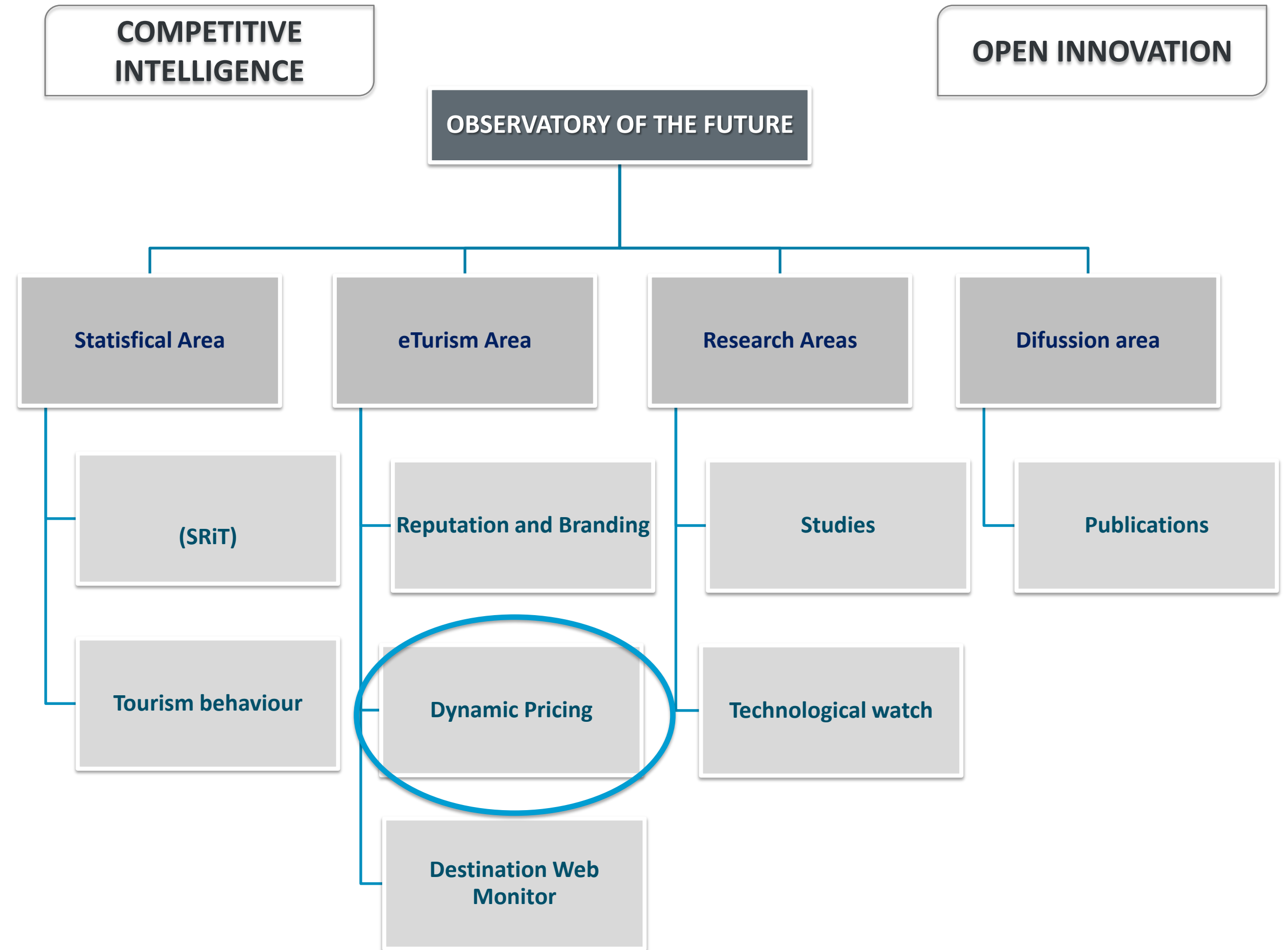
Nº de visitas totales:	847
Top de experiencias por idioma: alemán	
De pintxos por el Casco Viejo de Bilbao	13
Zarautz	10

Nº de visitas totales:	969
Top de experiencias por idioma: inglés	
Semana Grande de San Sebastián	31
Donostia / San Sebastián	11

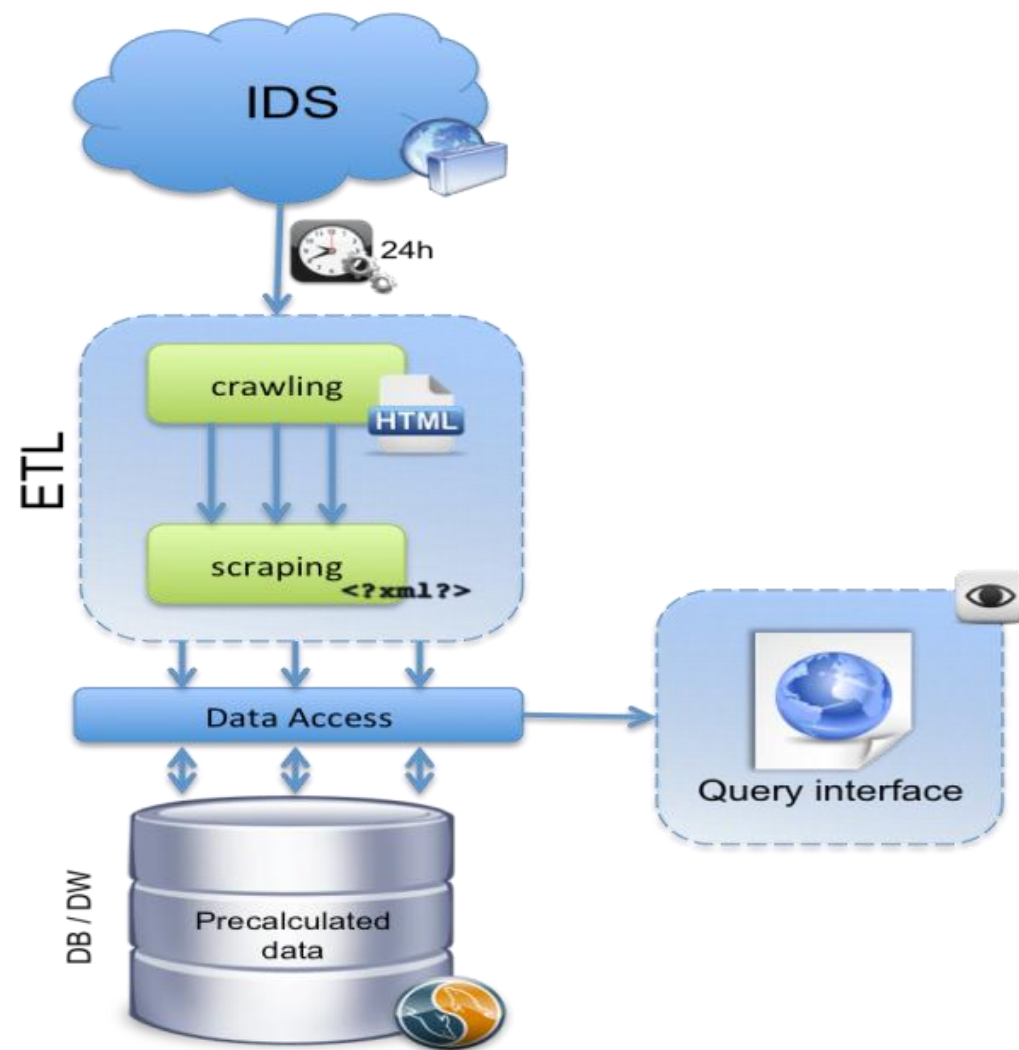
Very low access to anglo saxon market

Tourism Intelligence

Advanced Observatory

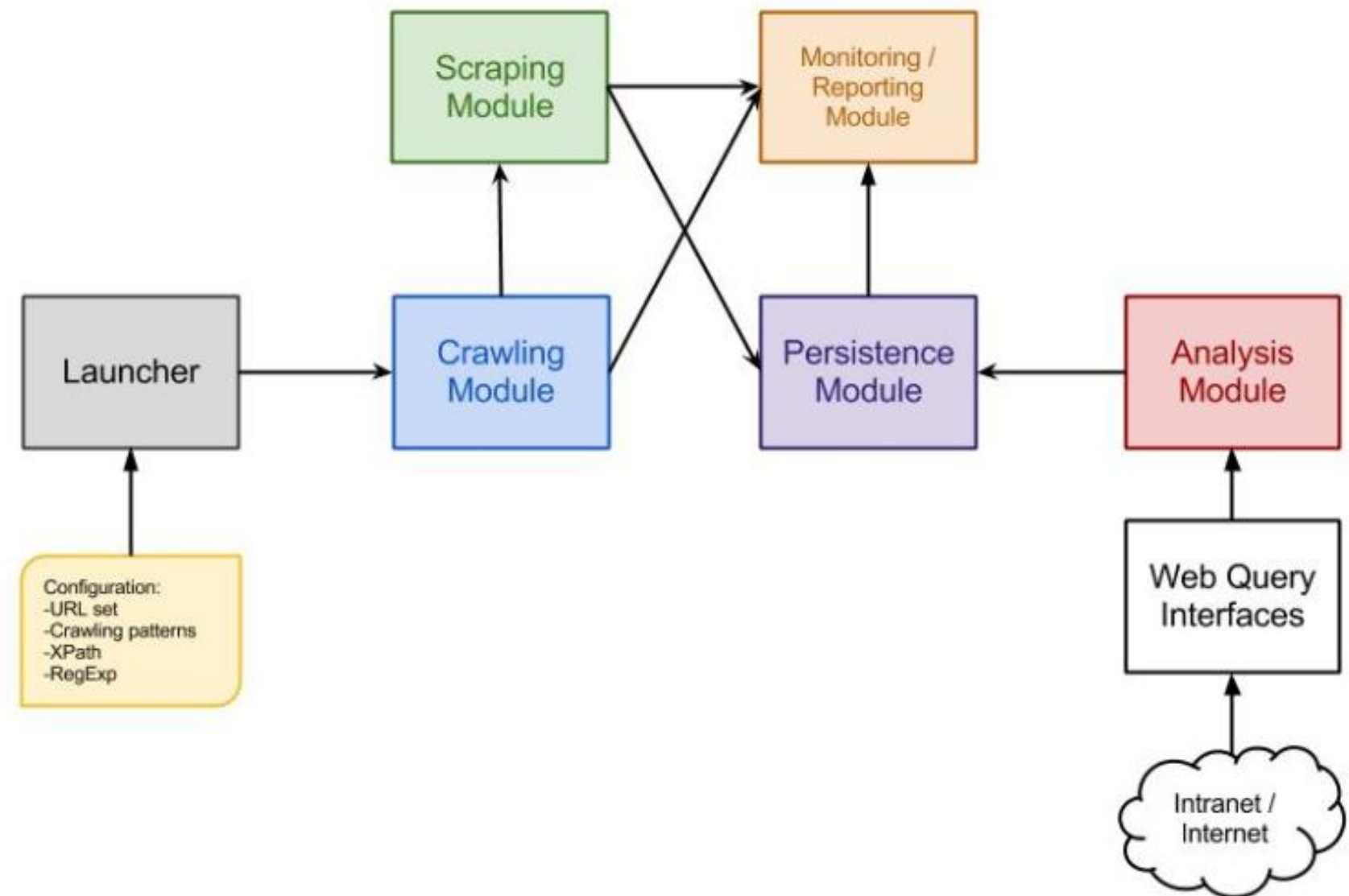


DYNAMIC PRICING MONITOR



Process

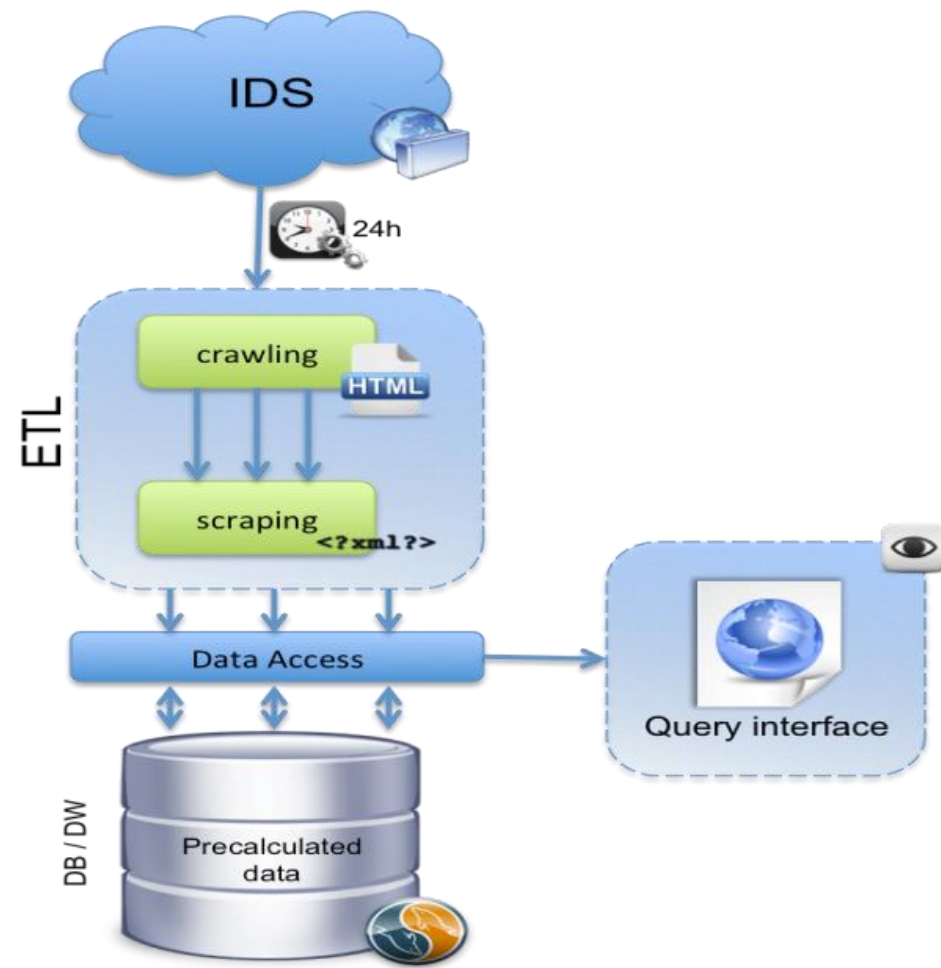
- Price and availability information gathering from the Internet every 24 hours
- Queries on the next 1-28, 30, 45, 60 y 90 days -> Variation of future prices



DYNAMIC PRICING MONITOR

Data volume

	Hoteles	Registros	Regs.Día	Hist. Series
Spain	11.569	140M	195K	5/2011
France	13.784	135M	300K	10/2011
Ireland	742	5M	18K	11/2012



Destinos Costeros Mediterraneos (muestra)

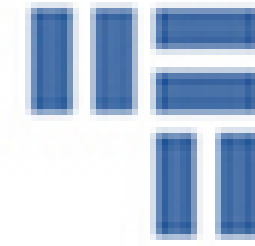
Croacia	86	323K	2k	6/2013
Egypt	33	123K	1K	
Greece	431	138K	10K	
Italy	1.105	2,5M	18K	
Morocco	217	812K	6k	
Portugal	163	141K	4k	
Tunisia	28	89k	1k	
Turkey	678	2,3M	16k	

**DYNAMIC
PRICING
MONITOR:**

**Contribution to
Statistics**



INSTITUTO
DE TURISMO
DE ESPAÑA



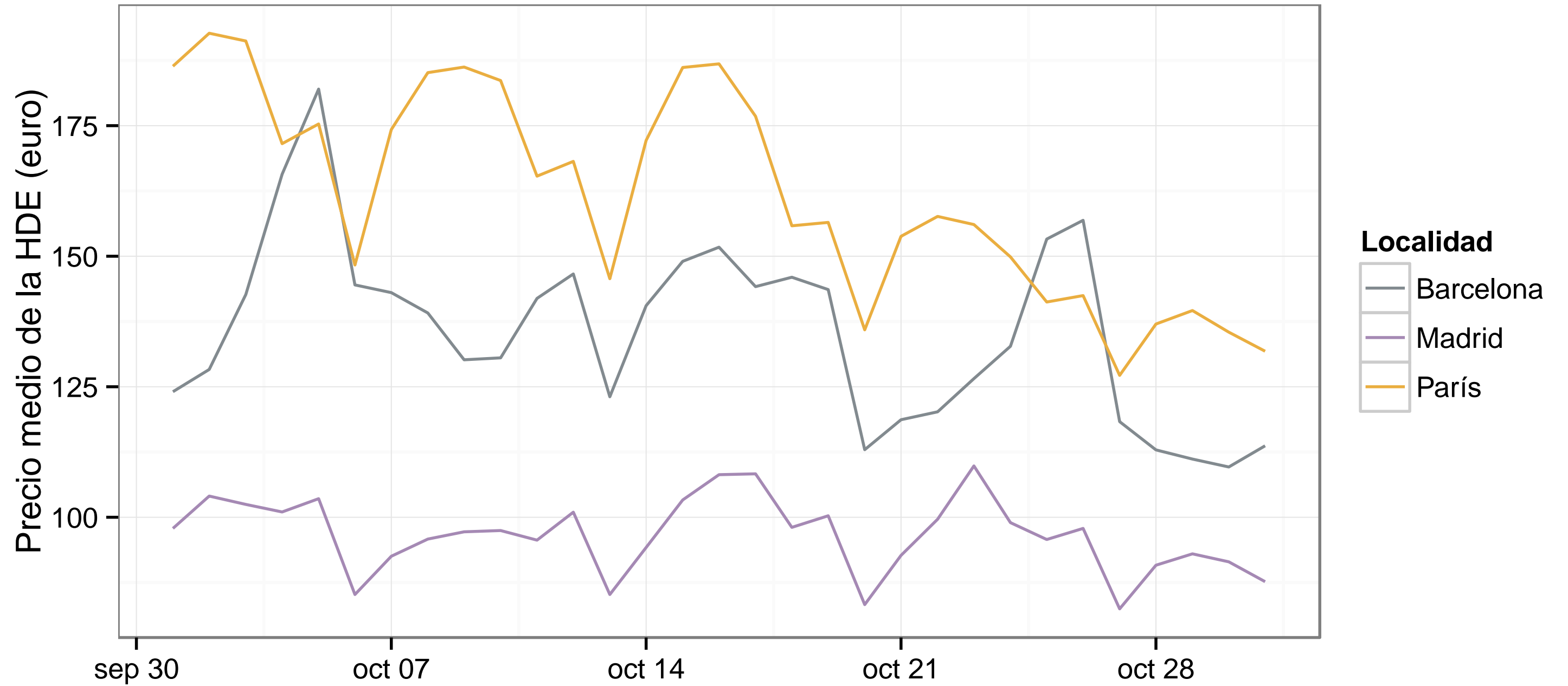
SUBDIRECCIÓN GENERAL
DE CONOCIMIENTO Y
ESTUDIOS TURÍSTICOS



Fáilte Ireland

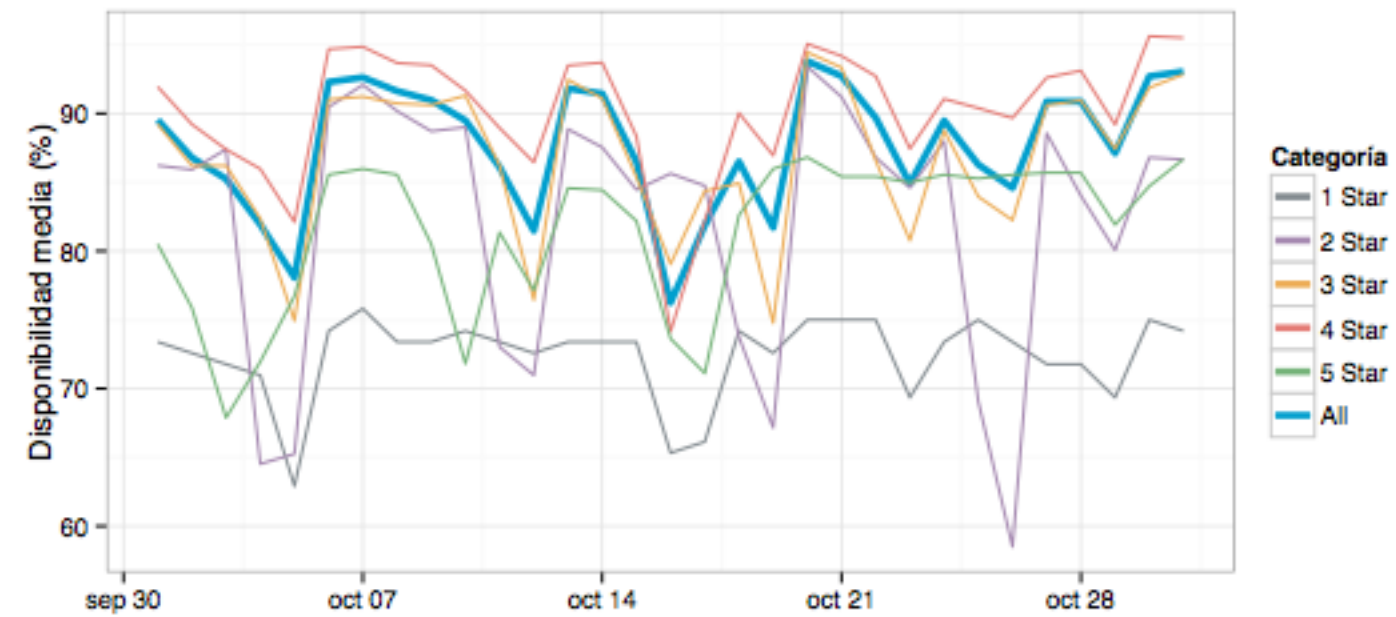
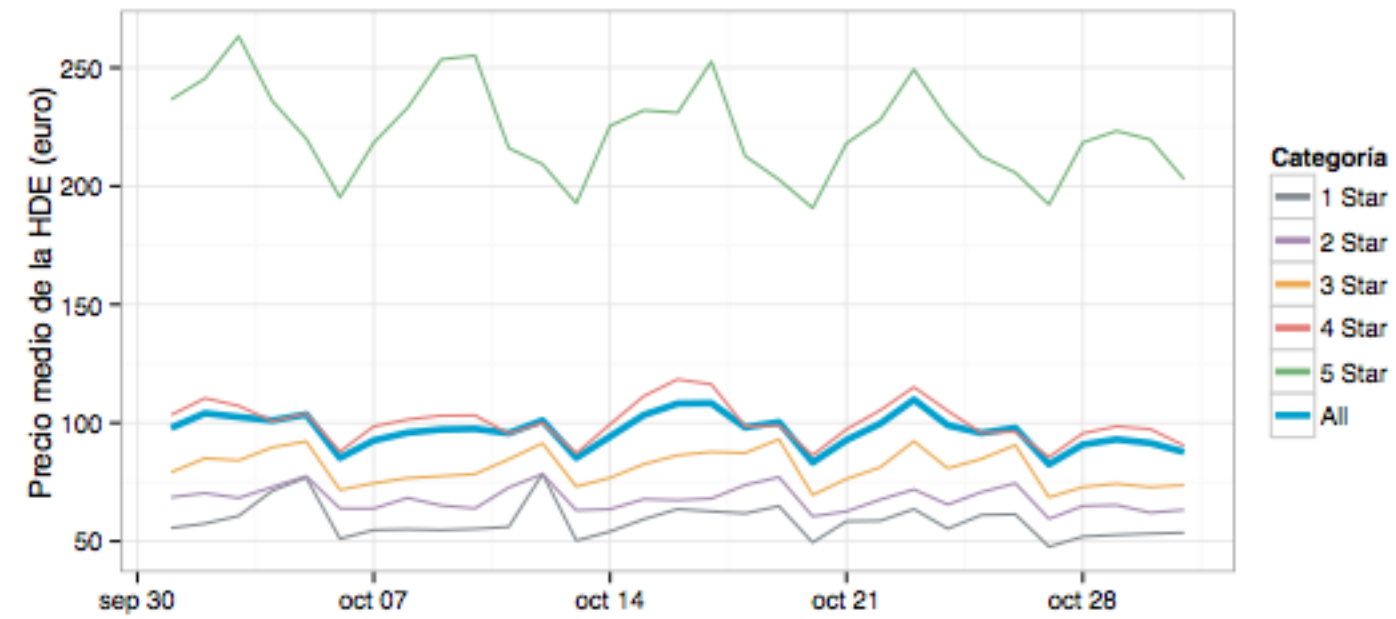
Example

Benchmarking cities



Dynamic pricing monitor

Madrid – oct 2013

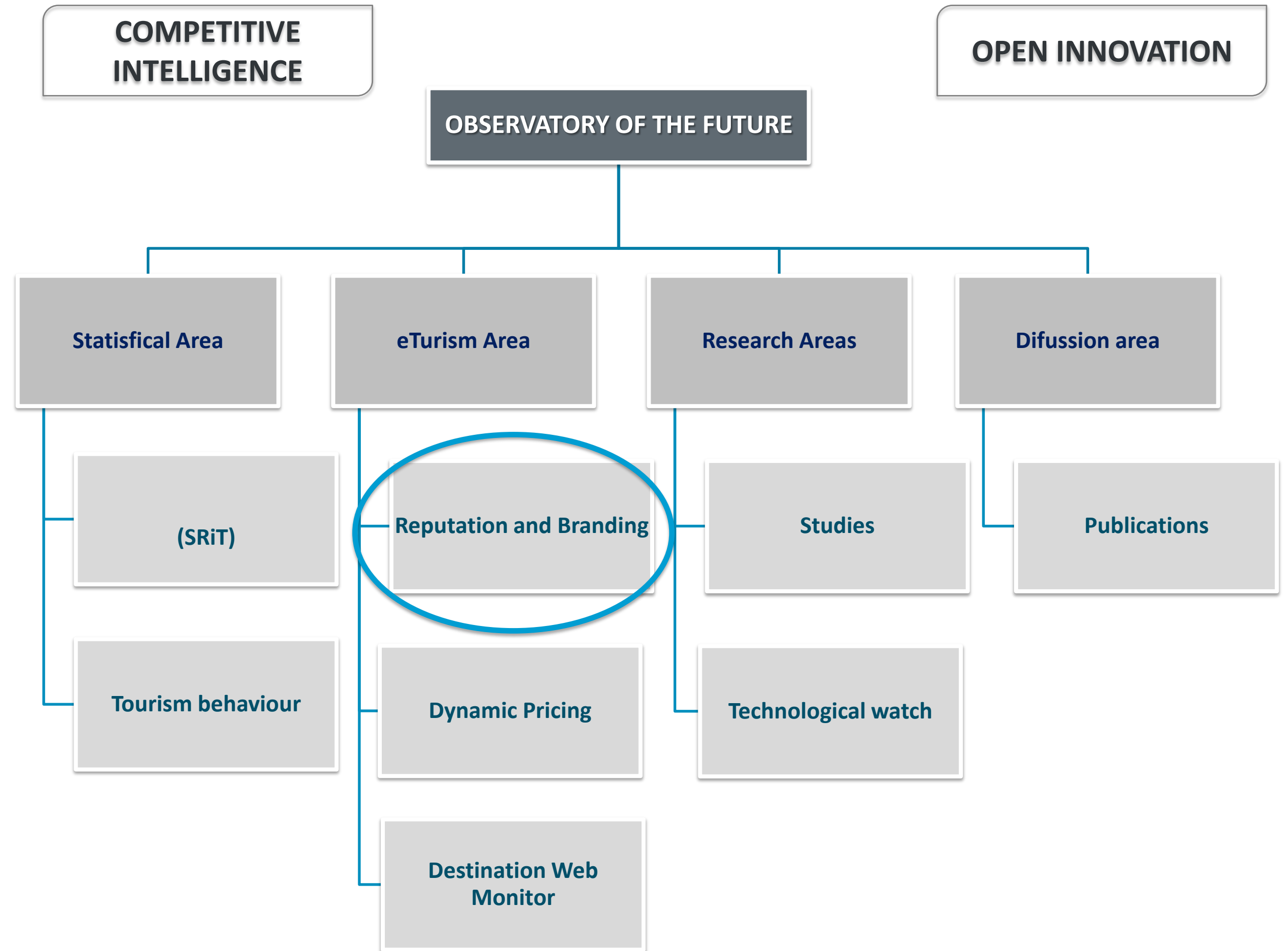


Categoría	Dias Laborables						Fin de semana					
	Precio (€)			disp. (%)			Precio (€)			disp. (%)		
	oct	sep	diff.%	oct	sep	diff.%	oct	sep	diff.%	oct	sep	diff.%
1 Star	50.77	55.43	-8.42	73.86	72.62	1.72	60.53	66.05	-8.37	70.16	71.88	-2.38
2 Star	63.93	65.35	-2.17	89.48	87.45	2.32	71.84	74.64	-3.75	69.76	67.78	2.92
3 Star	74.10	77.85	-4.82	88.95	88.98	-0.03	84.96	89.14	-4.70	79.58	80.73	-1.42
4 Star	94.47	100.59	-6.09	91.38	91.10	0.31	96.00	98.63	-2.66	83.75	87.56	-4.36
5 Star	208.81	225.32	-7.33	82.09	81.85	0.29	202.73	214.15	-5.33	80.82	80.82	0.00
All	89.88	95.40	-5.79	89.55	89.20	0.39	95.45	99.11	-3.69	81.06	83.33	-2.73



Tourism Intelligence

Advanced Observatory



Social Media Monitor

Digital Identity of our destinations and their offer

- This monitor enables the active monitoring, analysis quantification and qualification of information contained in digital means, in order to determine destination brand and perception reputation
- It is a tool that extends current quantitative and qualitative research methods, and sets questions like: what is being done? With what frequency and volume? In which contexts? Which attributes compose brand and how do they vary in time?
- Through the monitor's analytical power, the image projected and perceived can be compared.

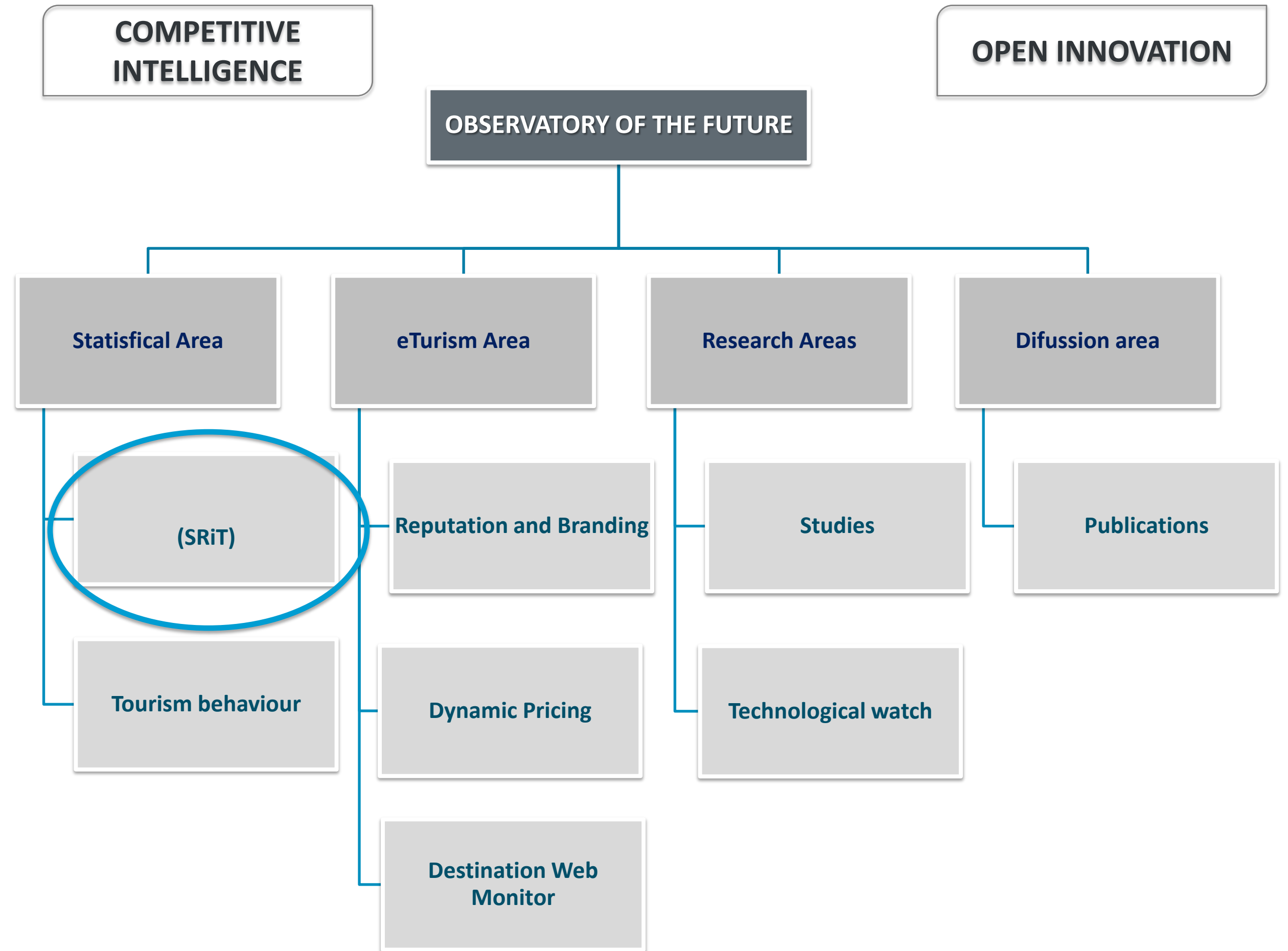
Imagen del País Vasco - Resultados

Channel	Image	REC	INF	SOC	ATM
Twitter TvEuskadi	Projected	86,76%	8,08%	0%	5,15%
Facebook	Projected and Perceived	84,36%	1,05%	4,15%	10,41%
Minube y Tripadvisor	Perceived	73,55%	11,59%	2,70%	12,14%

- The model allows us to find out the Basque Country's cognitive image through social networks

Tourism Intelligence

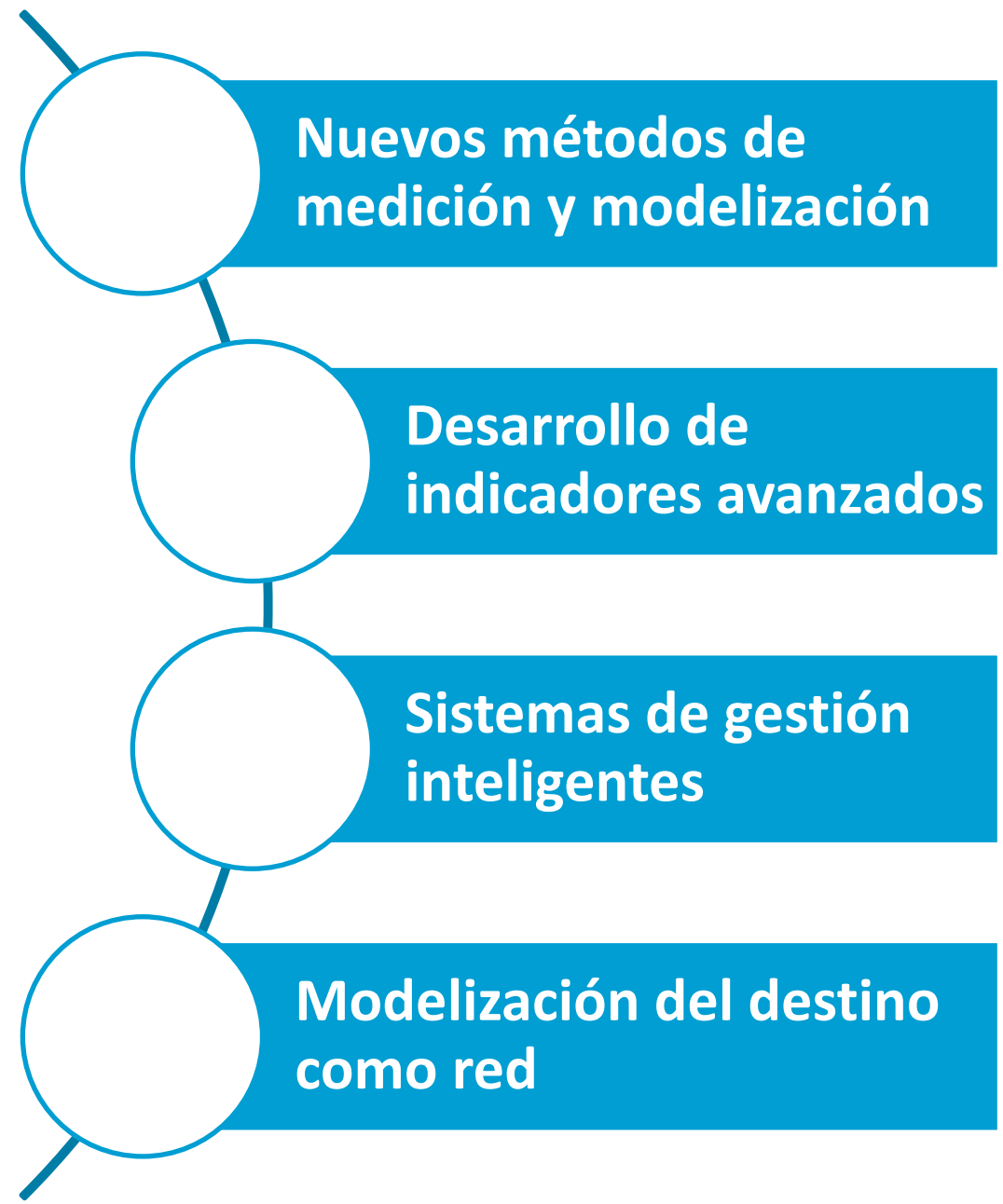
Advanced Observatory



1. El comienzo...

Observatorio Turístico de Euskadi

Inicio	Estadísticas	Comportamientos Turísticos	Monitores	Publicaciones	Ayuda	Contacto	Evaluación
			Dinámica de Precios Hoteleros Monitor Web de Destinos (MWD)				
			Rendimiento				
			Comportamiento				
			Tendencias				



Observatorio Turístico de Euskadi

El Observatorio Turístico de Euskadi se concibe y diseña para llevar a cabo el seguimiento de la actividad turística en Euskadi y potenciar la gestión inteligente de la información y el conocimiento con la finalidad de hacer de Euskadi un destino inteligente, articulado y que sea un referente mundial.

Nace como un sistema integrado de información, estudio, investigación y seguimiento del turismo con el fin de:

- Dotar al sector turístico de anticipación y reacción ante los cambios del entorno.
- Ofrecer mayor probabilidad de éxito en la implementación de la estrategia.
- Identificar oportunidades.
- Facilitar cambios de cultura corporativa.

Identificar oportunidades

Nos invita a actuar, a tomar decisiones a múltiples niveles y nos invita a asumir la realidad turística de forma dinámica, facilitando un espíritu de innovación y competitividad en la administración y el sector del turismo en general.

Mayor probabilidad de éxito en la implementación de la estrategia

La inteligencia competitiva puede aportarnos las herramientas de análisis para estimar la reacción de los competidores ante un cambio de estrategia del destino Euskadi.

Cambio de cultura corporativa

Disponer de la información ordenada, clasificada y convenientemente analizada, nos permite tener una visión global y completa del entorno competitivo.

Dotar a la organización de anticipación y reacción ante los cambios del entorno

Muchas veces la falta de tiempo nos impide ver con claridad las oportunidades, y la inteligencia competitiva permite hacer que éstas se identifiquen mejor.

2. Definición

SRiT

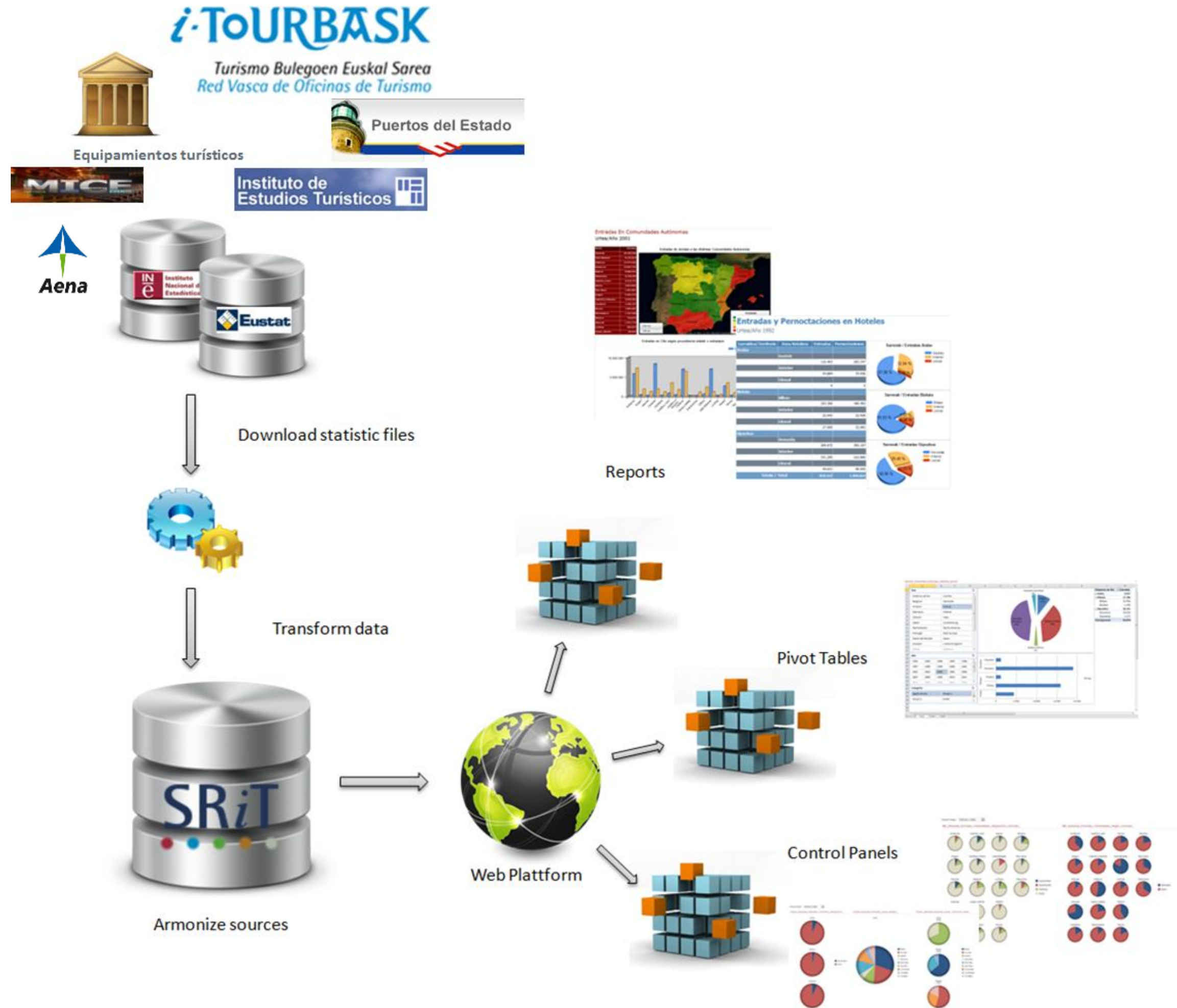
Sistema
Estadístico
(SRiT)

Recopila, integra, armoniza, visualiza la **información estadística** del turismo de Euskadi, y a su vez, provee herramientas analíticas que facilitan la toma de decisiones para el sector del turismo

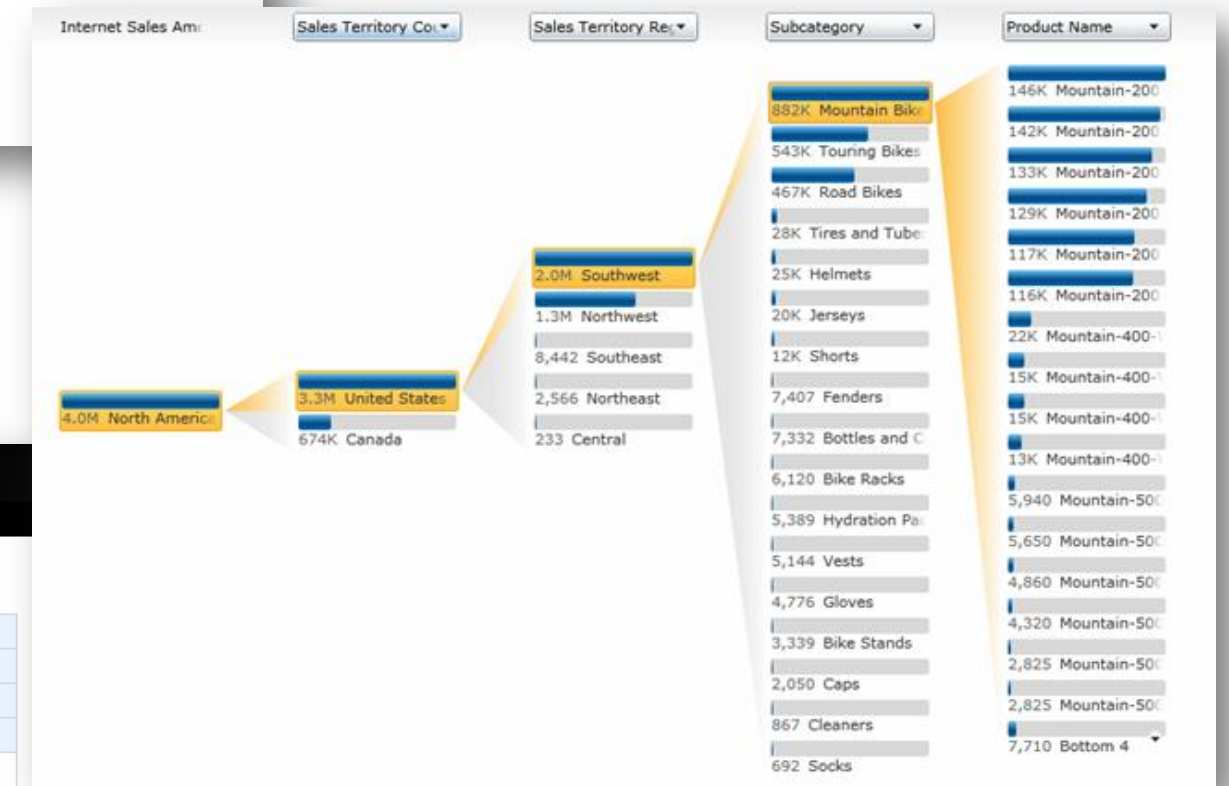
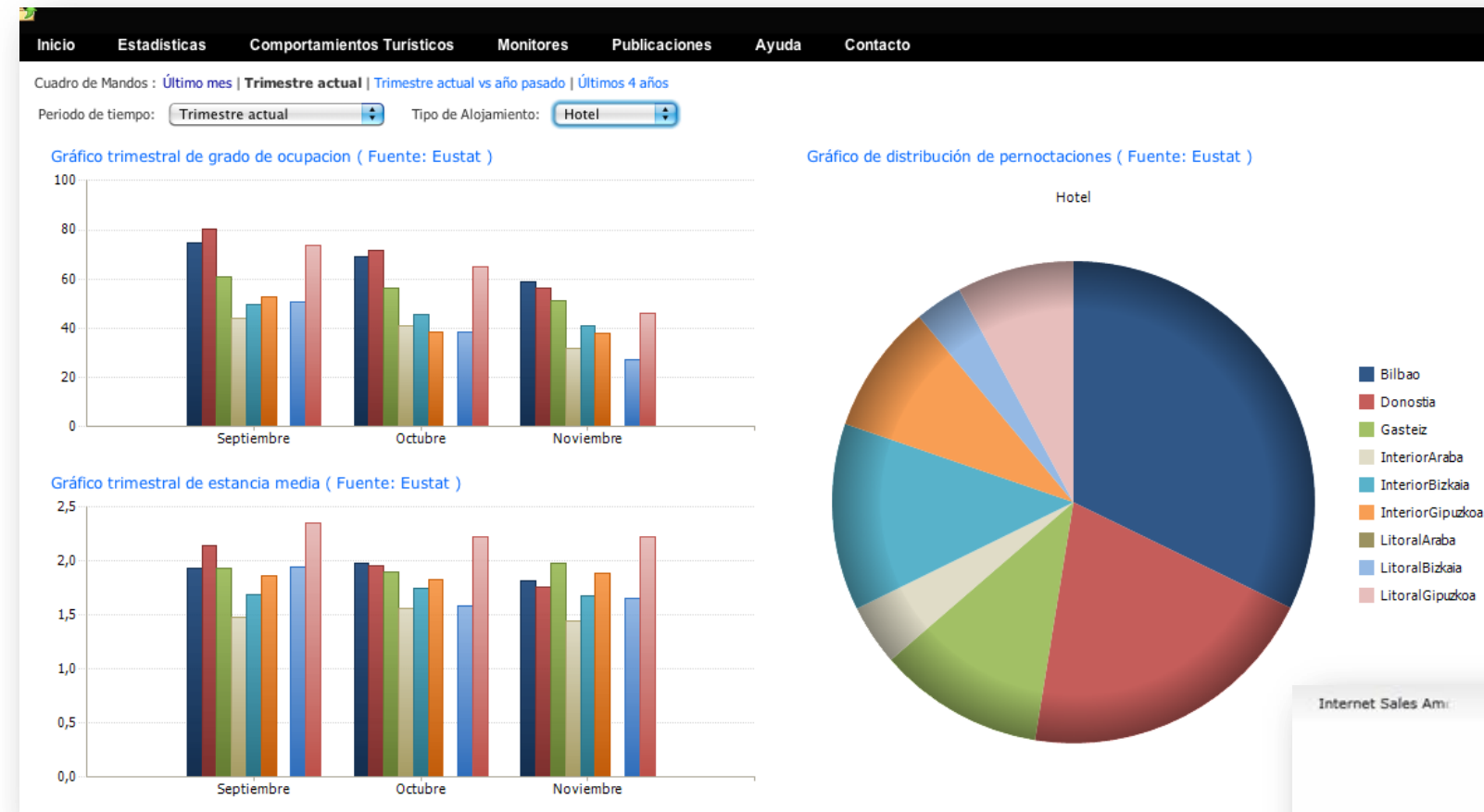
3. Fuentes de Datos



4. Proceso Data Science



5. Cuadros de mando



Cuadro de mandos de hoteles (Fuente: Eustat)

	2011		2010	
	Noviembre	Hotel	Noviembre	Hotel
	Real	Objetivo		
KPI de estancia media de hoteles				
Araba	1,81	1,78		
Bizkaia	1,76	1,79		
Gipuzkoa	1,86	1,81		
KPI de grado de ocupación de hoteles				
Araba	45,13	44,13	2%	
Bizkaia	50,16	48,92	3%	
Gipuzkoa	47,62	46,00	4%	

Cuadro de mandos de agroturismos (Fuente: Eustat)

	2011		2010	
	Noviembre	Agroturismo	Noviembre	Agroturismo
	Real	Objetivo		
KPI de estancia media de agroturismos				
Araba	2,04	1,88		
Bizkaia	2,29	2,53		
Gipuzkoa	2,34	2,35		
KPI de grado de ocupación de agroturismos				
Araba	14,22	17,14	-17%	
Bizkaia	13,00	17,39	-25%	
Gipuzkoa	16,88	17,07	-1%	

micro



Motivation
Emotional State
....



Unique travelers

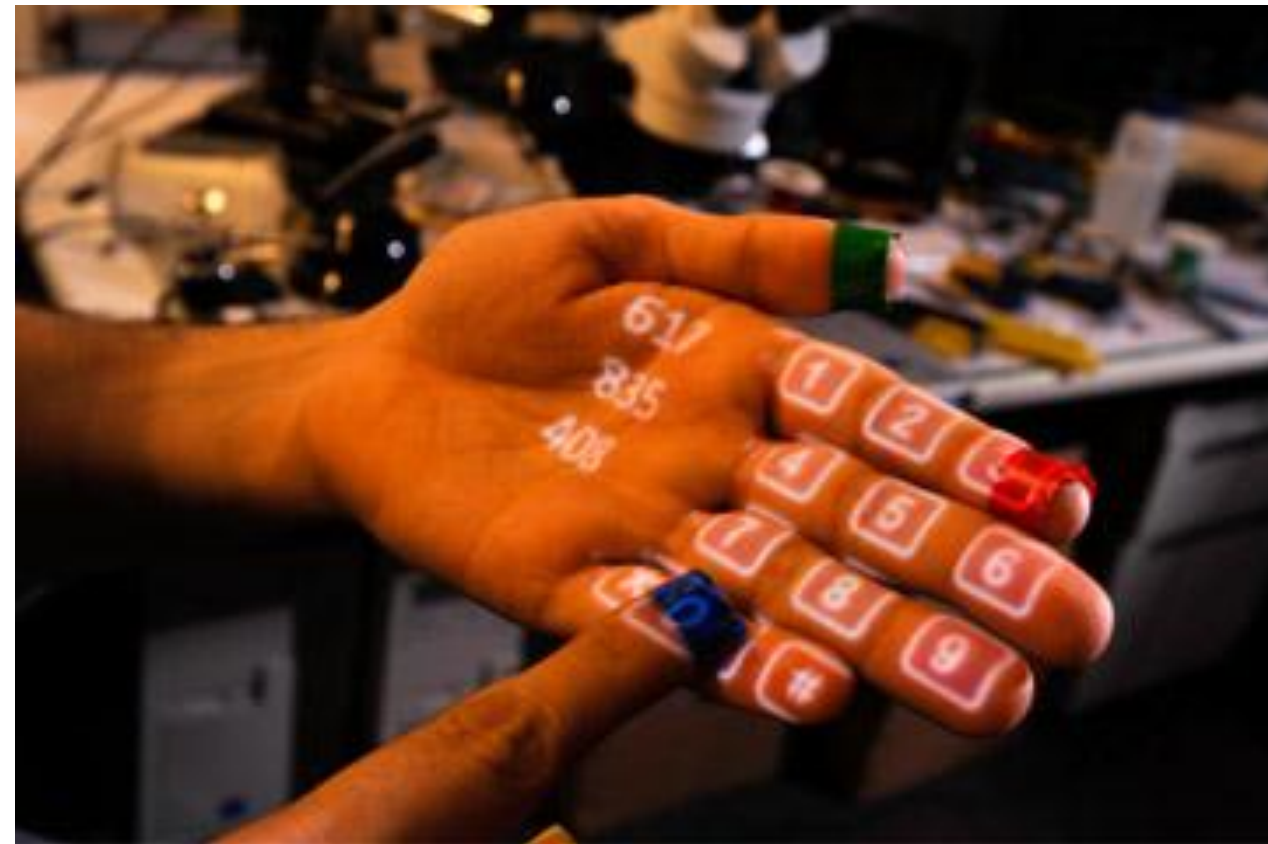


One billion of the world population (1/7) is using a Smartphone.

- **70%** changed their *face book* status while on holidays
- **52%** changed their original travel plans
- **50%** of travel companies agreed that bookings were coming from social media
- **46%** checked in location
- **33%** changed their hotel
- **85%** of leisure travellers use smartphones
- **30%** used mobile apps to find a hotel
- **29%** used mobile apps to find air deals
- **15%** have downloaded apps specific for their coming holidays



- **87%** of travellers use the Internet for travel planning
- **62%** researched an upcoming trip
- **43%** read reviews from other travellers
- **31%** watched travel video





Traditional Measurement Methods



Needs



New Measurement Methods

Space Time Diaries



Generate Knowledge at Micro-Level



Collect data via GPS

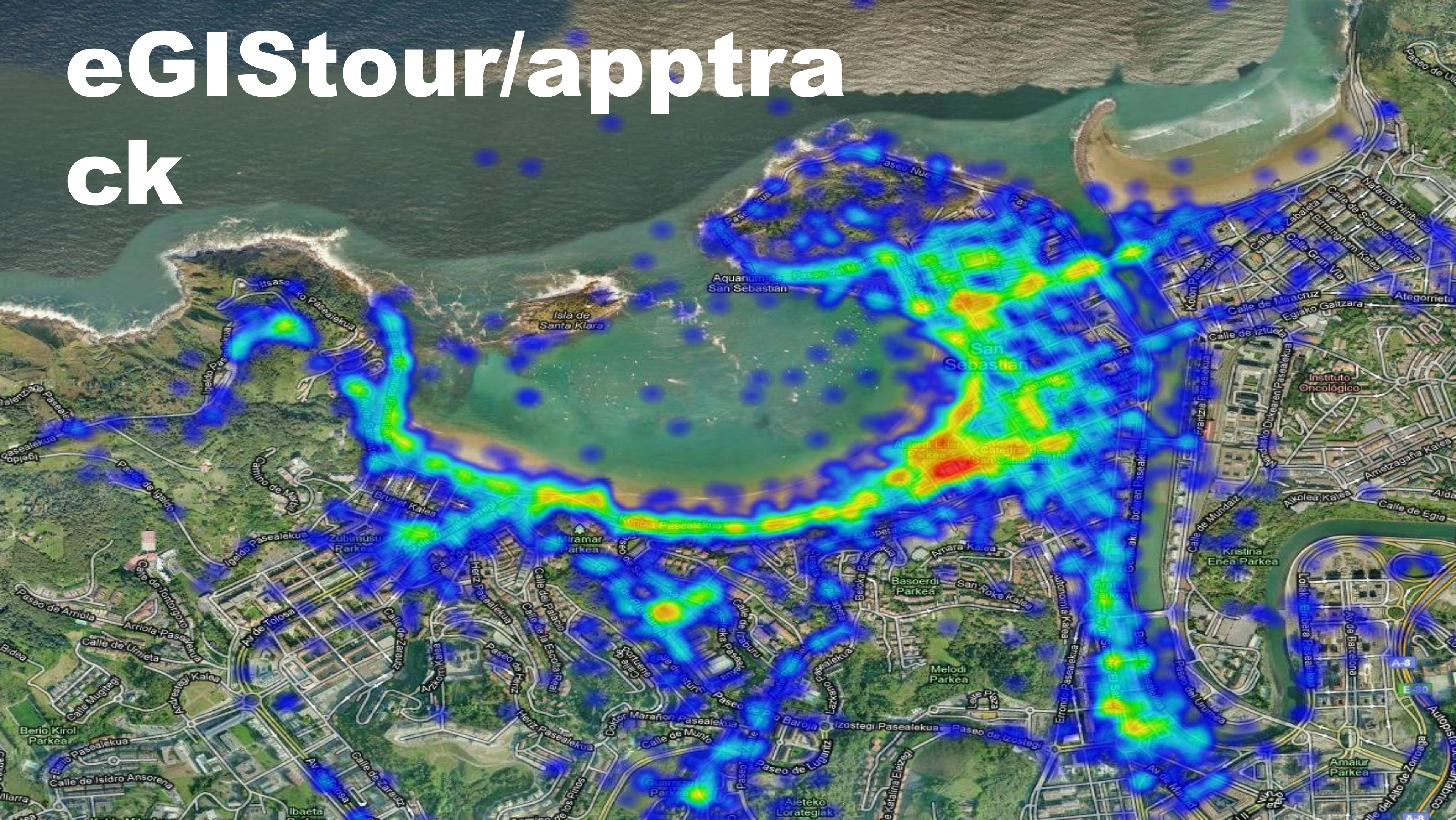
- Yet the current methods used to collect data on spatial and temporal activities are limited in accuracy and validity.
- Recent developments in the field of digital tracking technologies have produced a range of widely available systems, including land-based tracking, satellite navigation, and hybrid systems.



- Understanding behaviour beyond tourism:
 - Commerce (iKUScommerce)
 - Emotional dimension of places (emocionometer)
 - Marketing and advance services in mobility (myFecnes)



eGIStour/apptrack



Mobility at micro-level

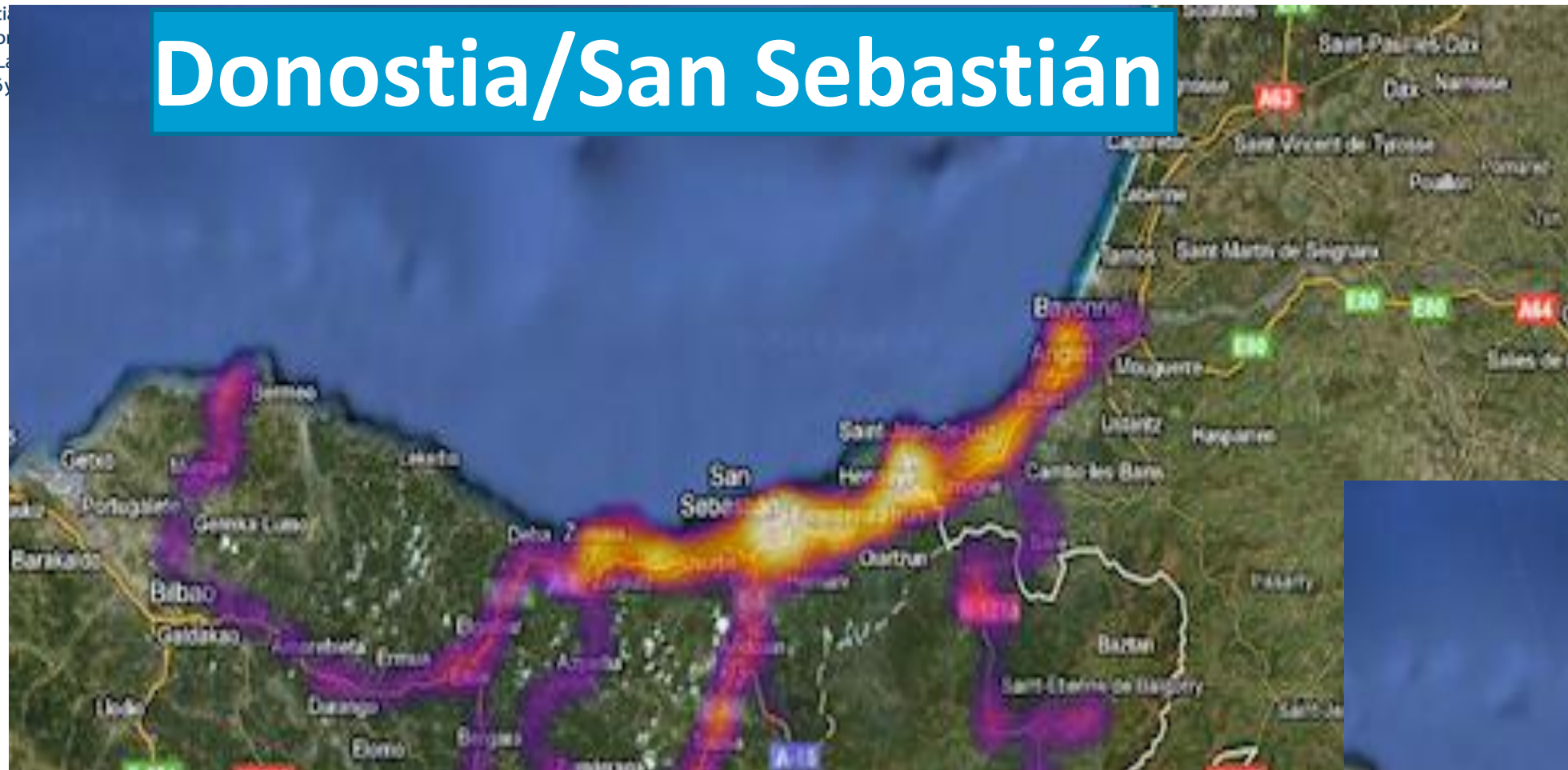
Apptrack's objective is to measure, monitor and analyse the flows of visitors through GPS location, in order to:

- Have a deeper knowledge and understanding of **time and space consumption**
- Identify **itineraries** and most frequently visited areas
- Define visitor profiles with base on their **behaviour**



Mobility Patterns

Donostia/San Sebastián



Vitoria-Gasteiz



Bilbao

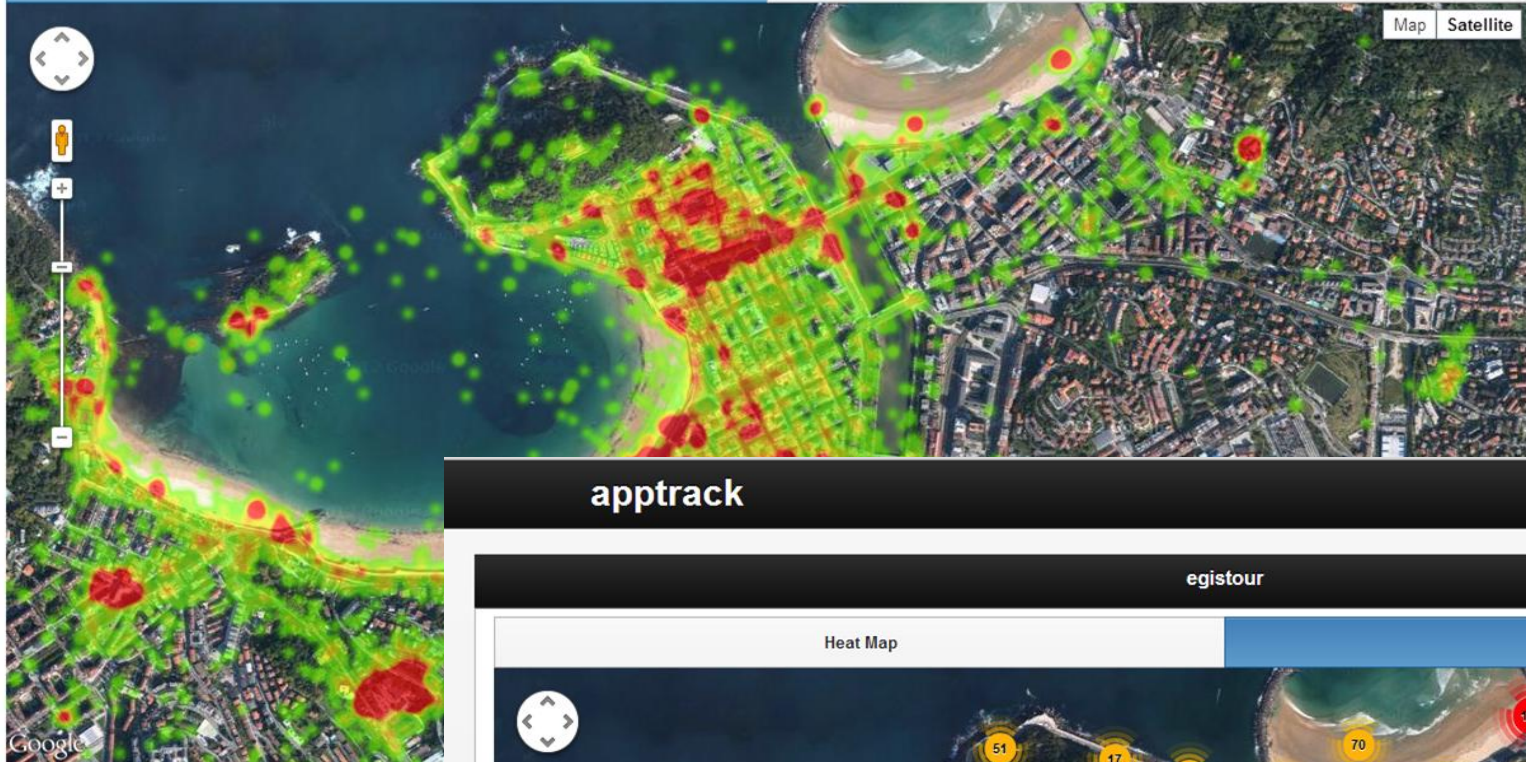


Mobility Patterns

aptrack
Panel de Control Salir

egistour

Heat Map
Clusters



Alma
Map Satellite

Rango de fechas

Desde: 01/05/2010 ▼

Hasta: 01/09/2010 ▼

Filtrado de variables

- submotivo
- provincia
- primera vez
- pernoctaciones
- pais

aptrack
Panel de Control Salir

egistour

Heat Map
Clusters



Alma
Map Satellite

Almacenar posición del mapa
Eliminar todos los puntos de la aplicación

Rango de fechas

Desde: 01/05/2010 ▼

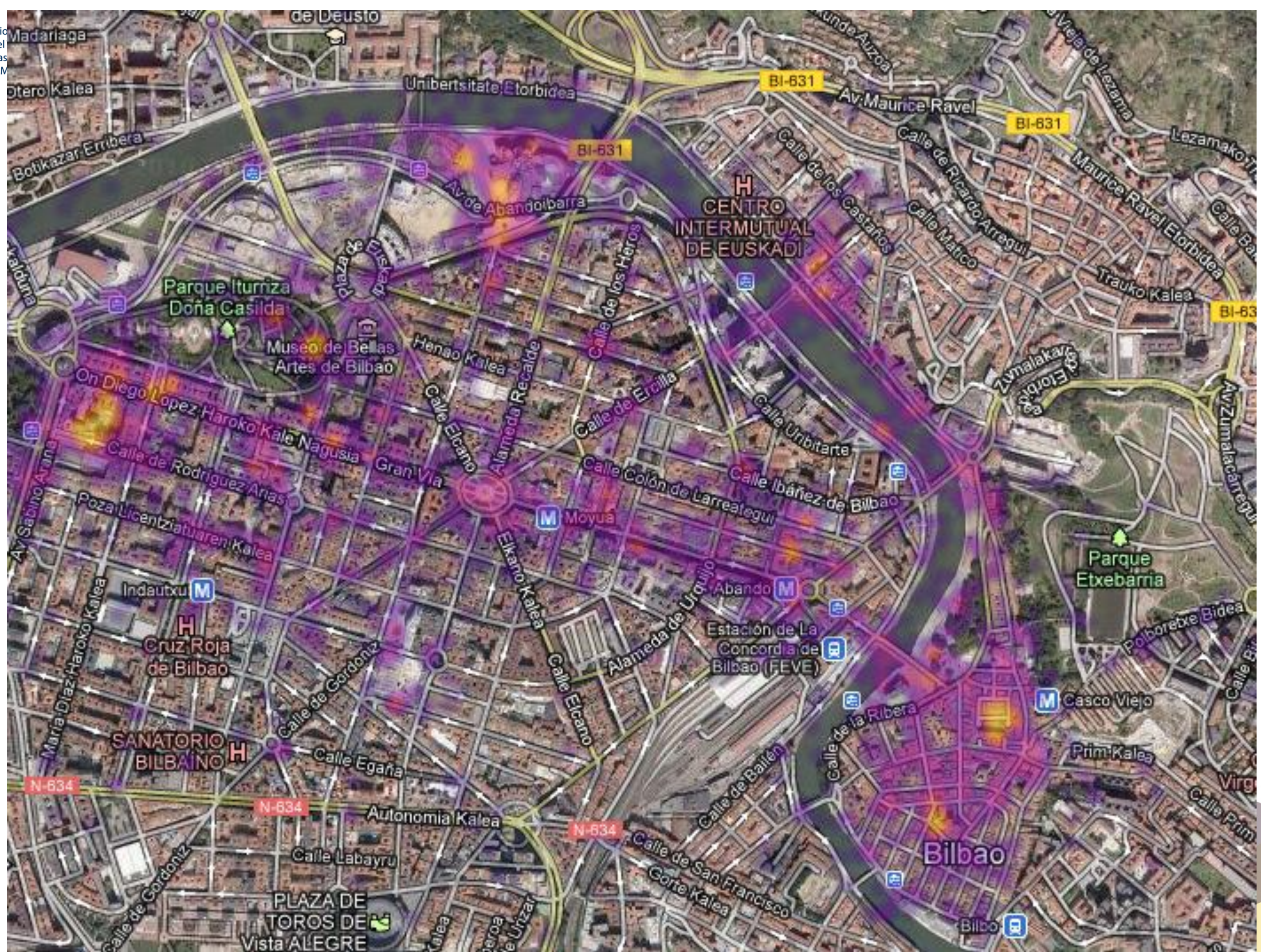
Hasta: 01/09/2010 ▼

Filtrado de variables

- submotivo
- provincia
- primera vez
- pernoctaciones
- pais
- origen
- numdia
- motivo
- idturista
- edad
- compania

it3LAB CICTOURGUNE

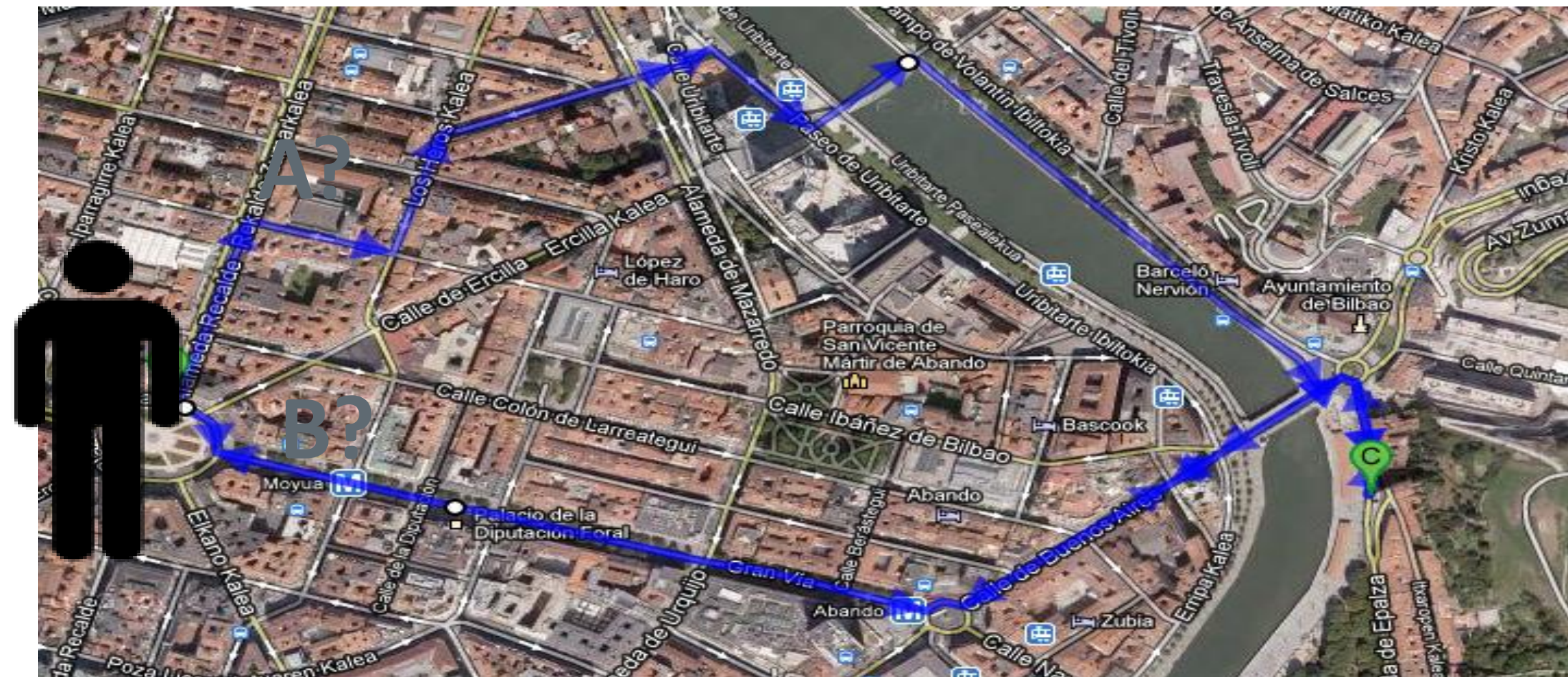
Consumo de espacio en Bilbao



MEASUREMENT Tourist flows

The other major research stream concentrates on MODELLING tourist **wayfinding decision-making process**

- Wayfinding can be described as the process of using spatial and environmental information to find our way in the built environment





- iKUScommerce encompasses the measurement, analysis and modeling of consumer flows
- **Understand the phenomenon of the consumer mobility** from an innovative approach
- Spatio-temporal data relating to **demographic profiles and mobility patterns**
- Identify **purchase itineraries**



Emotion measurement in the tourism arena

- The emotional measurement has been traditionally linked to marketing purposes, mainly in terms of satisfaction of the consumers
- This approach aims at understanding of the consumers, as well as at developing services, marketing strategies and failure prevention measures
- It is important for tourism industries to be aware of the potential of emotional measurement
 - Identification of emotional strengths and weaknesses can foster better managing of services according to their fluctuation

Web-based platform to send real-time push information to mobile devices depending on the context of the tourist

- **Web platform**
 - Fences and context data management for push notification.
 - It has a REST API to create, remove fence, and so on.

The screenshot shows the myfences web platform interface. On the left is a sidebar menu titled "Fences" with a "Create" button and a list of existing fences. The "Barrio de Gros" fence is selected. On the right is the configuration form for this fence, which includes a map showing the fence area, a name field, and various context data settings.

myfences Welcome david.martin

Fences

- + Create
- Introduccion
- Puente de María Cristina
- Barrio de Gros**
- Parque de atracciones de Igeldo
- Cementerio de los ingleses
- Aquarium
- Ayuntamiento de Donostia
- Plaza de la Constitución
- Estadio de Anoeta
- Sirena de las doce
- Iglesia de San Vicente

Map Mapa Satélite

Name Barrio de Gros

Context Data

- Every time someone arrives at this fence
- date between dd/mm/aaaa and dd/mm/aa
- hour between 1 and 24
- send data {"id":3,"url":"http://it3labprojects.tourgune.org/qrrify/ope"}
- to destination mobile

Data to send

Save Delete

- **Applications of myFences functionalities**
 - Location-based systems
 - Intelligent and connected environments
 - Adaptive Systems
 - Real-time monitoring systems
 - Smart Cities and Destinations
 - Mobile Marketing and Persuasive computing

**Few thoughts to
conclude**



- Destinations need to think about their potential based on their local richness and resources on how to outpace other attractive and valuable regions
- We need to build the so-called local character
- We need to provide local agents with the tools that allows them to dream, design and implement the destination of their choice
 - Design and make the place
 - Design and implement the policies to create the appropriate industry
 - Manage the economic activity derived from that



NEW CAPACITIES INTELLIGENCE

Working in a hybrid technological
environment

The new capacities will facilitate the
“seamless experience of the tourist”

SUMMING UP



NEW INFRASTRUCTURE INTERNET OF THINGS

SUMMING UP

Tourism Intelligence (Big data) offers significant benefits for all travellers and companies

- Better decision support
- New products and services
- Better customer relationships
- Cheaper, faster data processing

Maintaining competitive advantage



State of Affairs

Travellers' preference goes to destinations that provide them with a full choice and personalization of all (or most) elements of their stay

THINGS THAT REMAIN THE SAME

Decisions and changes can be very fast if tools are available to perform the choice

Single operators, unless having high level of capacities and resources to deliver, can be less attractive and competitive than well organized groups

PARTICIPATING IN GLOBAL VALUE CHAIN UNDER LOCAL RULES

CHALLENGE

We are in the process of understanding
KNOWLEDGE CREATION
KNOWLEDGE INTO ACTION
KNOWLEDGE MANAGEMENT



SMARTER
CONNECTED
AND
HAPPIER
PLACES



Conclusions and Implications

- Movement toward mobile is everywhere: from shopping, to media, to search.
- Knowing consumer behaviour is more crucial than ever before, but we have more means (tech) than ever before to find out
- Social search on what friends like -> social-based recommendation engines
- General decrease on online searchers per searcher (7%) vs. 8% increase on vertical search engines, specialised search engines. -> conclusion, reputation, make ourselves visually accessible,
- The most important thing is to have a mobile site, in order to influence at all levels of the travel purchase funnel.
- Apps drive travel brand engagement.

Conclusions and Implications

- mCommerce
- mMarketing
- Context-based services: more personalised.
- Persuasive Computing
- SoLoMo - SoCoMo
 - Local remains the most important thing, but with global technology
- Think global – act local – increase user experience
 - Everything is related to everything else, but closer things are more tightly related than others (Waldo Tobler, 1st Law of Geography)
- 52% of FB users are directly influenced by photos
- TripAdvisor has over 50 million comments that help 40 million people make well informed decisions.

Social, technology
but local remains
important

Conclusions and Implications

- Data: new raw material of the 21st Century
- Data on demand
- Cross channel communication
 - People increasingly use mobile devices to shop and compare while shopping
 - Decisions and changes can be very fast if tools are available to perform the choice
- Anywhere, anytime access apps: on demand information consumption
- Big data and Social Media connection to make wiser decisions
- Data aggregation
- Smart tourism destinations -> Empowering the tourist, engaging tourists

Conclusions and Implications

- NFC: not only for paying (if ever), but for all kinds of purposes:
 - Hotels: Room access management
 - Airlines: luggage identification
- M2M Communication: machines communicating among them or with us
- Important social trends: including personal leisure in business trips
- Important conclusion: keep on doing well your stuff, keep on being nice to people, keep on trying to add value to what you do, because now, your marketer and your market, is global, you act local, but the rest is global.
- Cross-platform
 - Breakfast -> phone
 - Lunch -> desktop
 - Dinner -> Tablet



ICT Challenges in Tourism Destinations on the 21st Century

The trends, behaviors, and social influences
affecting the tourism industry today

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