

# Financing Sustainable Mobility

Innovative tools and local revenue streams

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Social trends  
and new  
technologies

**Consumer and social  
trends relevant to  
urban mobility**

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mobility**

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Financing  
sustainable  
mobility

**Business Model Canvas**

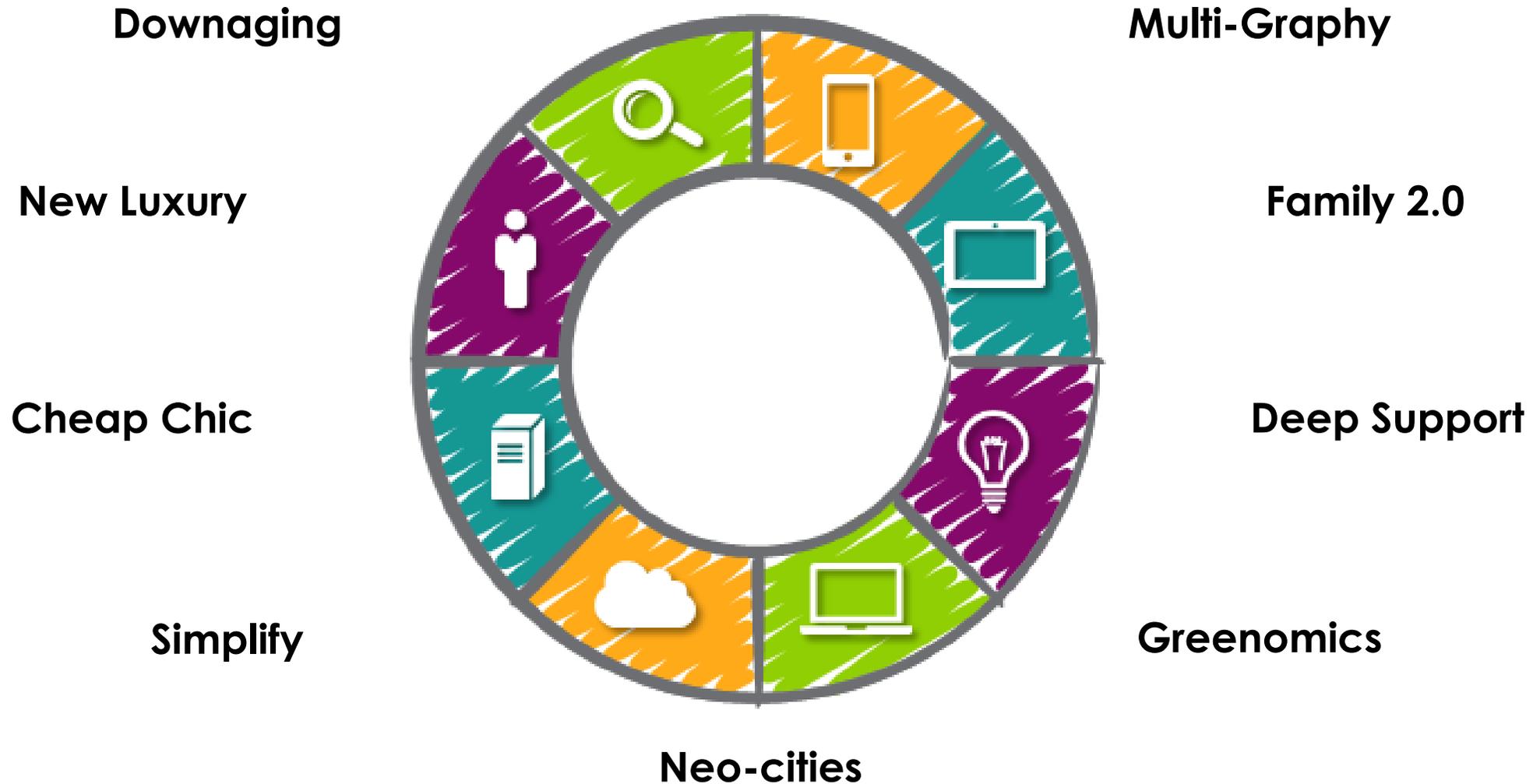
Examples  
& Conclusions

**Bike sharing  
schemes in Las  
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**BRT in Las Palmas de  
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# Social trends and new technologies

Consumer and social trends relevant to urban mobility



# Social trends and new technologies

## Consumer and social trends relevant to urban mobility

### Downaging

The society is irreversibly getting older all the time...  
... but at the same time we feel younger

### New Luxury

Having time of one's own, the authority to decide when and how one deploys his time.

### Cheap Chic

Till few years ago "design" indicated a premium product; Today demand for design in all price segments

### Simplify

Consumers wish for purity and simplicity in a high tech surrounding



Multi-Graphy

Family 2.0

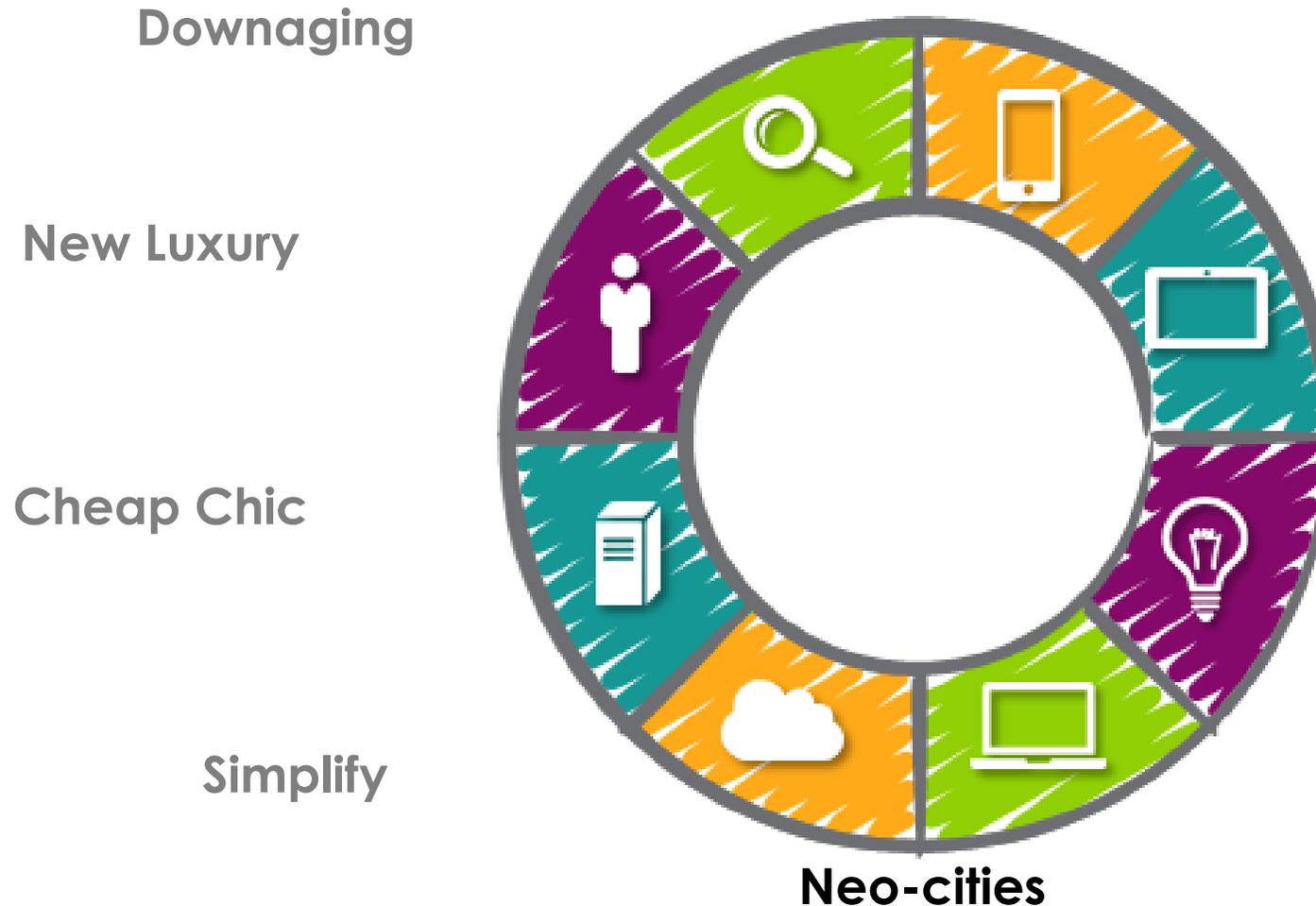
Deep Support

Greenomics

Neo-cities

# Social trends and new technologies

## Consumer and social trends relevant to urban mobility



Green metropolis and zero-emission cities are the urban design of the

### **Multi-Graphy**

The era of three-phased life planning is over. Life models will be subject to several phases of learning, partnership and family

### **Family 2.0**

A new form of living together that transcends the traditional *father – mother – child* unit.

### **Deep Support**

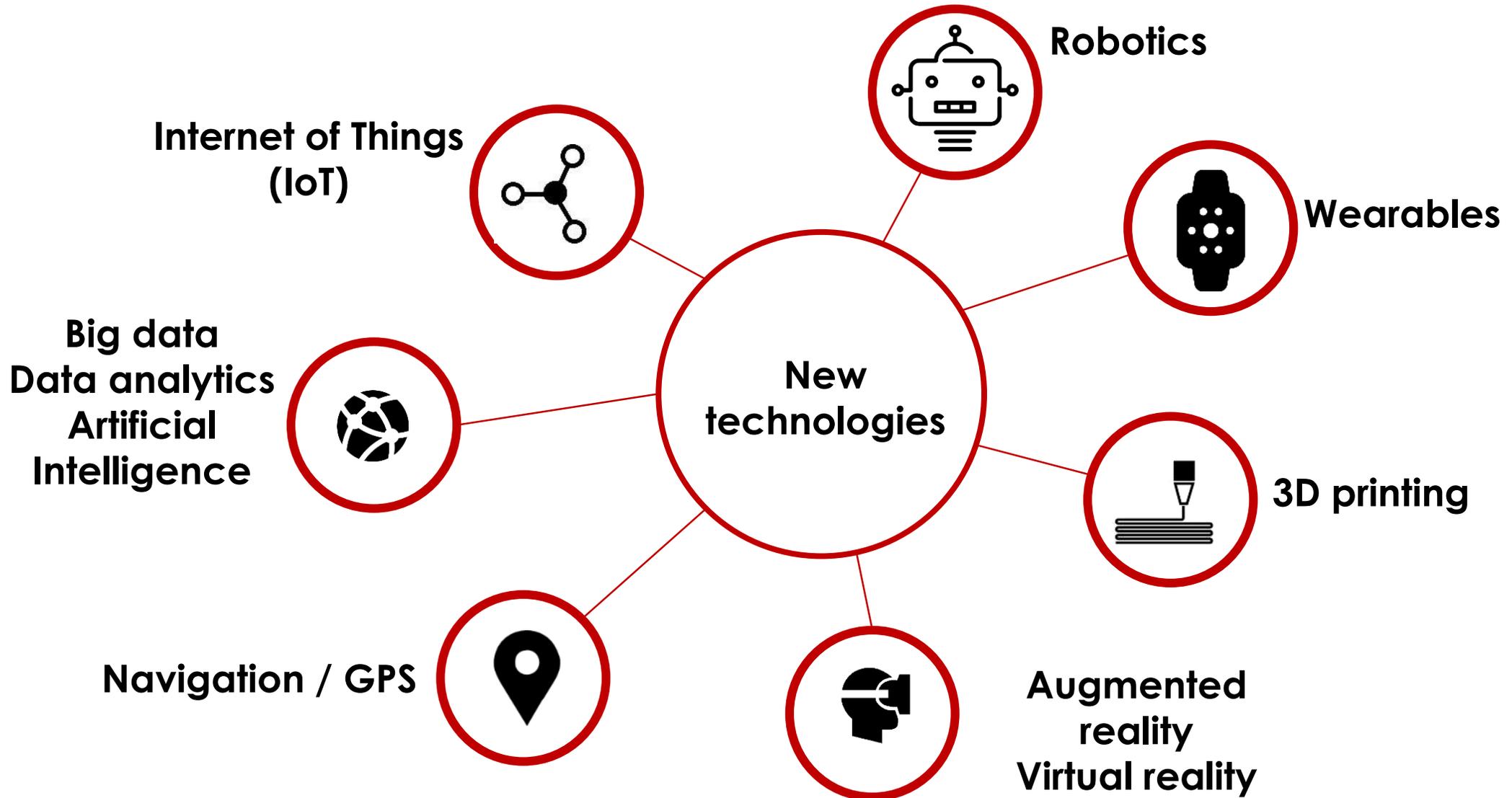
In an increasingly complex environment, consumers are looking for integrated support in multifaceted tasks

### **Greenomics**

Looking for a balance between sustainability and enjoyment; pleasure and health; consumption and social responsibility

# Social trends and new technologies

## New technologies relevant to urban mobility

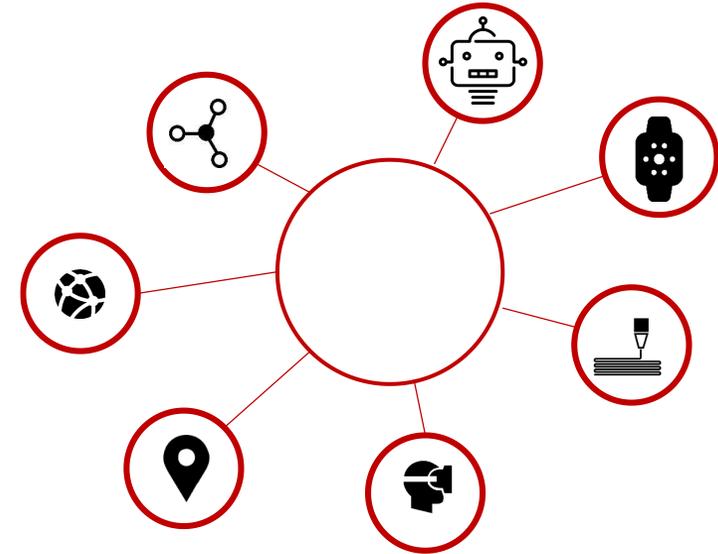


# Social trends and new technologies

Consumer and social trends



New technologies



&

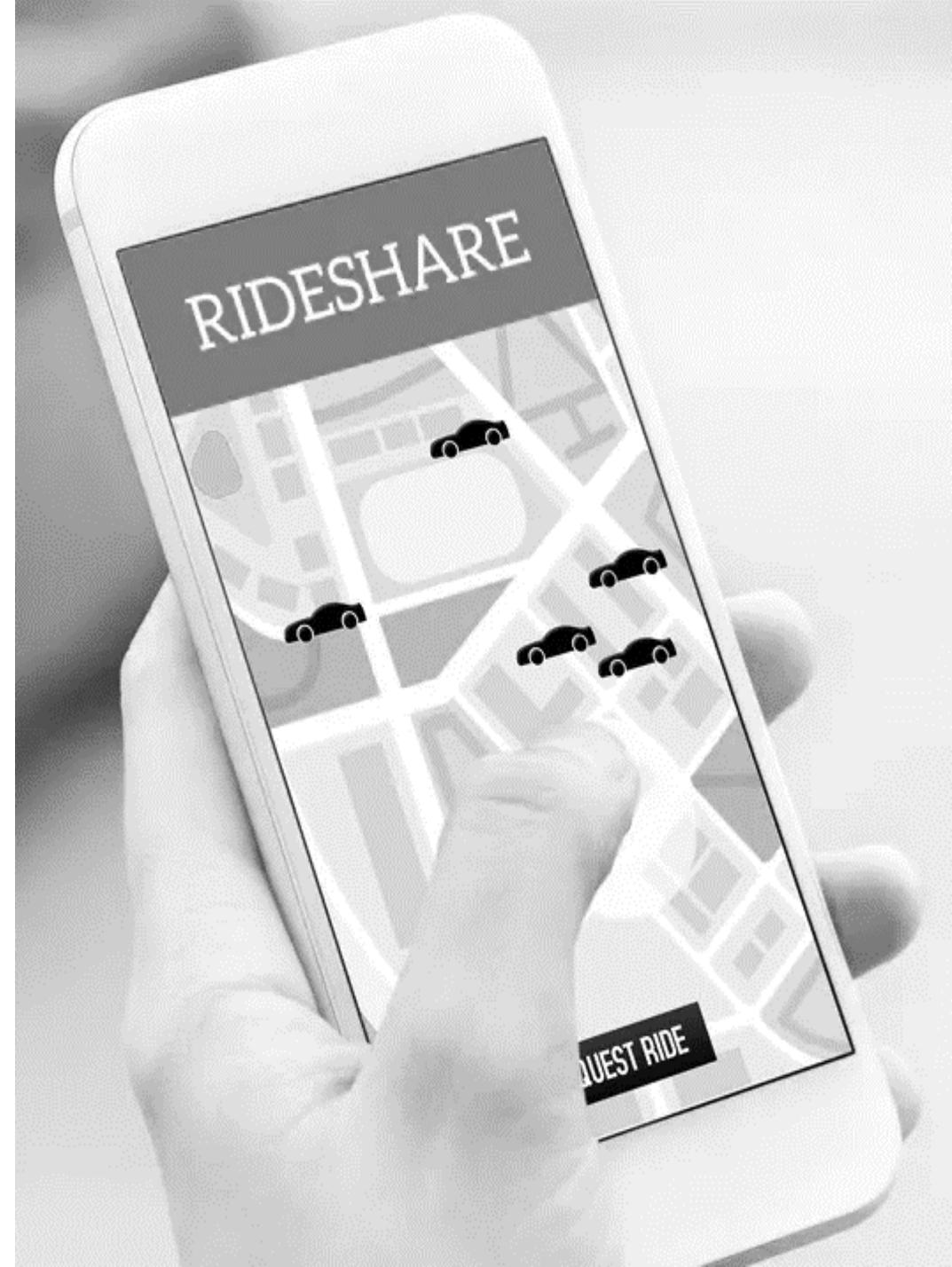
## New mobility solutions

#MaaS      #Multimodality  
#Sharing      #DemandResponsive  
#AutonomousDriving

# New mobility solutions

## Current situation

- ➔ Currently most companies offering new mobility services are **not achieving profitability** due to:
  - fierce competition for market share
  - low maturity of services and technologies behind them.
- ➔ **Digital platforms are not profitable yet** and are growing from a low level.
- ➔ **Revenues** and (especially) **profits** are shifting from the traditional “**car and vehicle world**” towards **innovative transport**.
- ➔ Customers expect **mobility solutions adapted to their own personal attitude to life**.



# New mobility solutions

## Future

- If the Public sector do not find the way to fit in, private companies will lead these market areas.
- Thread: consolidation in these market areas will leave only a handful of companies dominating the market.
- Opportunity: there will be a growing need for a **strong integration** among different mobility forms. The Public sector could play a key role as a facilitator.
- Compound annual growth rates (CAGR) for mobility services to be between **25–35%** over the next 10 to 15 years.
- Annual revenues of €400bn to €600bn by about 2030.



# New mobility solutions

## Challenges

### European level

- Europe is much more **restrictive** from a **legal and policy perspective** (i.e. when it comes to ride-sharing services).
- European **Public Transport Operators** are often an obstacle for the take-up of third party multimodal platforms and offerings.
- The European industry is threatened by US and Asian competition in the sectors of **electric mobility**.
- The **distribution of money** is highly concentrated in a few individual businesses **outside of the EU** and within specific business models (i.e. Uber, Didi Chuxing, Tesla, Lyft, Ola, Grab, Gett...).

### Local level

Amongst others (governance, regulation, enforcement, sustainability, etc.)...

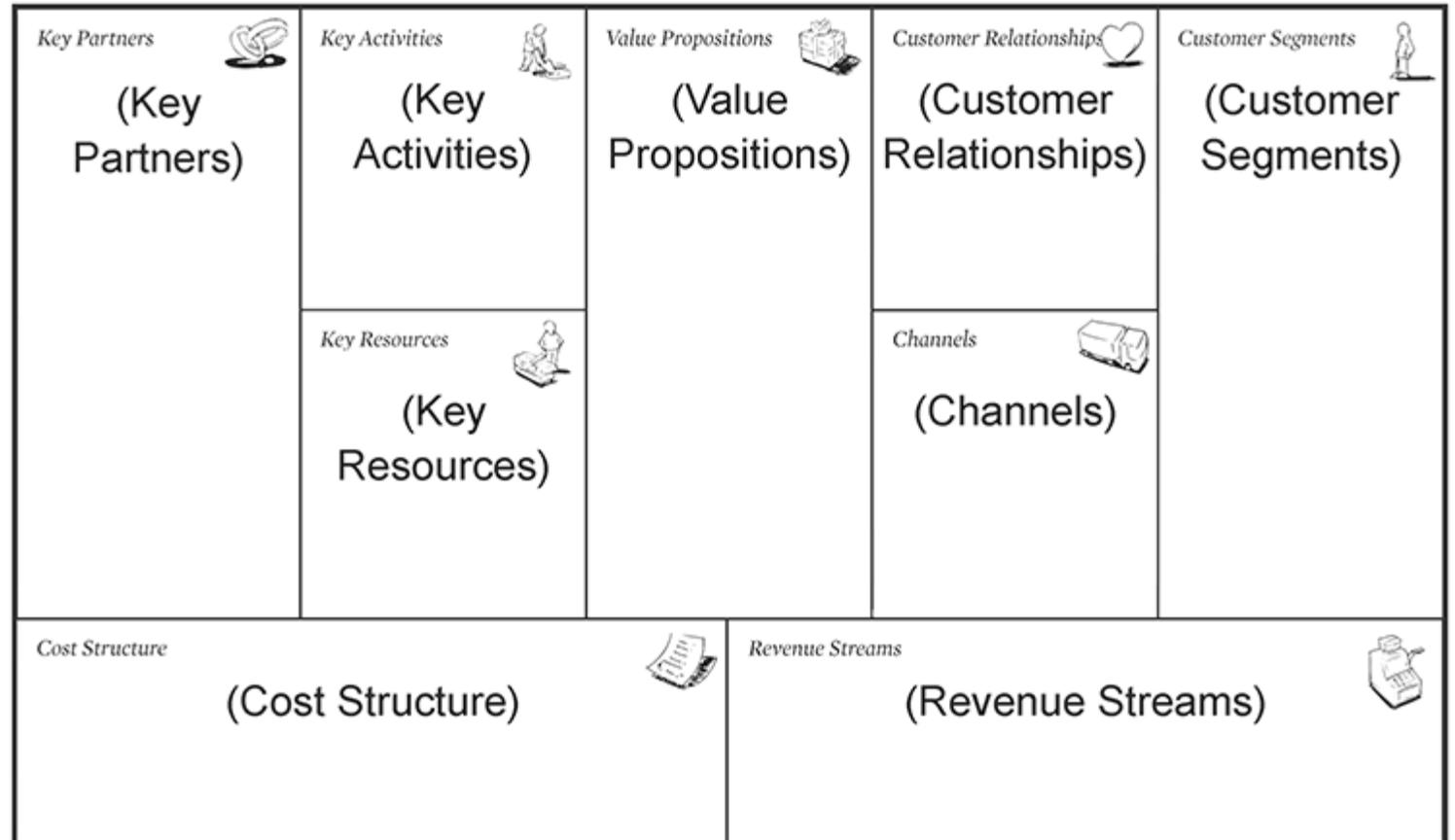
**... the lack of (financial) resources to ensure the uptake of these new mobility solutions is one of the huge challenges in all Municipalities**

**NEED OF MECHANISMS TO UNLOCK FUNDING**

# Financing sustainable mobility

## A new approach: Business Model Canvas

- The Business Model Canvas is a visual representation of current or new business models
- The Canvas provides a holistic view of the business as a whole.
- Consists of 9 interrelated building blocks defining a product's potential value.
- It helps to understand how the various components of a business affect each other.



# Financing sustainable mobility

## A new approach: Business Model Canvas

### 1. Customer Segments

The complete target market for the product, made up from different segments.

### 2. Value Propositions

Overall view of a product /service's value.  
What problem are you solving / gap filling?  
What's compelling about the proposition? Why do customers buy, use?

### 3. Channels

How are these propositions promoted, sold and delivered to the customer segments?

### 4. Customer Relationships

How will you interact with the customer during service delivery?

### 5. Revenue Streams

How does the business earn revenue from the value propositions?

### 6. Key Activities

What uniquely strategic things does the business do to deliver its proposition?

### 7. Key Resources

What unique strategic assets must the business have to compete?

### 8. Key Partnerships

What can the company not do so it can focus on its Key Activities?

### 9. Cost Structure

What are the business' major cost drivers? How are they linked to revenue?

# Financing sustainable mobility

## A new approach: Business Model Canvas



**Uber**  
Business Model  
Canvas

# Financing sustainable mobility

## A new approach: Business Model Canvas

<b>Key Partners</b> -IT providers -PT operators -Tourist agencies -Hotels	<b>Key Activities</b> - Engagement with PT operators - Open Data management - Marketing - Maintenance and upgrading of app	<b>Value Propositions</b>  <u>For local authorities:</u> -Reduce road congestion -Comfort for tourists -Attractive DESTINATION  <u>For users</u> - Convenience, real time - Door to door	<b>Customer Relationships</b> - Customer service via phone / online chat	<b>Customer Segments</b> -Current car users -PT users -Citizens -Tourists -Commuters -Leisure travellers
	<b>Key Resources</b> -IT Developers		<b>Channels</b> Mobile phone app Website Via tourist information	
<b>Cost Structure</b> -R&D work on app will incur main cost -Mitigate by using open data and making partnerships with key stakeholders			<b>Revenue Streams</b> -Freemium model (free to use basic journey planning, cost for real time data??) -Advertising on the app / website -PT providers sponsorship (thanks to increase passengers from app) -Participating tourist attractions / hotels	

**Limassol (CY)**

Business Model  
Canvas  
Mobility app

# Financing sustainable mobility

## A new approach: Business Model Canvas

### Mobility services

Car-sharing  
Bike-sharing  
Ride-sharing  
Multimodal-transport  
Parking  
Capacity As a Service  
Logistics platforms  
Last mile deliveries  
Robo-Taxi / Shuttle  
Platooning

### Usage-Based Payment:

Payment for rides from mobility services or for temporary usage of vehicles as well as digital mobility platforms.

Includes the offering of mobility services such as car-sharing and ridesharing as well as services through a digital platform or app.

Many active companies are start-ups.

Revenues are generated from customers paying for rides or vehicles by time and/or distance as well as through commission fees

**Horizontally enhancing and enabling products, components, software, vehicles and services across all business models**

### Monetisation of User Data:

Collect and sell user or product data and add value added analysis or related service.

Data is in every part of the vehicle and also a key enabler for mobility services.

This business model is about collecting data from different sources inside and outside the vehicle, the driver, the infrastructure and the environment.

Big data allows for detailed analytics and tailored services that can then be sold to other

# Financing sustainable mobility

## A new approach: Business Model Canvas

**Check each response in the Canvas against the following criteria:**

- Does it work? Do the revenues outweigh the cost? Try estimating revenues and cost for the first month of sales
- What are the risks to your business model? What parts of your business model are most critical for your business to grow in a profitable manner?
- Are there things that can or should be changed to strengthen the business model or reduce its risk?
- How do you know what you wrote in each building block is true? Have you made an assumption or do you have solid evidence—in the form of documented facts?



## Innovative funding

### SÍTYCLETA, the new bike-sharing scheme in Las Palmas de Gran Canaria (ES)

#### System details:

- ✓ 42 new stations / 520 bike racks.
- ✓ 375 smart bikes with an on-board computer & 20 e-bikes.

#### Funding scheme:

- ✓ Design: fully funded by CIVITAS DESTINATIONS (Horizon 2020): users' needs analysis, feasibility study, etc.
- ✓ Implementation: partially funded by CIVITAS DESTINATIONS (80% equipment)
- ✓ Operational: fees and memberships cover 20% of the costs.

**Revenue stream:** sponsorships allow private companies to fund stations located in proximity to their business or designated high visibility market locations.



# Innovative funding

## BIKEAZY, the new bike-sharing scheme in Rethymno (GR)

### System details:

- ✓ Dockless bike sharing scheme.
- ✓ 300 e-bikes.

### Funding scheme:

- ✓ Design: fully funded by CIVITAS DESTINATIONS (Horizon 2020): users' needs analysis, feasibility study, etc.
- ✓ Implementation:   **European Union**  
European Regional Development Fund
- ✓ Operational: Public-Private-Partnership (PPP).

**Innovative funding**: operational costs (and profit) are under responsibility of a private company (bikeazy.gr).



# Innovative funding

## METROGUAGUA: The new BRT in Las Palmas de Gran Canaria (ES)

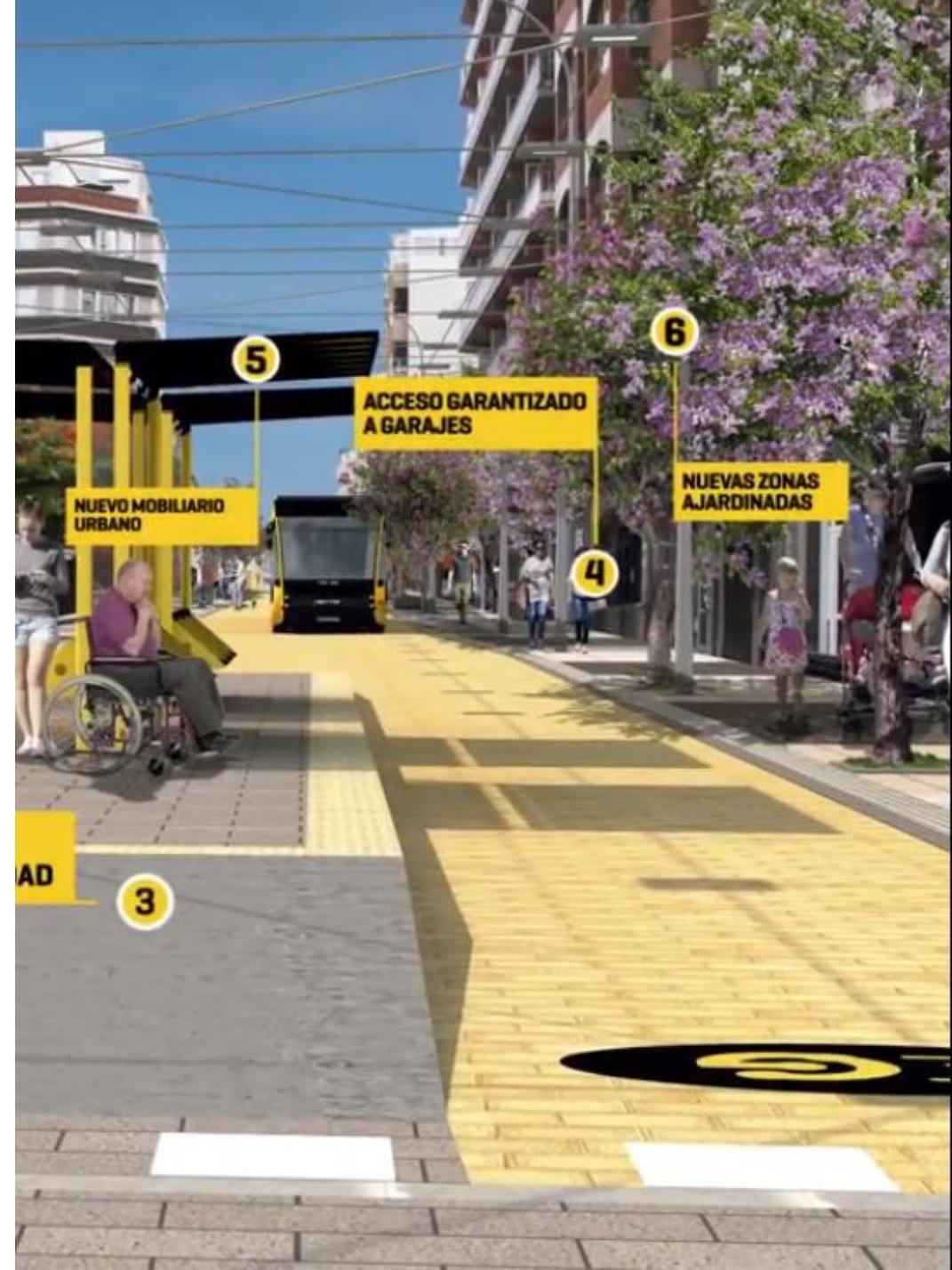
### System details:

- ✓ A segregated 11.7 km double lane for buses.
- ✓ A key driver for traffic-calming.
- ✓ 20 hybrid-electrical buses carrying 4.500 passengers in a peak hour

### Funding scheme:

- ✓ Design & Implementation: 50% funded by the EIB (European Investment Bank). The EIB loan has facilitated the long-term financing on good conditions, both in terms of repayment periods - up to 20 years - and interest rates.
- ✓ Operational: scheduled by 2021.

**Innovative funding:** With a EUR 50 million loan, the European Investment Bank (EIB) backed half the total cost of the new BRT system.



# Conclusions

- Innovative transport technologies and services are disrupting the traditional automotive and road transport sector.
- New stakeholders are emerging from the start-up and IT & software sectors.
- Particularly for mobility services and alternative fuel vehicles, many non-European start-ups are driving this change.

## Recommendations:

- ✓ There is the need of innovative approaches to unlock funding for new mobility solutions.
- ✓ It is necessary to mitigate regulatory and policy challenges.
- ✓ To adapt grants programs towards high-growth service-focused companies.
- ✓ Public and Private Sectors should strengthen their cooperation (PPPs, etc.).

# Thank you!

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