

An aerial photograph of a multi-lane highway interchange. The roads are dark grey asphalt, and there are several cars visible on the different lanes. The interchange is surrounded by a dense forest of green trees. The perspective is from above, looking down at the roads.

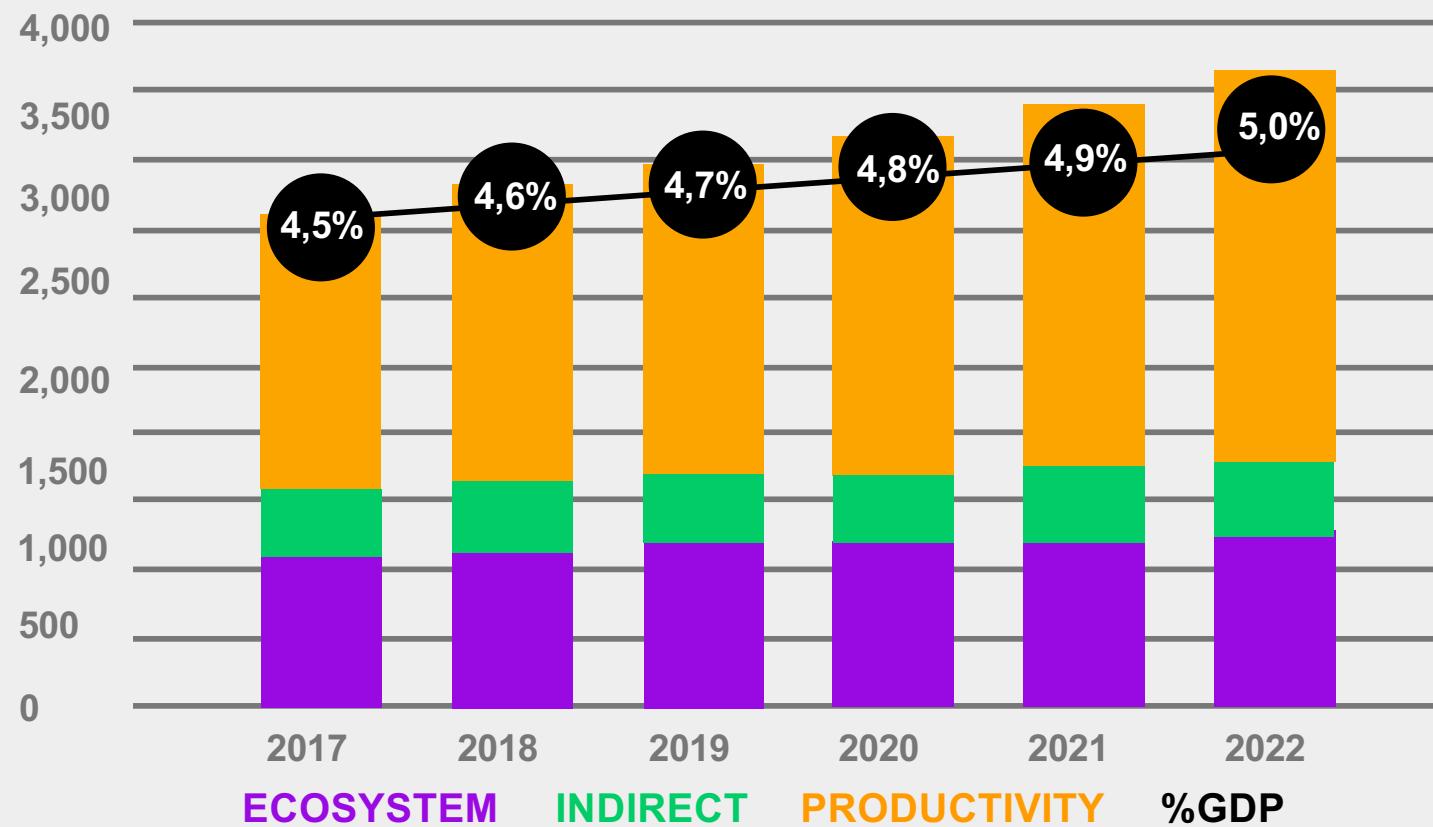
5G REVOLUTIONIZES THE VALUE OF DATA IN CITY

ONE

Janne Koistinen, Director of 5G Program, Telia



MOBILE CONTRIBUTION TO PRODUCTIVITY: +40% INDUSTRIES AND CITIES SHARE THE GOAL



\$ billion, % of GDP. Totals may not add up due to rounding.

Source: GSMA Intelligence analysis



NEW MOBILE FRAMEWORK

From mobile Internet into
new era of
data powered society

DATA
DIGITAL
PHYSICAL

VALUE
INSIGHT

From downlink peak hour best effort "Despacito" to
diversified 24/7 professional grade with
guaranteed quality service

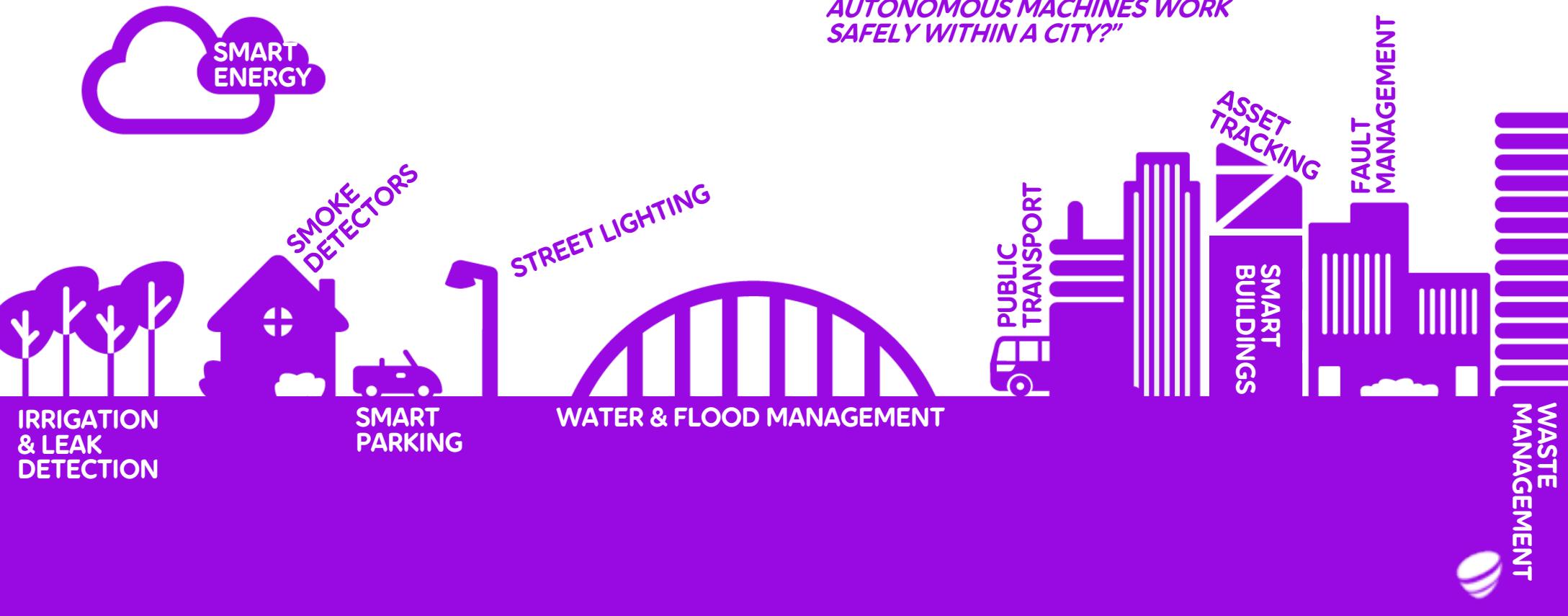


NEW MOBILE FRAMEWORK

SMART CITIES ARE BUILT ON...

*"HOW CAN WE MAKE THE CITY
OPERATE SMARTER AND MORE
EFFICIENTLY?"*

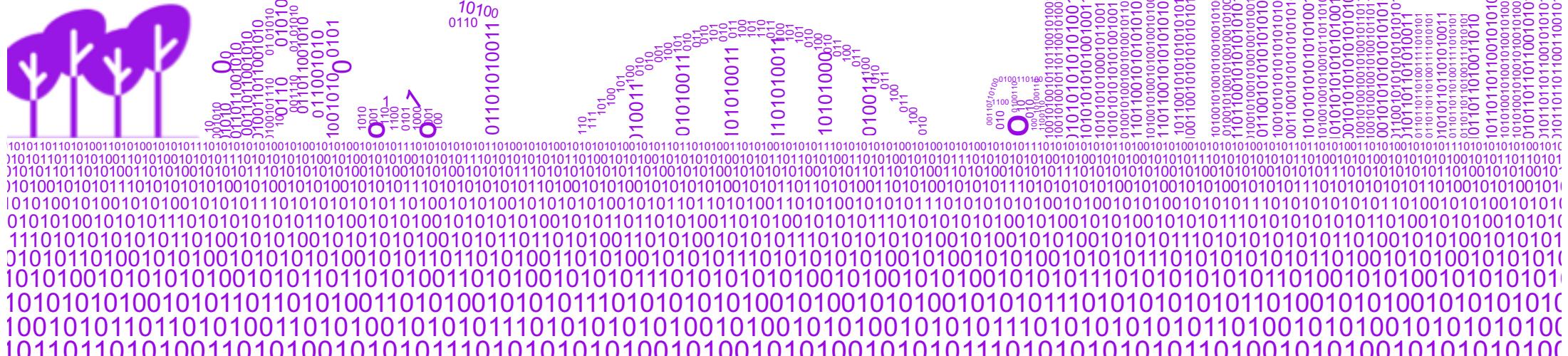
*"HOW CAN WE MAKE
AUTONOMOUS MACHINES WORK
SAFELY WITHIN A CITY?"*



NEW MOBILE FRAMEWORK

...REAL-TIME DIGITAL MODEL OF ITS OPERATIONS: “DIGITAL TWIN”

UNLIMITED NUMBER OF DATA SOURCES – HOW TO ENABLE?



NEW MOBILE FRAMEWORK





RANGE OF APPLICATIONS TO MAKE A CITY A BETTER PLACE TO LIVE

TRANSPORTATION



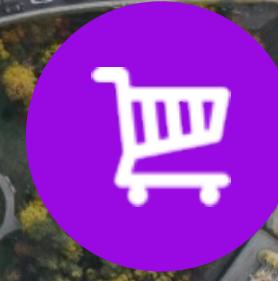
URBAN PLANNING



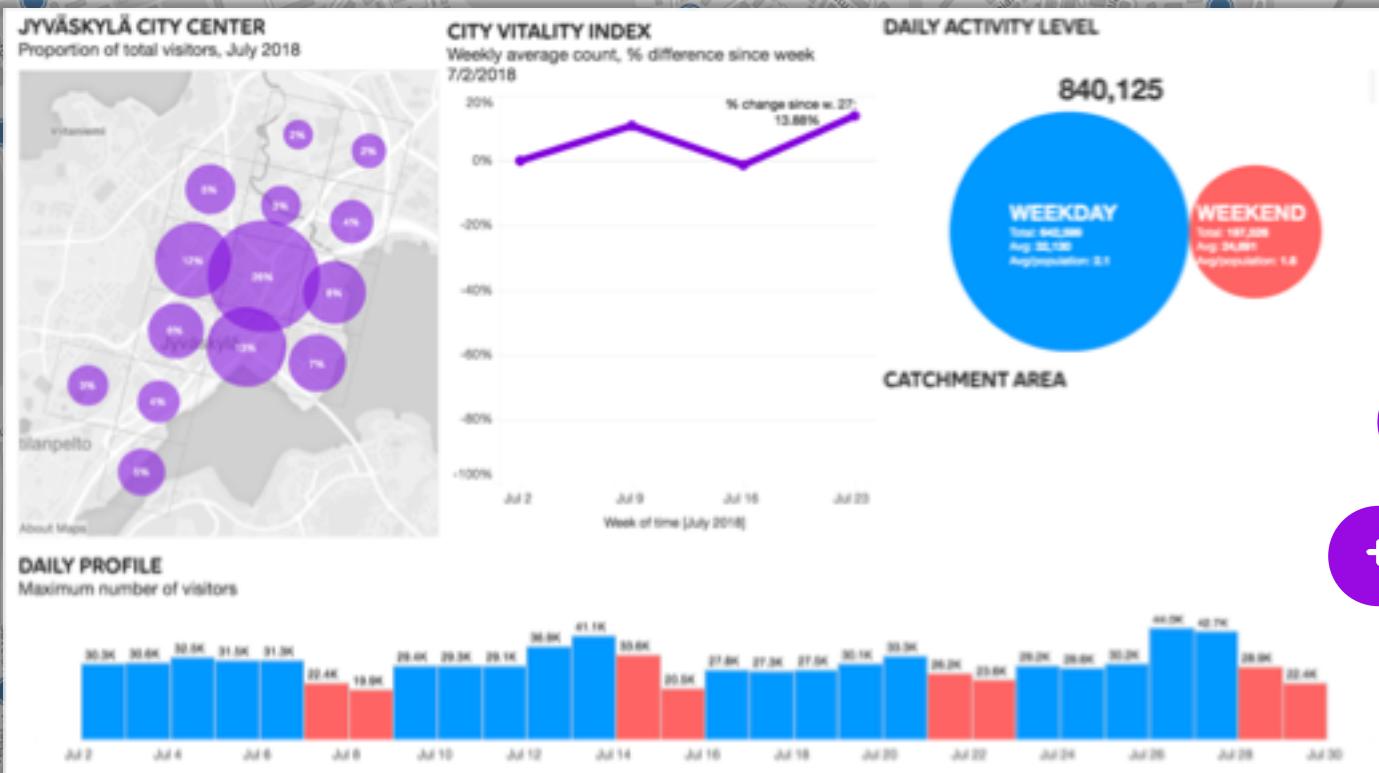
TOURISM & EVENTS



RETAIL



JYVÄSKYLÄ: CITY VITALITY INDEX FOR STRATEGIC METERING OF CITY CENTER DEVELOPMENT



+ VISITOR COUNTS

+ MONTHLY TRENDS

+ IMPACT OF EVENTS

+ CATCHMENT AREA



THE URBAN CHALLENGE

Ever-increasing population,
traffic & pollution

CONNECTED PUBLIC TRANSPORT

For **commuters**, to make public transport a better option:

Predictability,
safety, and
convenience.

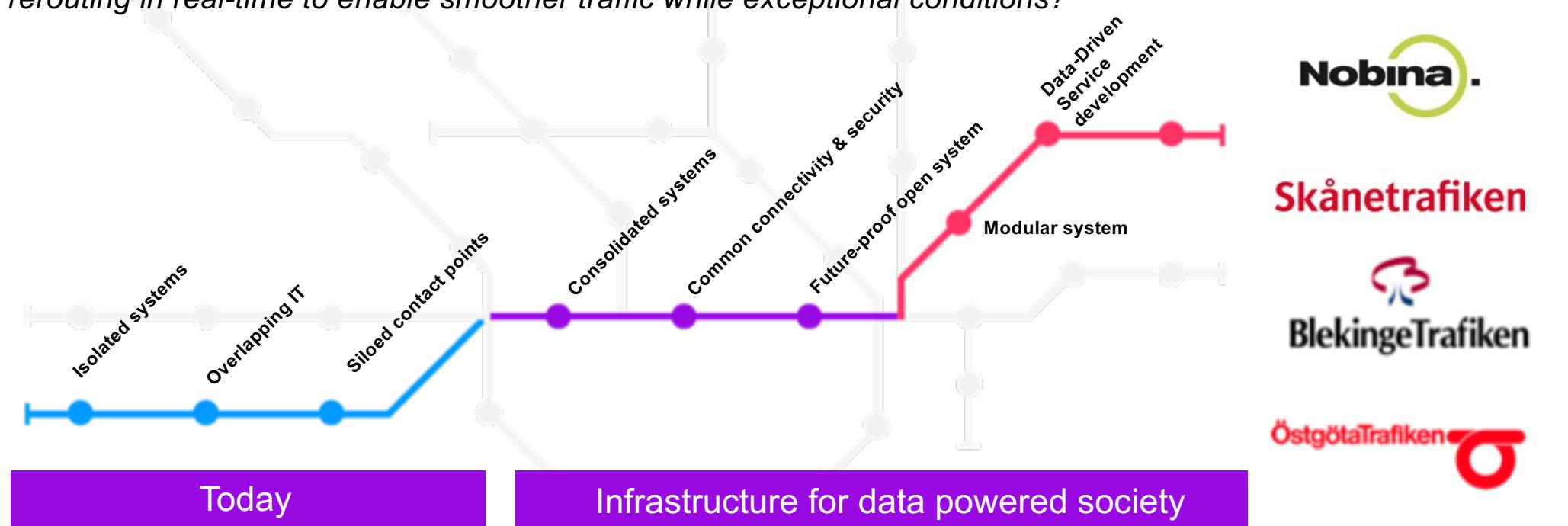
For **public transport providers**
cleaner,
safer, and
more cost effective.



THE FUTURE OF PUBLIC TRANSPORT

From reactive to predictive transportation service:

"How can we combine real-time traffic status, traffic lights, transport capacity, and rerouting in real-time to enable smoother traffic while exceptional conditions?"



**PROVIDING A ONE STOP SHOP FOR PUBLIC TRANSPORT WITH OPEN PLATFORM AND
BEST IN CLASS CONNECTED SERVICES. FOR A SMARTER CITY.**



Skånetrafiken



BlekingeTrafiken



NEW MOBILE FRAMEWORK

VALUE OF CITY DATA REVOLUTIONIZED BY:

Professional grade mobile networks,
unlimited number of data sources,
secure, scalable, real-time ICT, and
analytics to create insight on open data.

DATA
DIGITAL
CITY

