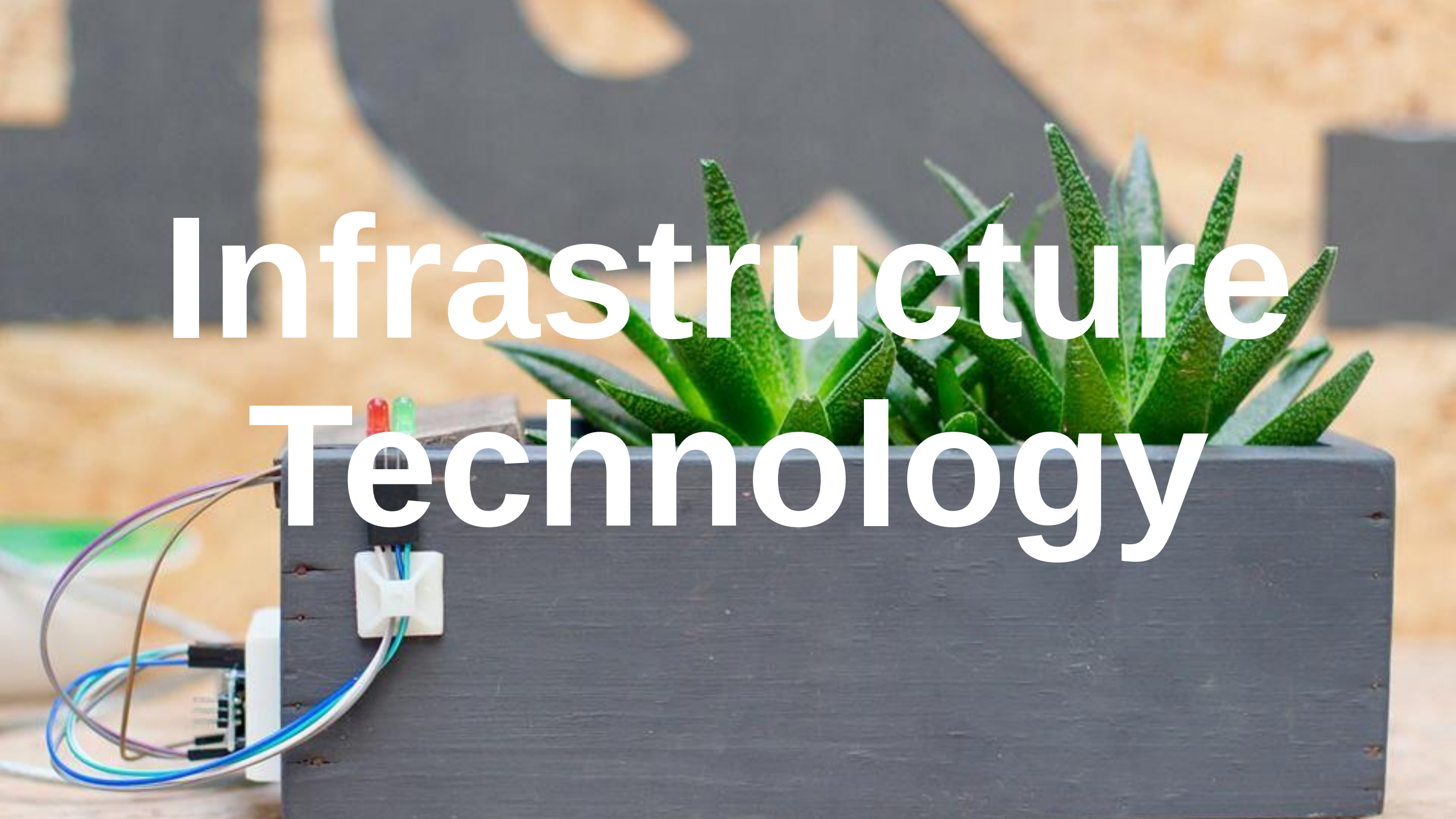
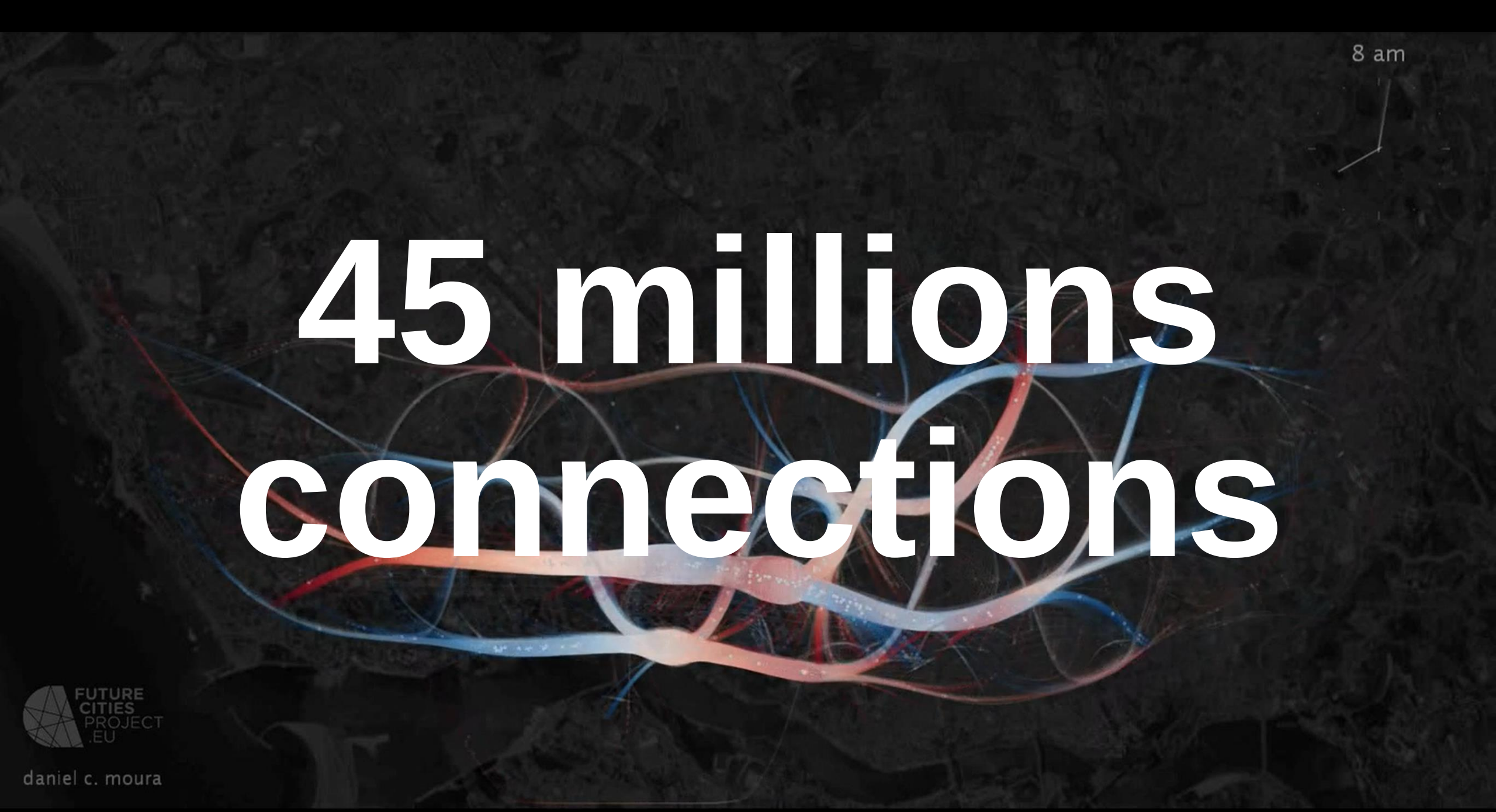
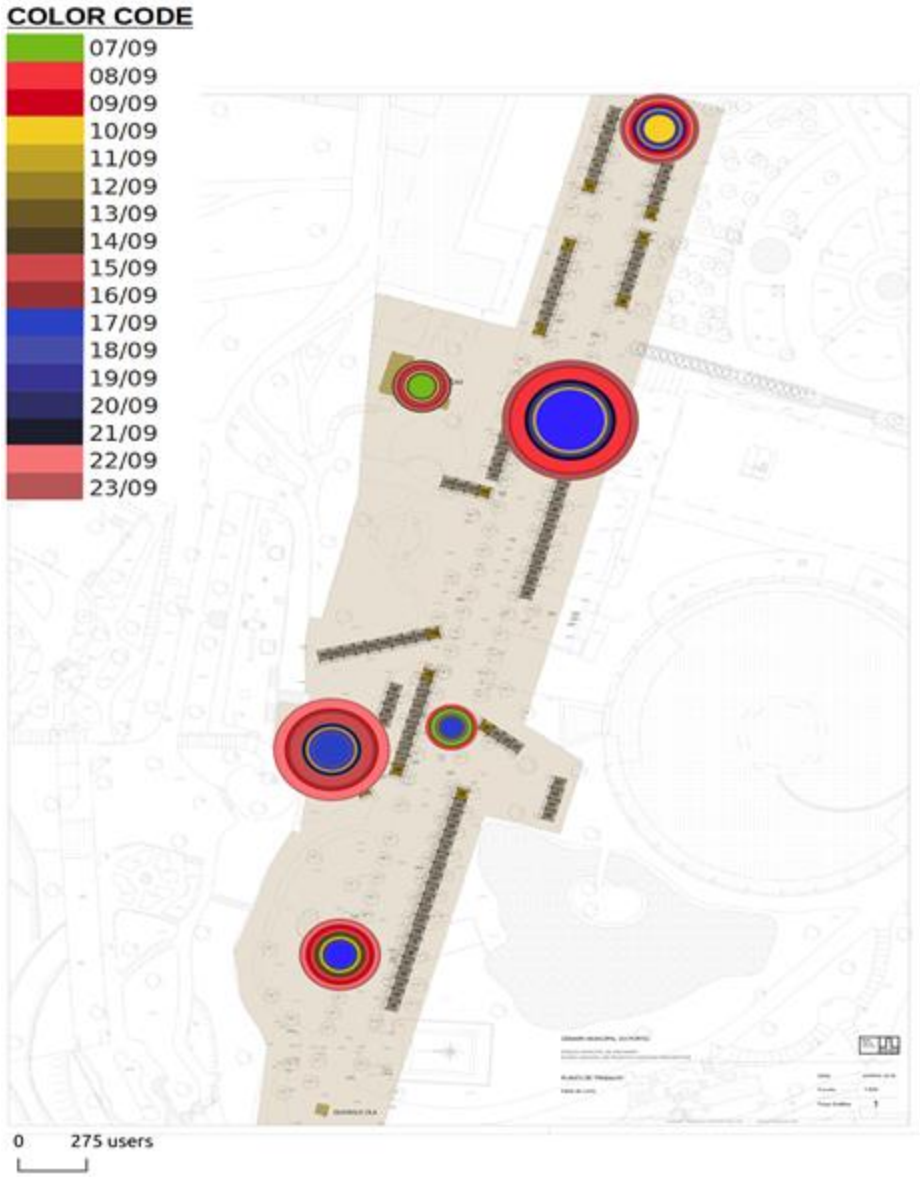
Smart and
Connected
Cities
Porto.

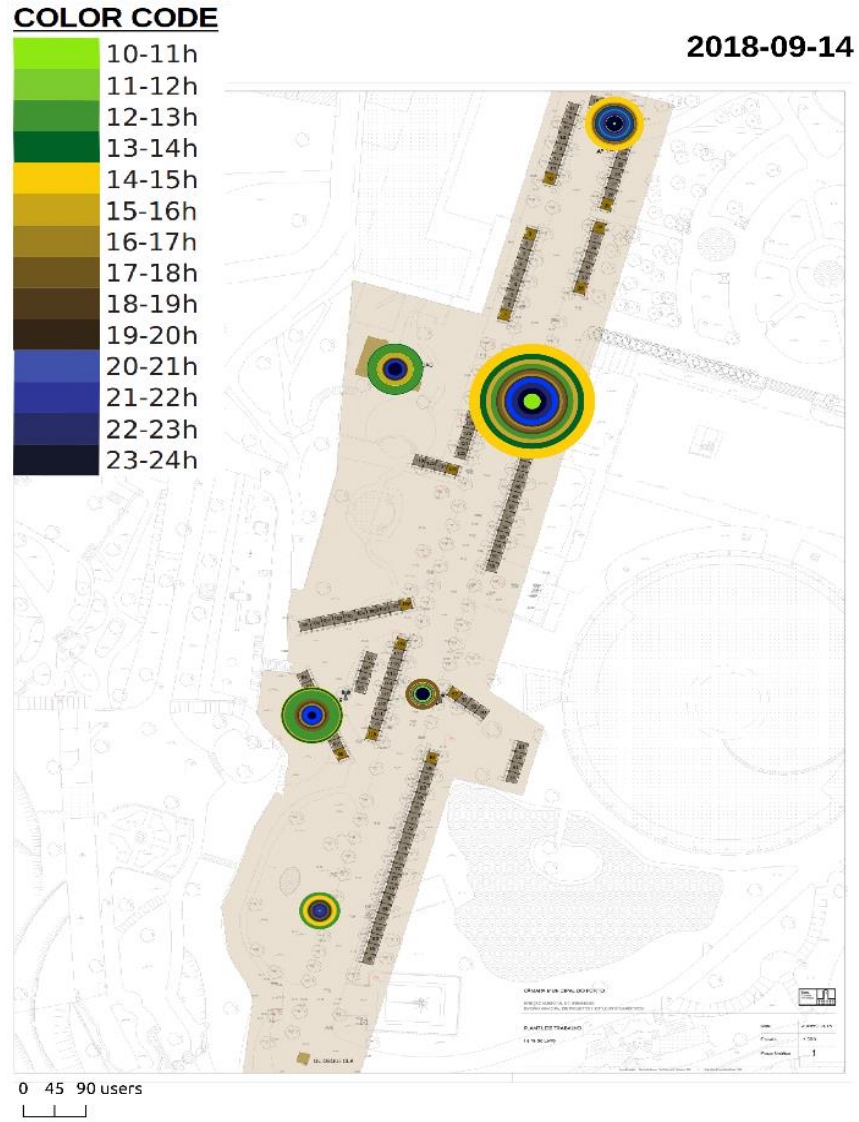

Infrastructure
Technology

4000 km

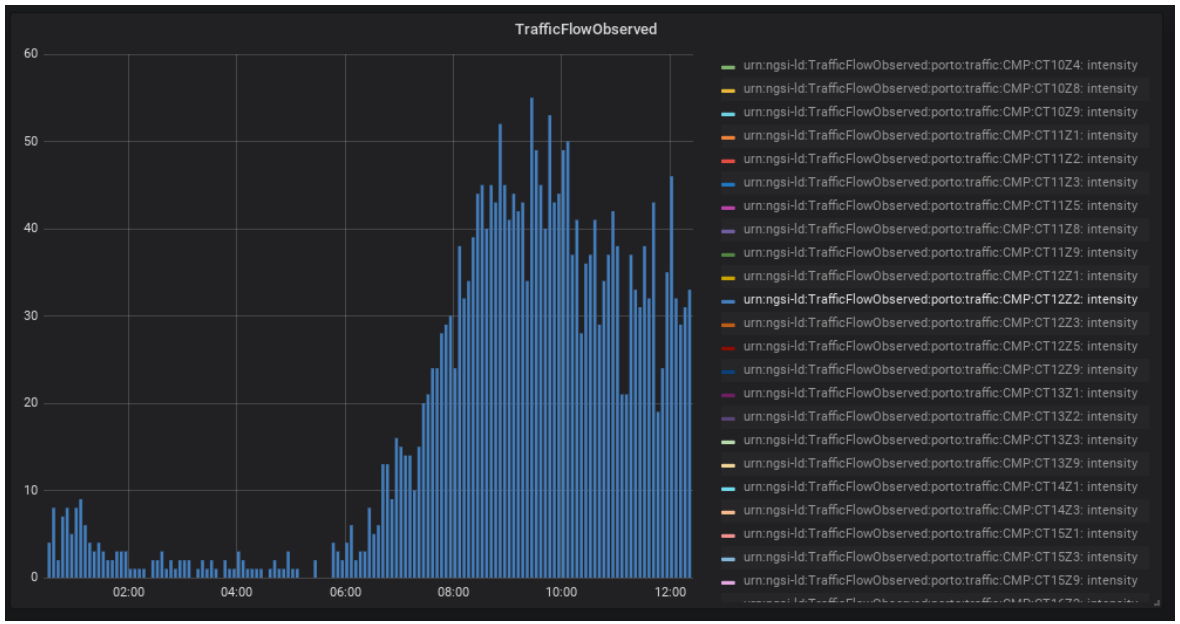
2,5 millions
devices

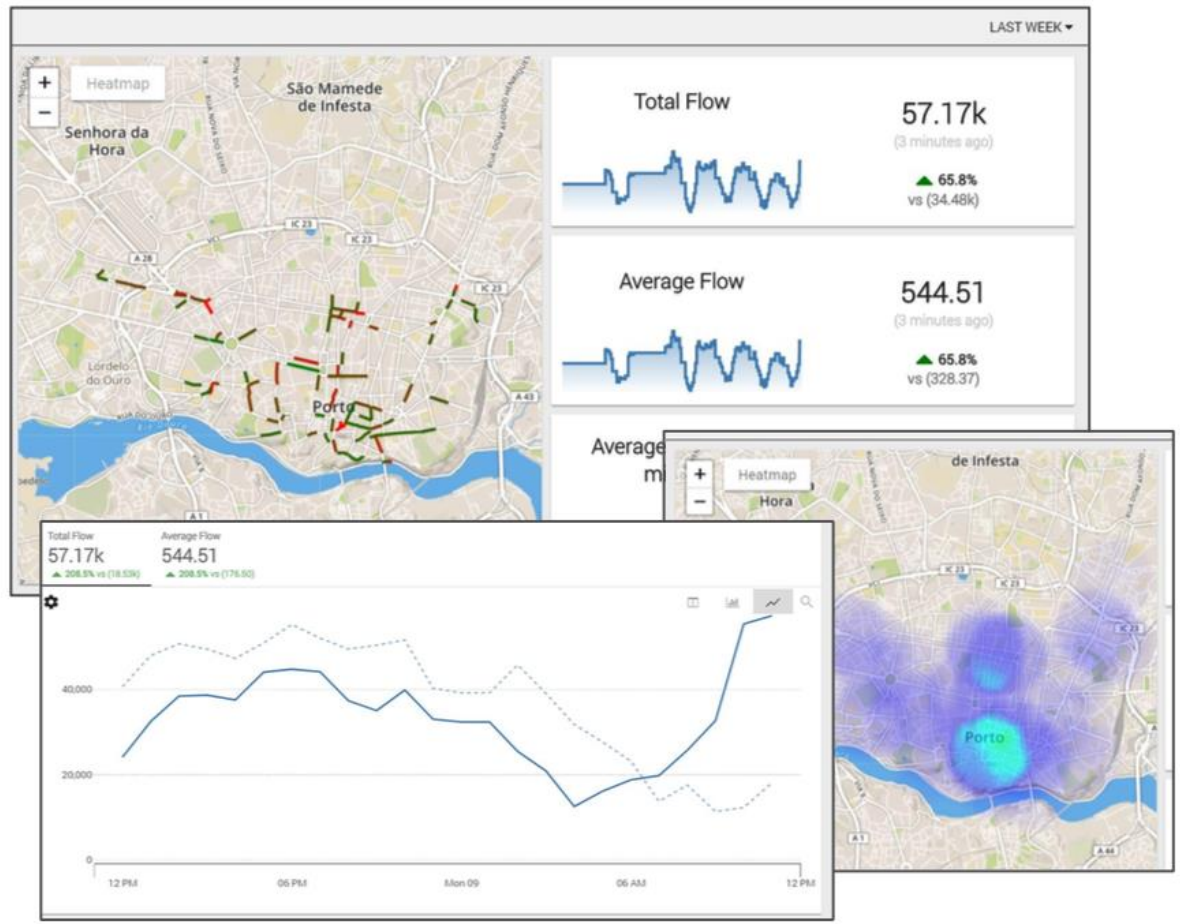

8 am
45 millions
connections
FUTURE
CITIES
PROJECT
.EU
daniel c. moura


COLOR CODE
07/09
08/09
09/09
10/09
11/09
12/09
13/09
14/09
15/09
16/09
17/09
18/09
19/09
20/09
21/09
22/09
23/09
0 275 users

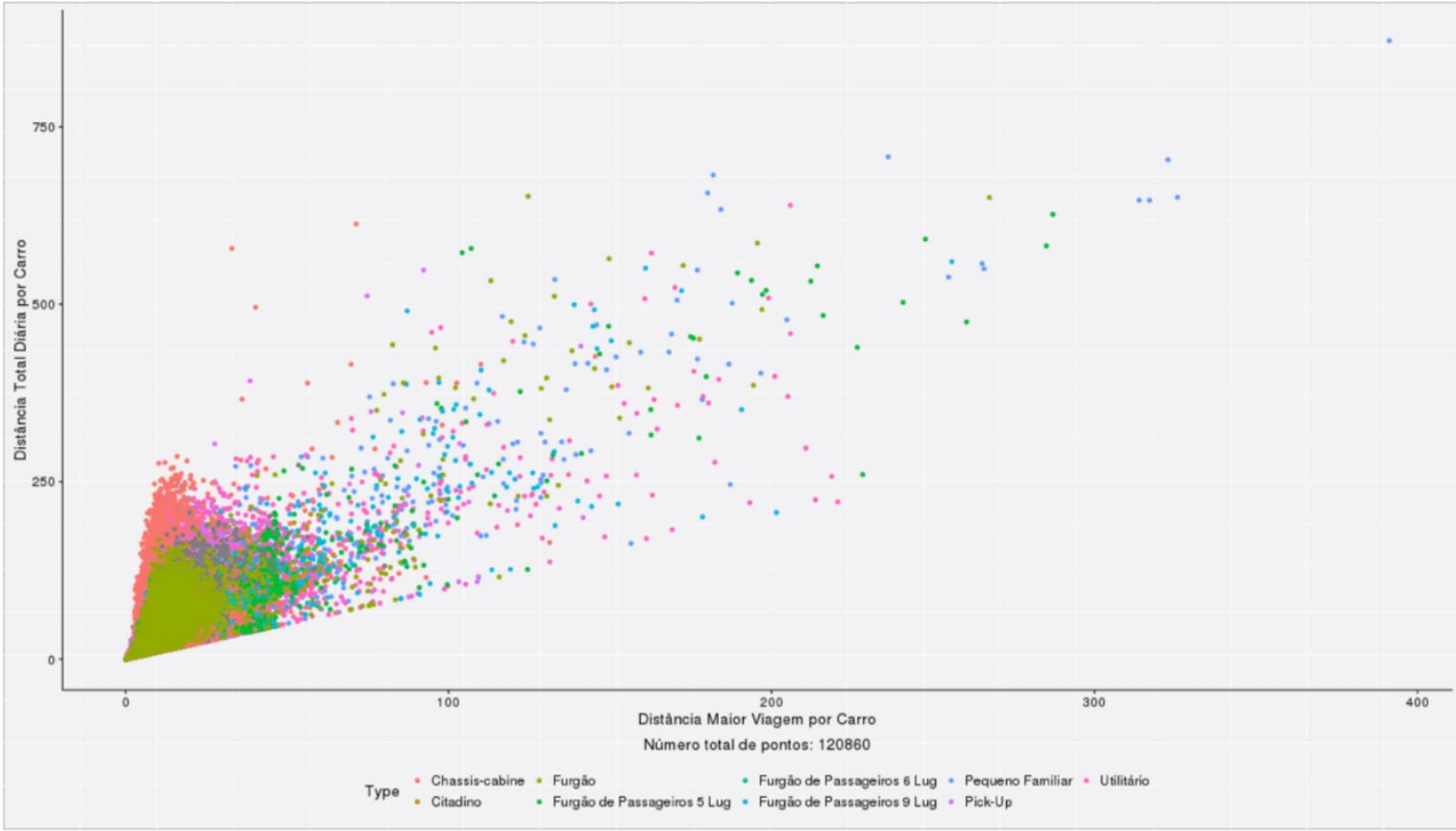

COLOR CODE
10-11h
11-12h
12-13h
13-14h
14-15h
15-16h
16-17h
17-18h
18-19h
19-20h
20-21h
21-22h
22-23h
23-24h
0 45 90 users

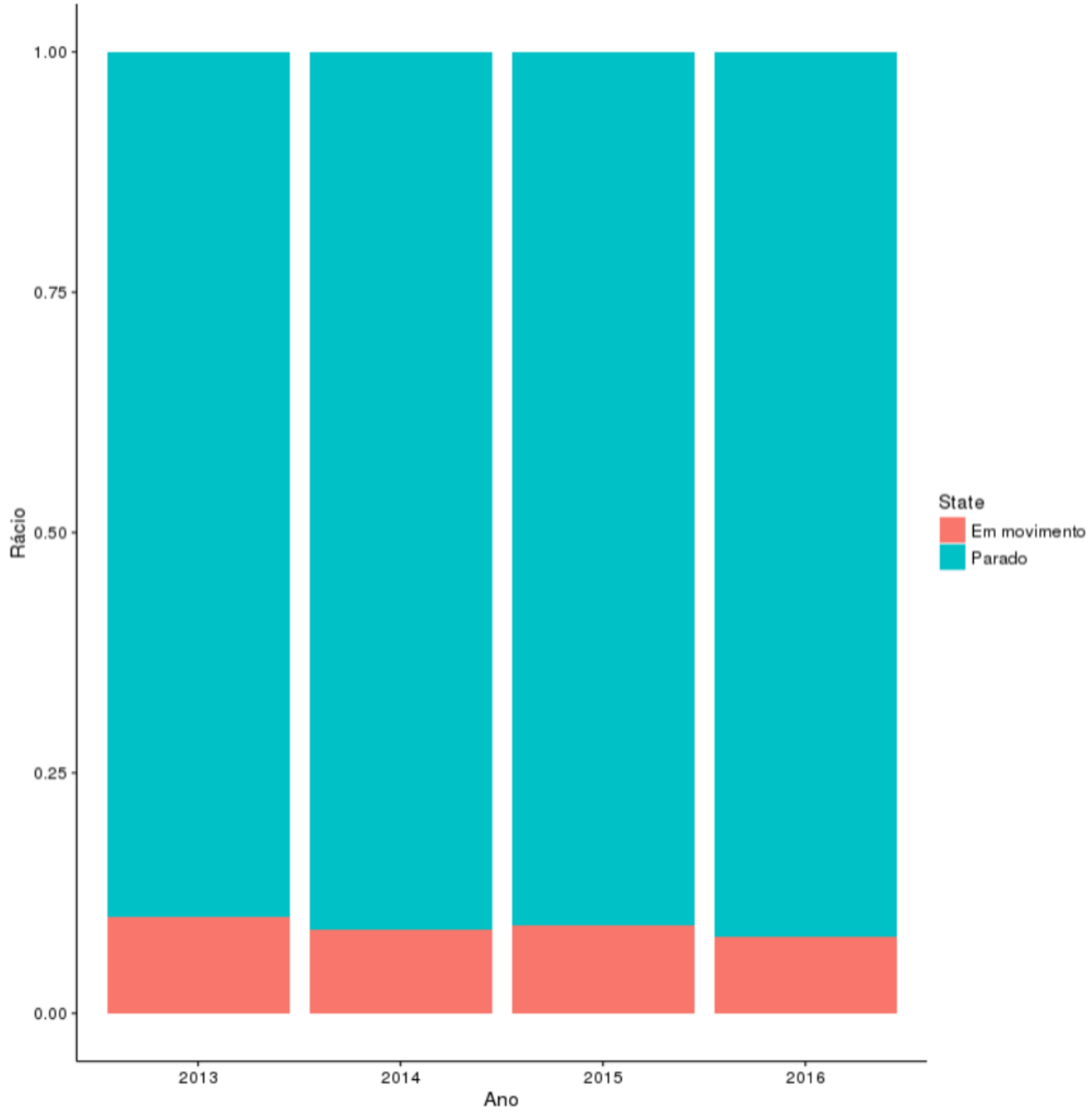
2018-09-14


TrafficFlowObserved
60
50
40
30
20
10
0
02:00
04:00
06:00
08:00
10:00
12:00
urn:ngsi-ld:TrafficFlowObserved:porto:traffic:CMP:CT10Z4: intensity
urn:ngsi-ld:TrafficFlowObserved:porto:traffic:CMP:CT10Z8: intensity
urn:ngsi-ld:TrafficFlowObserved:porto:traffic:CMP:CT10Z9: intensity
urn:ngsi-ld:TrafficFlowObserved:porto:traffic:CMP:CT11Z1: intensity
urn:ngsi-ld:TrafficFlowObserved:porto:traffic:CMP:CT11Z2: intensity
urn:ngsi-ld:TrafficFlowObserved:porto:traffic:CMP:CT11Z3: intensity
urn:ngsi-ld:TrafficFlowObserved:porto:traffic:CMP:CT11Z5: intensity
urn:ngsi-ld:TrafficFlowObserved:porto:traffic:CMP:CT11Z8: intensity
urn:ngsi-ld:TrafficFlowObserved:porto:traffic:CMP:CT11Z9: intensity
urn:ngsi-ld:TrafficFlowObserved:porto:traffic:CMP:CT12Z1: intensity
urn:ngsi-ld:TrafficFlowObserved:porto:traffic:CMP:CT12Z2: intensity
urn:ngsi-ld:TrafficFlowObserved:porto:traffic:CMP:CT12Z3: intensity
urn:ngsi-ld:TrafficFlowObserved:porto:traffic:CMP:CT12Z5: intensity
urn:ngsi-ld:TrafficFlowObserved:porto:traffic:CMP:CT12Z9: intensity
urn:ngsi-ld:TrafficFlowObserved:porto:traffic:CMP:CT13Z1: intensity
urn:ngsi-ld:TrafficFlowObserved:porto:traffic:CMP:CT13Z2: intensity
urn:ngsi-ld:TrafficFlowObserved:porto:traffic:CMP:CT13Z3: intensity
urn:ngsi-ld:TrafficFlowObserved:porto:traffic:CMP:CT13Z9: intensity
urn:ngsi-ld:TrafficFlowObserved:porto:traffic:CMP:CT14Z1: intensity
urn:ngsi-ld:TrafficFlowObserved:porto:traffic:CMP:CT14Z3: intensity
urn:ngsi-ld:TrafficFlowObserved:porto:traffic:CMP:CT15Z1: intensity
urn:ngsi-ld:TrafficFlowObserved:porto:traffic:CMP:CT15Z3: intensity
urn:ngsi-ld:TrafficFlowObserved:porto:traffic:CMP:CT15Z9: intensity

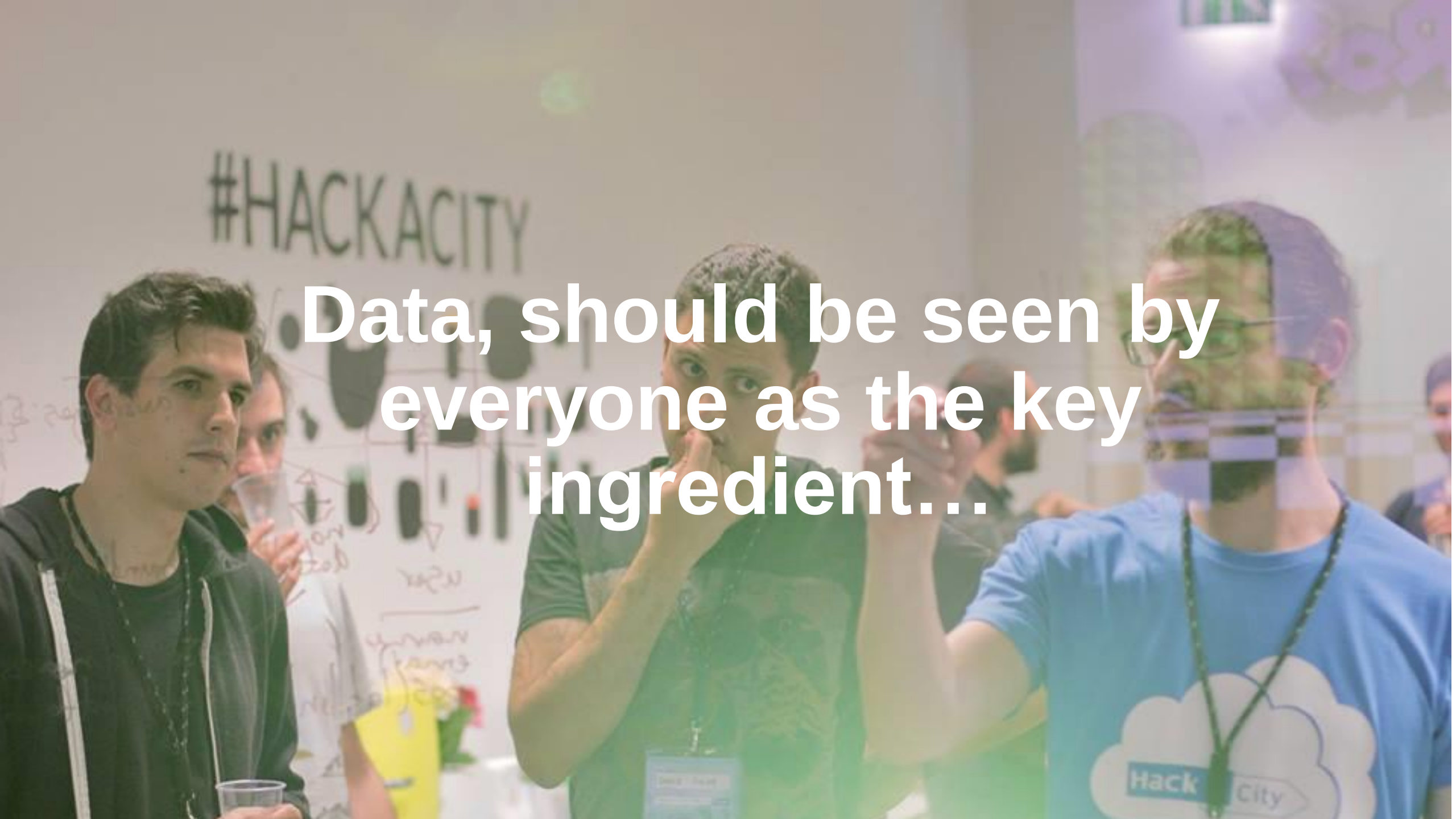

LAST WEEK
Heatmap
São Mamede de Infesta
Senhora da Hora
Lordelo do Ouro
Porto
Total Flow
57.17k
(3 minutes ago)
65.8%
vs (34.48k)
Average Flow
544.51
(3 minutes ago)
65.8%
vs (328.37)
Total Flow
57.17k
Average Flow
544.51
40,000
20,000
0
12 PM
06 PM
Mon 09
06 AM
12 PM
Heatmap
Hora
de Infesta
Porto

Data, the basic ingredient for smart decision making.
738
Porto.
67·TN·81
67·TN·82
67·TN·85


Distância Total Diária por Carro
750
500
250
0
0
100
200
300
400
Distância Maior Viagem por Carro
Número total de pontos: 120860
Type
Chassis-cabine
Citadino
Furgão
Furgão de Passageiros 5 Lug
Furgão de Passageiros 6 Lug
Furgão de Passageiros 9 Lug
Pequeno Familiar
Pick-Up
Utilitário

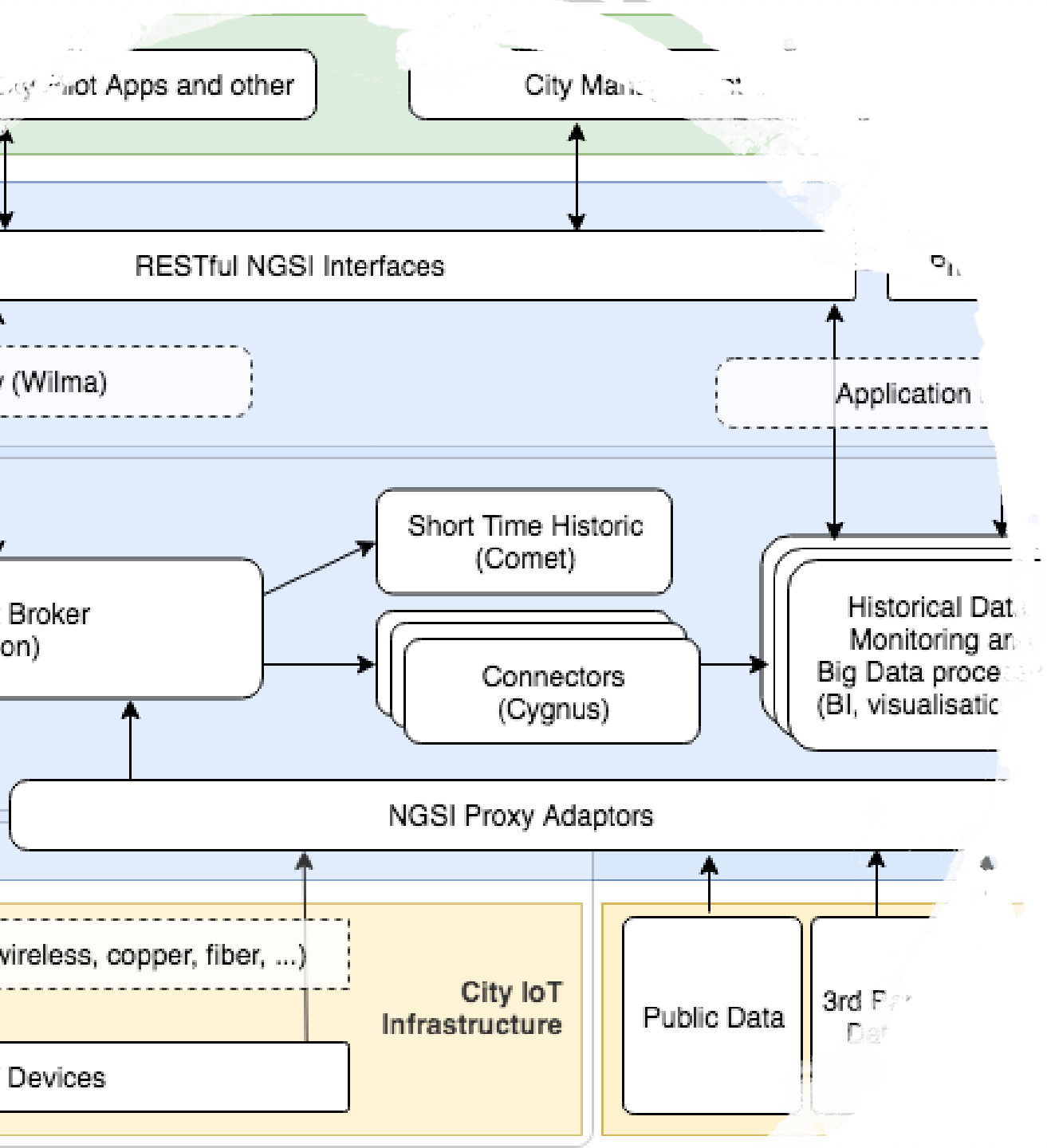

1.00
0.75
0.50
0.25
0.00
Rácio
2013
2014
2015
2016
Ano
State
Em movimento
Parado

2,3 thousands tons of CO2



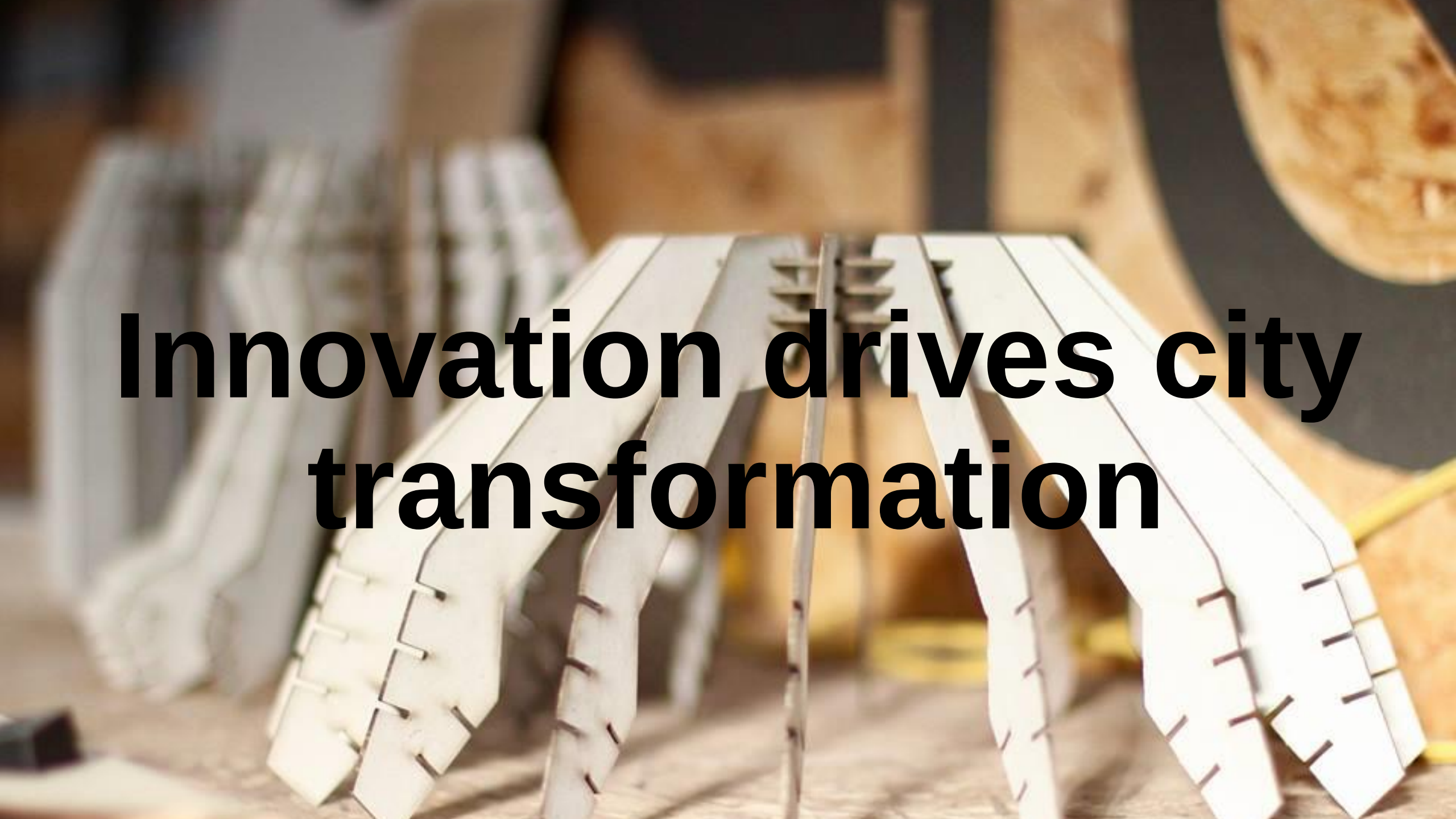
Data, should be seen by everyone as the key ingredient…

Integrated view
Integrated management



SYNCHRONICITY

OPEN & AGILE SMART CITIES


Innovation drives city transformation

From technology to people

Balcão Virtual

Smarter Cities

Happier People