Smart City in Practice

WWW.SMARTCITYINSIGHTS.DK

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Smart City Insights

Full Business Case for Regional Data Exchange

THALES

Expertise on Danish Smart City Solutions in Australia

Smart City Insights

Future Cities co-working space in Copenhagen

Waste Collection Route optimization

> "The route optimisation exercise was an evidence-based approach that made use of the huge amounts of data we have to support the wealth of personal expertise and insight gained by waste crews on the ground. We were able to deliver savings with minimum impact on our residents and without affecting our overall recycling performance."
>
> Mike Hill, Director of Health and Environmental Services

Savings of £200,000 in 2014-15, with a further £400,000 forecast in 2015-16 as a result of the package of service changes introduced.

180 new optimised waste collection rounds with just nine out of 63,000 households needing a change to collection days.

A **reduction of 30 collection routes** and **three refuse collection vehicles.**

Savings in 56 tonnes of CO_2 in a full year through a **reduction in fuel use**.

SCDC can more effectively and **efficiently plan for future service developments** to deal with the high levels of growth projected in the area.

Identifying routes **using algorithms**, including restrictions such as one-way streets, turn and time or weight restriction
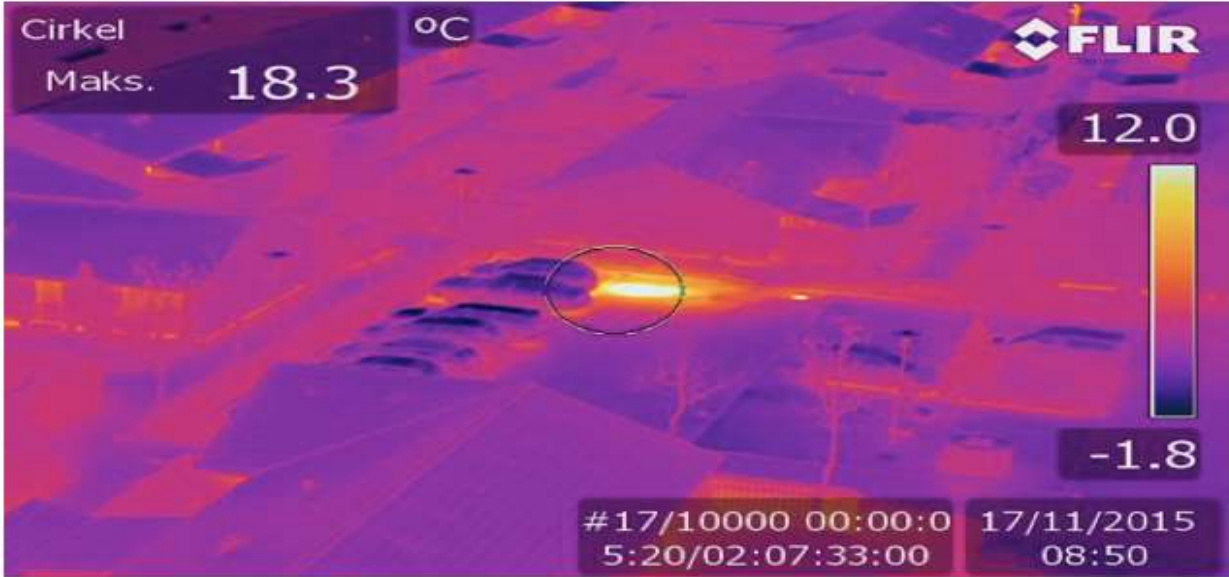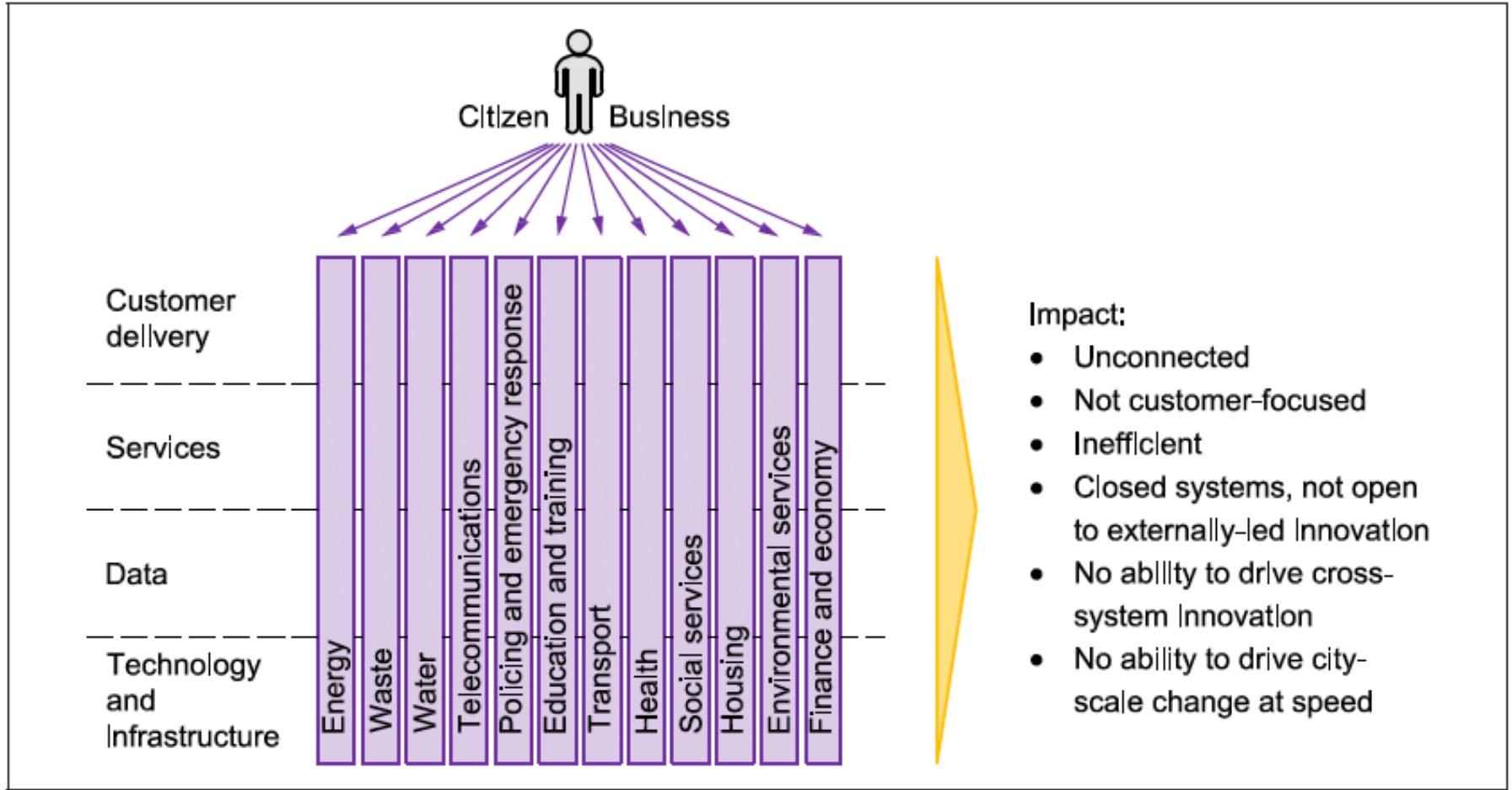
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Water challenges and solutions

Traditional City Operating models

Figure 4 Traditional operating model: where cities have come from
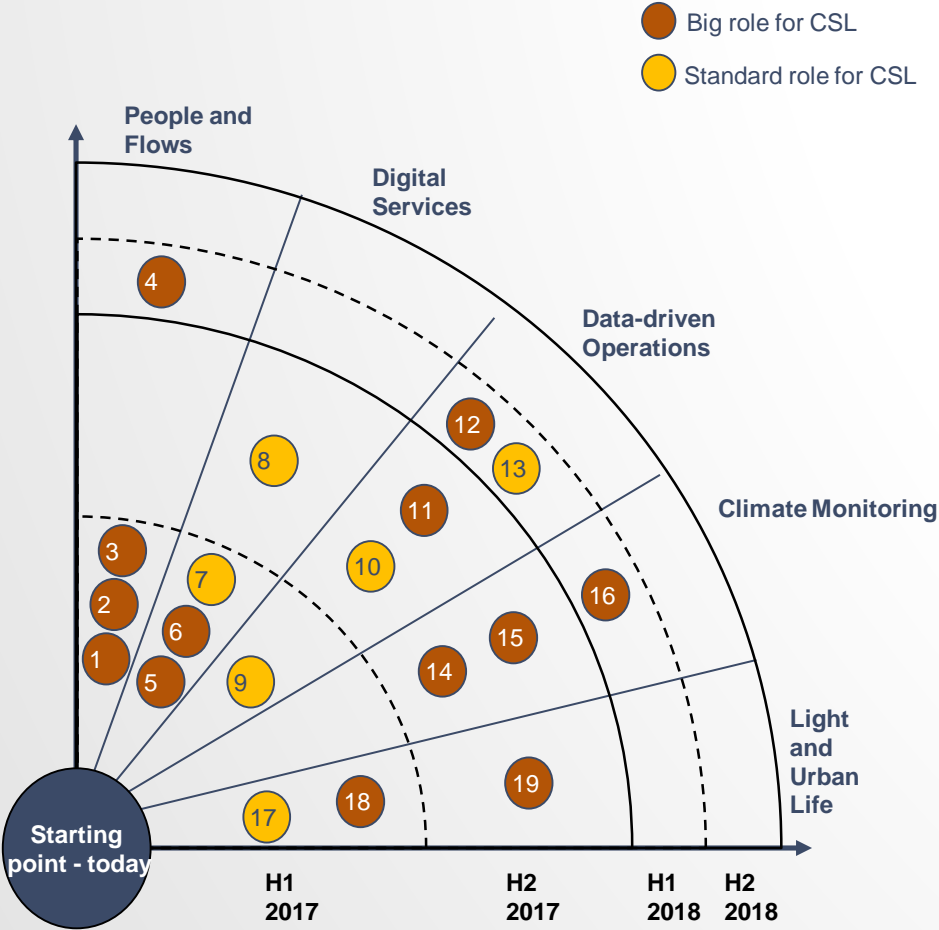
Source: BSI – PAS 182

Similar demand for insights

Projects/Info	People movement (Origin-destination)	Traffic flow/count	Weather	Events	Consumer patterns	Pollution	People profiles
City projects							
Parking	X	X	X	X	X		
Safety	X	X		X			X
Flooding	(X)	X	X	(X)		X	
Mobility	X	X	X	X	X	X	X
Cultural/tourism	X	X	X	X	X	X	X
Private sector							
Retail	X	X	X	X	X		X
Transport	X	X	X	X	X	(x)	X
Urban architects	X	X	X	X	X	X	X
Tourism	X	X	X	X	X	X	X

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Copenhagen: Driven by demand/challenges

Theme Chart

● Big role for CSL

● Standard role for CSL
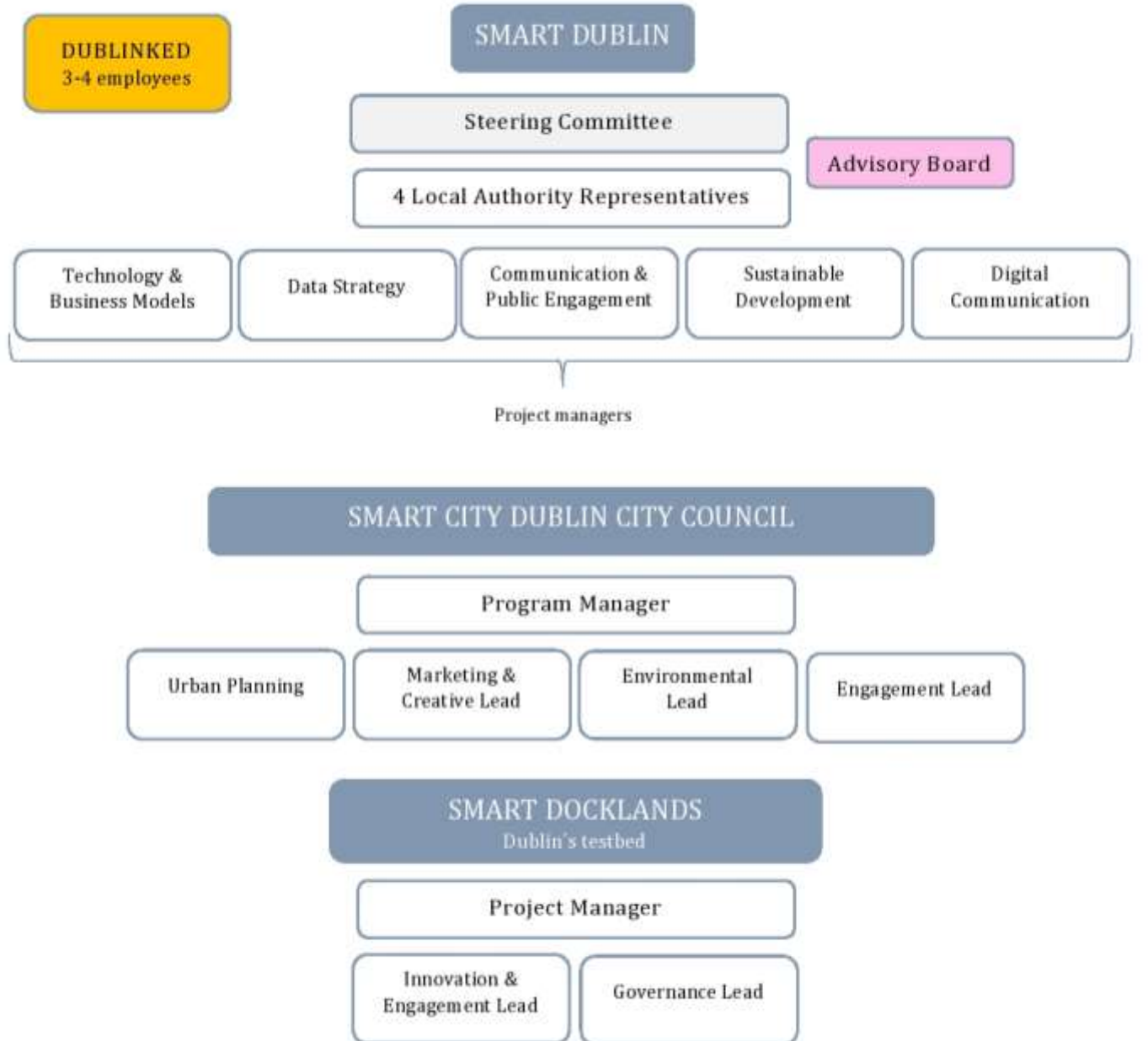
Projects

ID	Project
1	Data on tourists' use of the city
2	Data on bike traffic flow in real-time
3	Data on citizens' use of the city
4	Flexible use of cultural and leisure activities
5	Wi-Fi to citizens and tourists
6	Information displays in urban spaces
7	Information about free parking spots
8	Innovative use of advertising and bus stop ads
9	Waste management in the city
10	Optimisation of bike parking
11	Smarter city handling/supervision
12	Day-to-day operations and monitoring of green areas
13	Household waste management
14	MONICA - Reduce noise levels in the city
15	Air quality monitoring
16	Noise level monitoring
17	Traffic safety through lighting
18	Urban Light Festival
19	Wayfinding through lighting

COPENHAGEN
Solutions Lab

Smart Dublin

Smart City structure

Thank you for listening

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