Smart City
The City of Vancouver Digital Journey

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Technology is transforming cities...

1784  STEAM REVOLUTION

1880  ELECTRICITY REVOLUTION

1917  AUTOMOBILE REVOLUTION

2017  DIGITAL TECHNOLOGIES
... and redefining Vancouver
External pressures, innovation, new data sources, social and environmental needs, operational constraints and changing citizen expectations created a need for cities to become smart and digital.

The challenge once they complete their strategies… is staying smart!
Where does the journey to becoming a smart city begin?

It starts with data and ends with the connections citizens, business, and government make to enhance the urban experience.
In 2011, Vancouver saw NYC rise to face the digital challenge.
In 2012, we assessed our digital maturity. We discovered we had some work to do.

We also discovered that digital strategies of the breadth we felt was needed were few and far between.

1. The analysis was focused on the cities as organizations.
2. Data was not normalized to conduct assessment.
3. Vancouver Public Library or Vancouver Police Department digital readiness was not included in the assessment.
4. Boston, Portland, San Francisco, San Jose, and Seattle were assessed using the PwC capability metrics by the VSR.
5. The assessment was completed in the fall of 2012.

@SOURCE: PwC Digital Readiness Assessment and Maturity Model
Vancouver is on a journey. A journey to create a smart, intelligent, connected, green city. And it’s taking some time to get there. This is CoV’s story to date.
Laying the foundation for a Smart City

DIGITAL STRATEGY 1.0
2013 – 2016
Citizens and businesses can easily interact with the City through digital channels.
Improve delivery of high demand services through digital channels

Provide access to technology and increase digital literacy for all

Increase citizen involvement through digital engagement
Better digital services lead to better data

Unify service delivery Models… Think multi or omni Channel

Be citizen centric and invest in practices that will drive adoption
Embrace mobility and promote activity through digital tools

The table stakes of digital transformation

Transparency into the process drives delight
Hastening graffiti removal along Hastings with VanConnect and evolving relationships with City partners.
“Having the ability to understand the digital world and engage in it is vital for everyday life,”

Anne O’Shea, Manager of programming and learning, Vancouver Public Library
A robust digital infrastructure built through strategic investments and partnerships
Pervasive digital infrastructure, the convergence of IT and OT, and data as an asset
Data wrangling and visualizations illuminate the story of affordable housing in CoV.

@SOURCE: The End of the $1 million Line for Single Family Homes in the City of Vancouver, Andrew Yan, January 2016

Awakening awareness with open data

“The Catalogue should be lauded by everyone in the data community in the City for providing incredibly rich and robust tabular and spatial datasets from which analysts, scholars, and advocates can draw upon.”

INFRASTRUCTURE & ASSETS

145 datasets

5,000 average downloads per month
The right approach to strategic partnerships will put Vancouver on the global map of wireless cities.
How do you get ready to become a Smart City?

You pave the way for pervasive, fibre-enabled, digital infrastructure through innovative policy.
“Connectivity is not a luxury”
– Jo-Ann Stevens
Electric vehicle sales have grown 70% year-over-year since 2011.

“The cost of electricity to fully charge an electric vehicle is less than your morning coffee.”

250+ EV Charging Stations In Vancouver

75 City of Vancouver Level 2 Chargers

1 City of Vancouver DC Fast Charger
Vancouver is a global leader in supporting innovation and growth in the digital economy.
Vancouver’s Innovation Economy

#1 Job-Creating Economy in Canada (Conference Board of Canada)

#1 Most Diverse Economy in Canada (Conference Board of Canada)

#1 Startup Ecosystem in Canada (World, Startup Genome)

#1 VFX & Animation Cluster in World (World, Variety Magazine)

#1 Cleantech Cluster in Canada (World, Global Cleantech Cluster Association)
Digital districts driving the innovation economy
According to HBR, Canada is “stalling out” in the digital economy. What is stalling out? These are “countries that enjoy a high state of digital advancement while exhibiting slowing momentum”.

Start your engines. Averting the stall out in the digital economy.
Growing green and digital innovation

#14 of 25 of the highest tech cities in the world (WEF 2017)
ORGANIZATIONAL DIGITAL MATURITY
Digital IN and OUT
Digital business in the real world

The digital dashboard creates ongoing visibility of the impact of the digital transformation and its outcomes
32% of CDOs have a technology background, a significant increase since 2015 (14%).

@SOURCE: Chief Digital Officer Study, 2016, Strategy& (part of the PwC Network)
Evolving to get ready for the Smart City

TECHNOLOGY TRANSFORMATION
2017 – 2018
Flexible frameworks that empower.

Maturing IT practices.

Fluency in agile and traditional modes of operation.

Designed to evolve, continually.

Moving from project orientation to product orientation.

Evolution not revolution.

Strategy is not a capital project.

An innovative, resilient and agile framework for IT.
Driving a ‘data fluent culture’

@SOURCE: Shutterstock Builds a Data Fluent Culture, Juice Analytics
Optimizing for interoperability

SMART, INTELLIGENT, CONNECTED, GREEN CITY
2019 – 2021
“Over half of trips in Vancouver are made by walking, cycling and transit”

MOBI rides to date, covering a million km’s

+600,000

Peak number of daily trips (July 1, 2017)

3916

Number of stations & growing

124

INFRASTRUCTURE & ASSETS
Public Bike Share

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Mobilizing our mobile workforce

Doing double-duty as data collectors

Our sanitation engineers capture geocoded data that is distributed to our social services partners (the very next day!) in order to better support the homeless.
Emergencies need the right rapid response

With flexible technology and digital channel governance, service delivery can be focused in the right way, informed by near real-time data.
"How can I keep my finger on the pulse of the city?"
– City Manager

From data to insights.
From insights to decisions.
Making data an asset.
TODAY

Where are we today? Our digital maturity has increased significantly. But so has the bar. And the gauge itself is changing.

@SOURCE: PwC Digital Readiness Assessment and Maturity Model, 2017 Assessment
As Vancouver continues on its successful digital journey, the smart, intelligent, green, and resilient city of the future will emerge from the digital noise and the data exhaust.