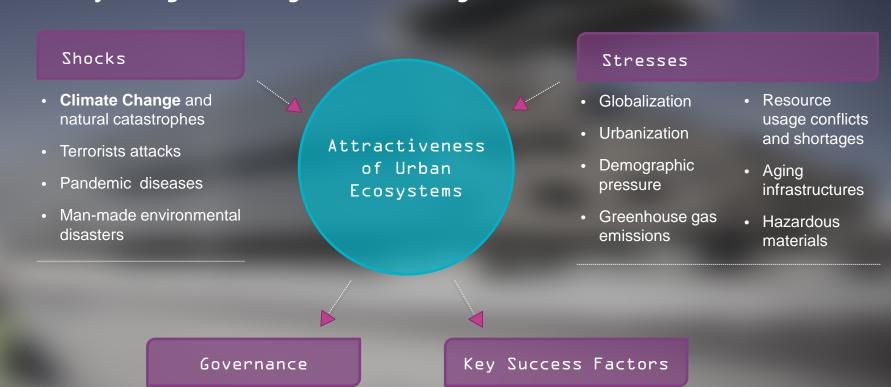
# Des solutions numériques pour des villes plus résilientes



#### WHAT IS RESILIENCE ?

Resilience: Strategic approach to strengthen the socioeconomic attractiveness of the urban ecosystem, guaranteeing its sustainable growth.



### CHALLENGES FACED BY CITIES

Aging infrastructure and/or Infrastructure failure: 40%

Flooding: 83%

Pollution or environmental degradation: 21%

Chronic energy shortages: 8% Terrorism: 18%

## DIGITAL SOLUTIONS AT THE HEART OF RESILIENCY BY CONNECTING STAKEHOLDERS - EXAMPLE OF CRISIS MANAGEMENT





#### **REACTIVITY**

#### One platform to manage critical events

Integrated view for situational awareness
Real time monitoring







#### CITIZEN ALERT THROUGH MOBILE APP

#### Two way communication about events

Information to citizens on crisis
Feedback from citizens on local situation

#### **CONTROL**

#### A global view on critical events

Help with decision making Information on citizen's perception on crisis management

#### COPENHAGUEN CASE STUDY: FLOOD FORECASTING AND ALERT







#### Stakes:

Foresee rainy events and then implement a tailored monitoring of sewage networks and waste water treatment plants to limit the discharge of pollutants.

#### <u>Veolia Solution:</u>

In Copenhague, Veolia put forward a monitoring of meteorological radar data combined with a dynamic management of networks enabling to foresee and be more reactive in case of rainy events.

#### Customers benefits:

- Overflowings related to rainy events were shrinked from 100 to 10 occurrences a year.
- More nature within the city as well as more leisure areas
- The harbour turned into a bathing area
- A higher environmental quality
- An improved safety for all
- Alerts and information in real-time