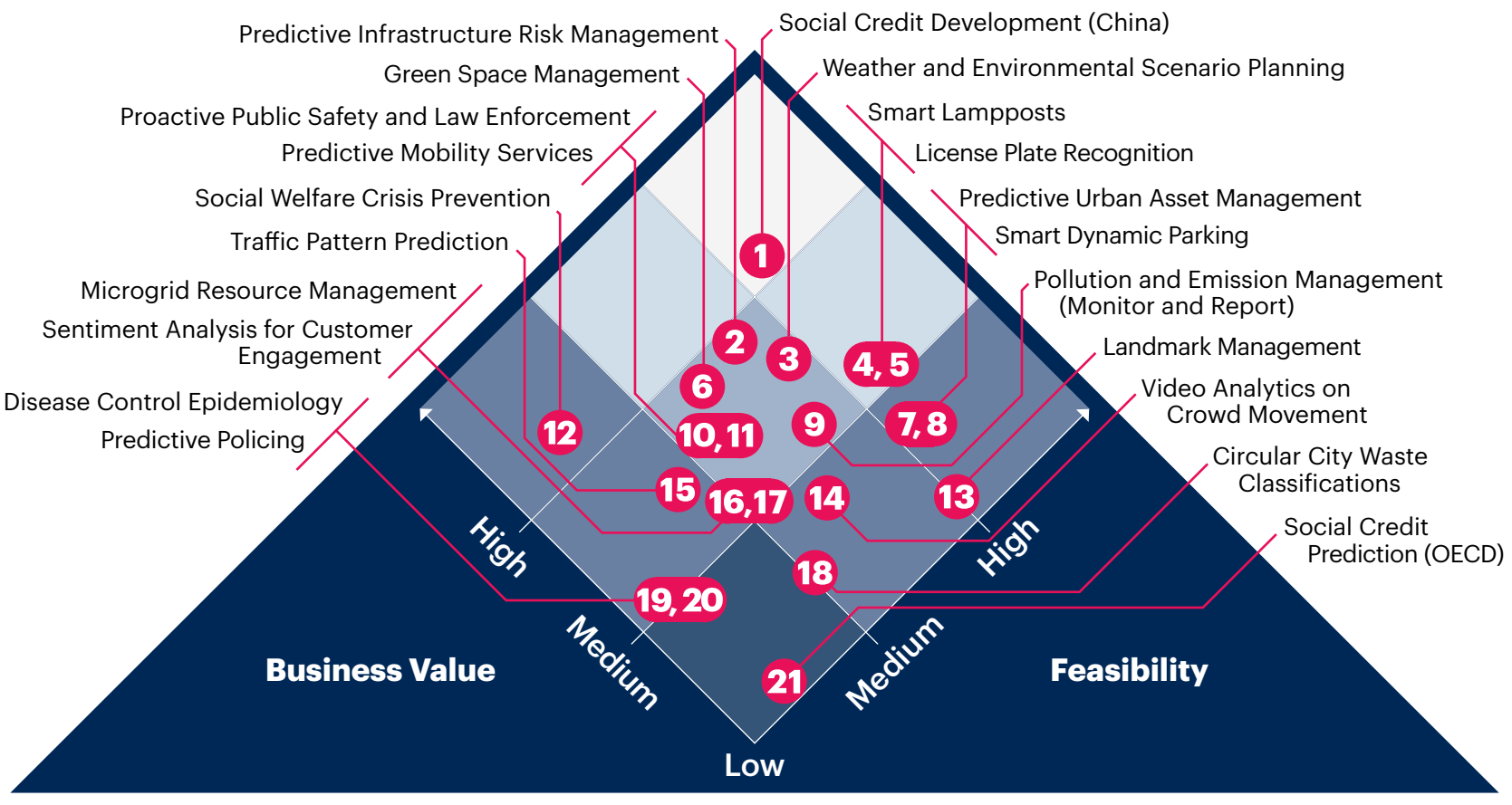
Gartner

AI Use-Case Prism for Smart Cities



Note: Use cases are clustered only for ease of visual representation.

Environmental Protection	Public Safety	Infrastructure and Utility	Economy	Transportation and Mobility	Government and Human Services

1 Social Credit Development (China)

2 Predictive Infrastructure Risk Management

3 Weather and Environmental Scenario Planning

4 Smart Lampposts

5 License Plate Recognition

6 Green Space Management

7 Predictive Urban Asset Management

8 Smart Dynamic Parking

9 Pollution and Emission Management (Monitor and Report)

10 Proactive Public Safety and Law Enforcement

11 Predictive Mobility Services

12 Social Welfare Crisis Prevention

13 Landmark Management

14 Video Analytics on Crowd Movement

15 Traffic Pattern Prediction

16 Microgrid Resource Management

17 Sentiment Analysis for Customer Engagement

18 Circular City Waste Classifications

19 Disease Control Epidemiology

20 Predictive Policing

21 Social Credit Prediction (OECD)

▪▪ Business case is intermittent and doesn't apply to the process spanning the dotted line.

Note: The above diagram denotes a smart city ecosystem as opposed to a pipeline, which is showcased in other prisms. The diagram denotes the applicability of use cases and not a linear path of use-case implementation.

		Business Value			Feasibility		
		Finance Optimization[1]	User Attractive-ness[2]	Business Competitive-ness[3]	Technical Feasibility[4]	Internal Readiness[5]	External Readiness[6]
1	Social Credit Development (China)	◑	◕	●	◕	◕	◕
2	Predictive Infrastructure Risk Management	◕	◕	◕	◑	◕	◕
3	Weather & Environmental Scenario Planning	◑	◕	◕	◕	◕	◕
4	Smart Lampposts	◑	◕	◑	●	◕	◕
5	License Plate Recognition	◑	◑	◑	●	◕	◕
6	Green Space Management	◕	●	◑	◕	◑	◑
7	Predictive Urban Asset Management	◑	◑	◔	◕	◕	◕
8	Smart Dynamic Parking	◑	◔	◑	◕	◕	◕
9	Pollution and Emission Management (Monitor and Report)	◔	◕	◕	●	◔	◕
10	Proactive Public Safety and Law Enforcement	◕	◑	◑	◕	◑	◑
11	Predictive Mobility Services	◕	◕	◕	◕	◑	◔
12	Social Welfare Crisis Prevention	◕	●	◕	◔	◕	◔
13	Landmark Management	◔	◑	◑	◕	◕	◕
14	Video Analytics on Crowd Movement	◔	◕	◑	●	◑	◔
15	Traffic Pattern Prediction	◑	◕	◕	◑	◑	◑
16	Microgrid Resource Management	◑	◕	◑	◕	◕	◔
17	Sentiment Analysis for Customer Engagement	◔	◕	◕	◕	◑	◔
18	Circular City Waste Classifications	◔	◑	◑	◑	◑	◑
19	Disease Control Epidemiology	◑	●	◑	◔	◔	◑
20	Predictive Policing	◑	◑	◑	◑	◑	◔
21	Social Credit Prediction (OECD)	◔	○	◑	◕	◔	◔

[1] Includes cost optimization and new sources of revenue (e.g., data monetization).

[2] Includes social and demographic sustainability.

[3] Includes efficiency to be more targeted at a lower cost, leading to new service possibility.

[4] Includes includes standards, interoperability of systems, cloud vs. edge, data governance, machine learning and algorithm improvements, training capabilities, computing power, edge computing power, and infrastructure availability on the network.

[5] Includes regulations and compliance to GDPR, cybersecurity and data protection.

[6] Includes trust in the compliance and adherence to laws, ethics and regulations (e.g., data protection and privacy).

○ None
◔ Low
◑ Medium
◕ High
● Very High

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