



ITU-SUDACAD Regional Forum on Internet of Things for Development of Smart and Sustainable Cities

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Key Success Factors and Dependencies for IoT Ecosystem of SSC

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Content

IoT for SSC Overview and Characteristics

Maturity and Governance of a SSC and IoT Context

Align IoT and SSC strategy with feasible RoI

Invest Properly in Analysis and Planning

Involve and Inspire Stakeholders

Assess & Control Risks

Run under Project Framework

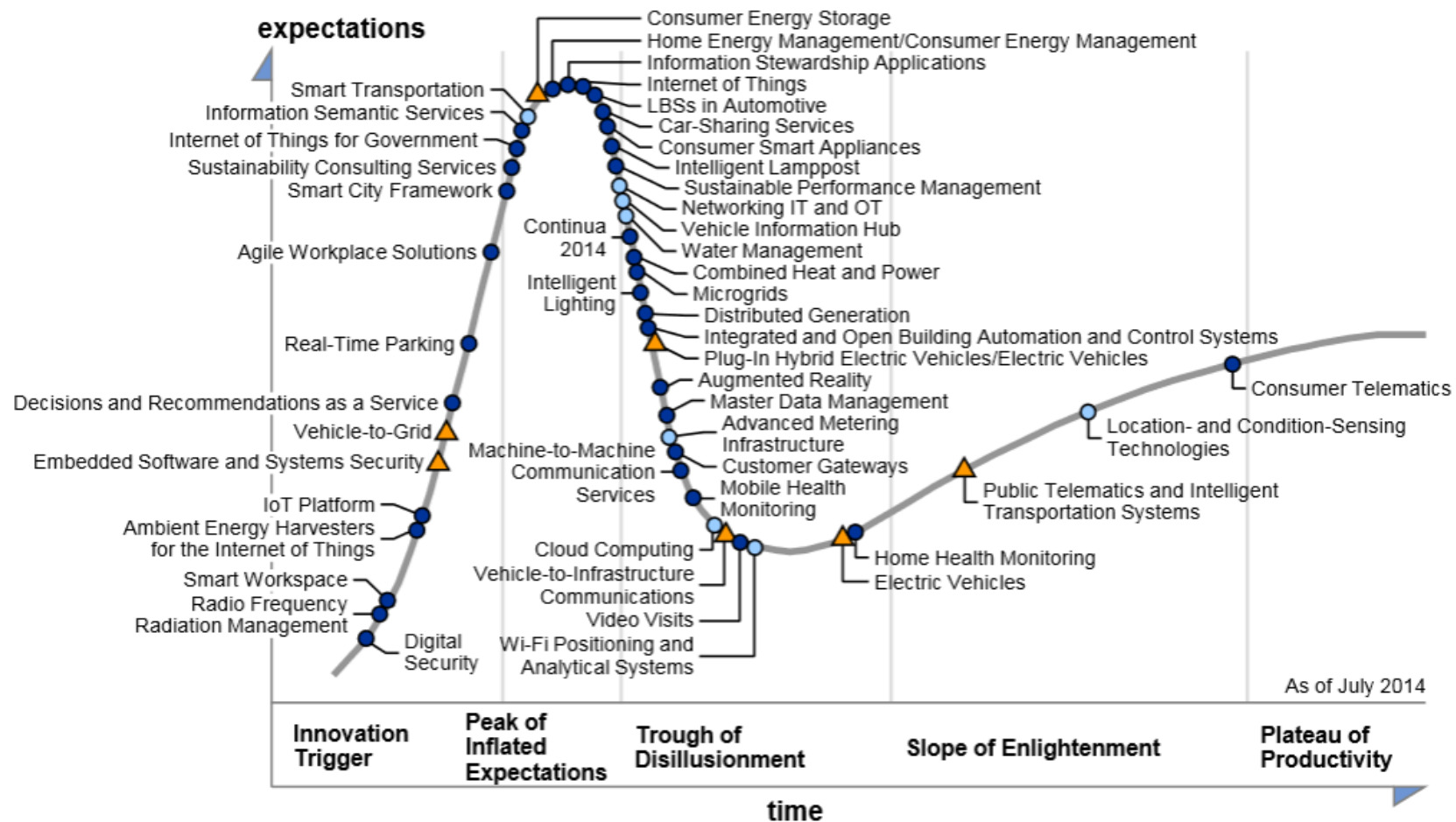




Smartness Maturity Dimensions of SSC

Leadership & Governance	<ul style="list-style-type: none">• Level of Leadership Commitment• Effective City Mgt.- learning form best practices• Strategic and transformational mind-set for smart initiatives
Stakeholder Engagement and Citizen Focus	<ul style="list-style-type: none">• Stakeholder engagement and citizen/customer focus• Support business, community & academic smart city activities• Social inclusion
Effective Use of Data	<ul style="list-style-type: none">• Openness and sharing of data based on agreed regularity policies• Data interoperability (use of common standards)+ Availability of City data analytics• Data privacy and data security based on standard policies and processes
Integrated ICT Infrastructure	<ul style="list-style-type: none">• Reliable ICT resource mapping and management• Progress in developing a city-wide ICT architecture• IOT Integration and Cloud computing
Levels of Smartness	<ul style="list-style-type: none">• Smart core infrastructure smart management of water, gas, ICT, waste and energy• Smart Facilities and buildings• Smart core services (education, health, legal, safty,..)Environment

Hype Cycle for SSC Technologies





Strategy and RIO (Business Case)



- Work within SSC ICT strategy for transformation
- Identify set of strategic partners (e.g. Partnership bet. public and private sectors)
- Start with quick wins (business cases with fast implementation and short payback periods)
- The business value can be:
 - Cost reduction, higher efficiency
 - high revenue
 - Improved customer experience(citizen/tourists)



Characteristics of IoT for SSC Projects

Intelligence

Connectivity

Dynamic
Nature

Enormous
Scale

Sensing

Heterogeneity

Security

Innovation

Energy

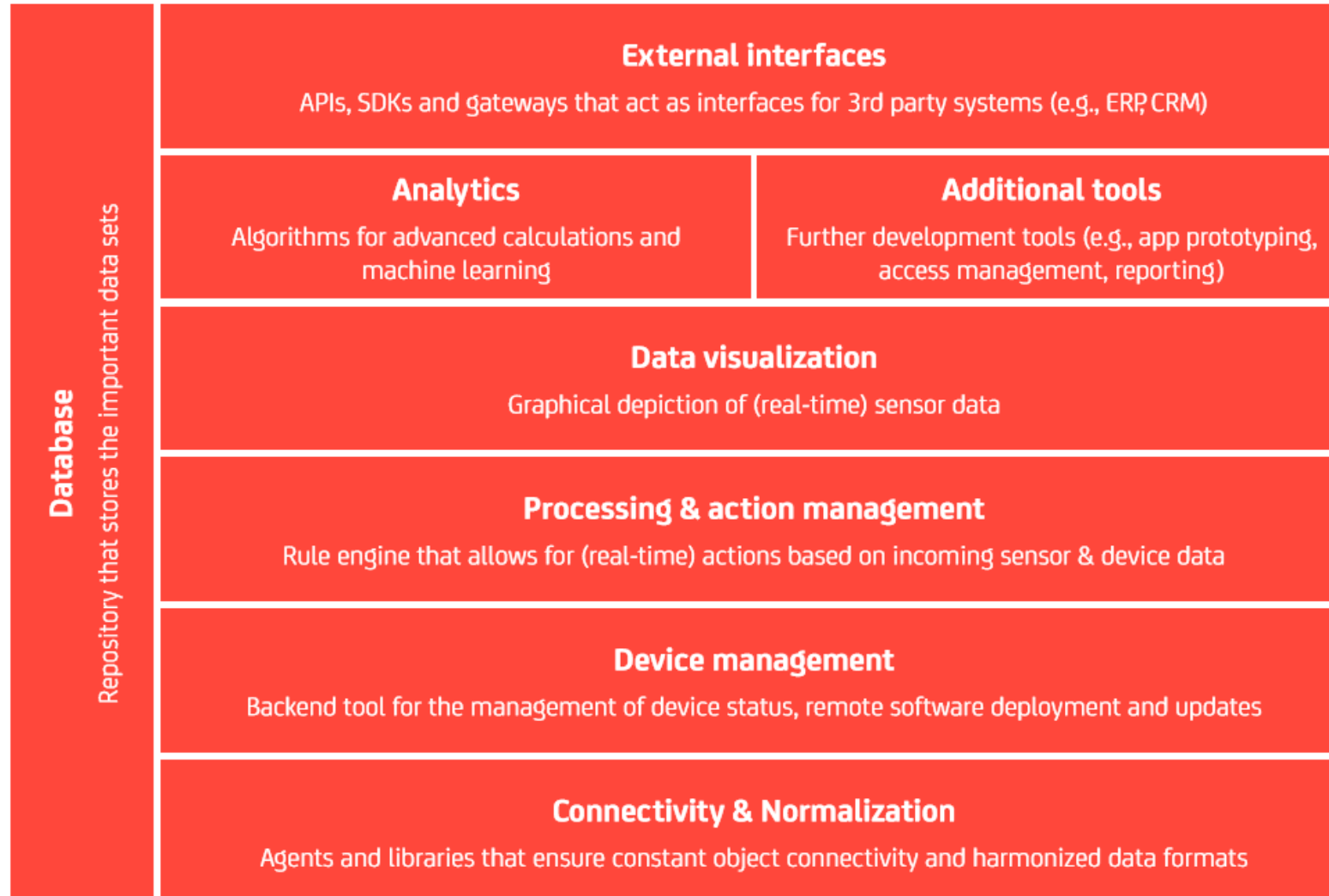
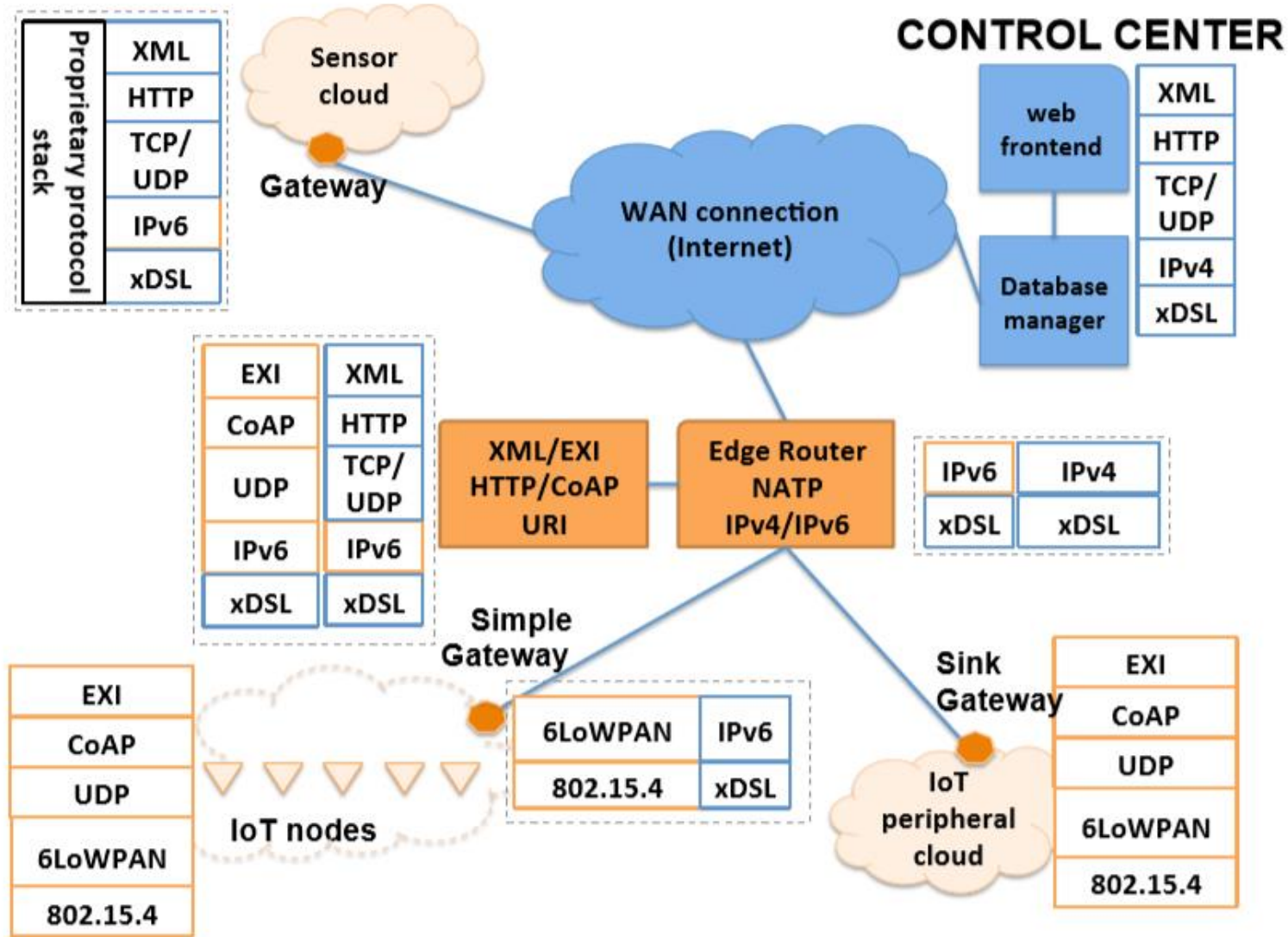
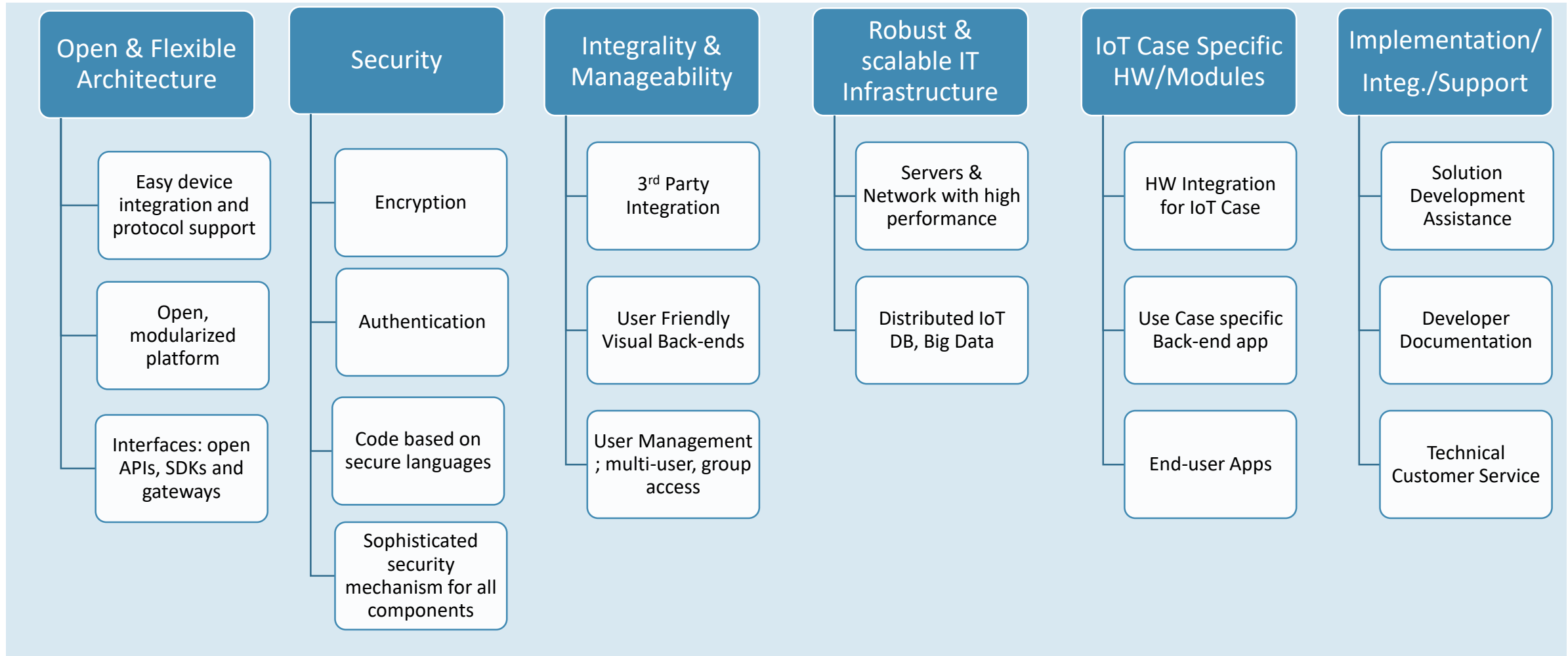


EXHIBIT 4: The eight major building blocks of an IoT platform (Source: IoT Analytics)

Technical Design Elements



Choosing the Right Design Checklist for IoT Platform Components



Make or Buy ?

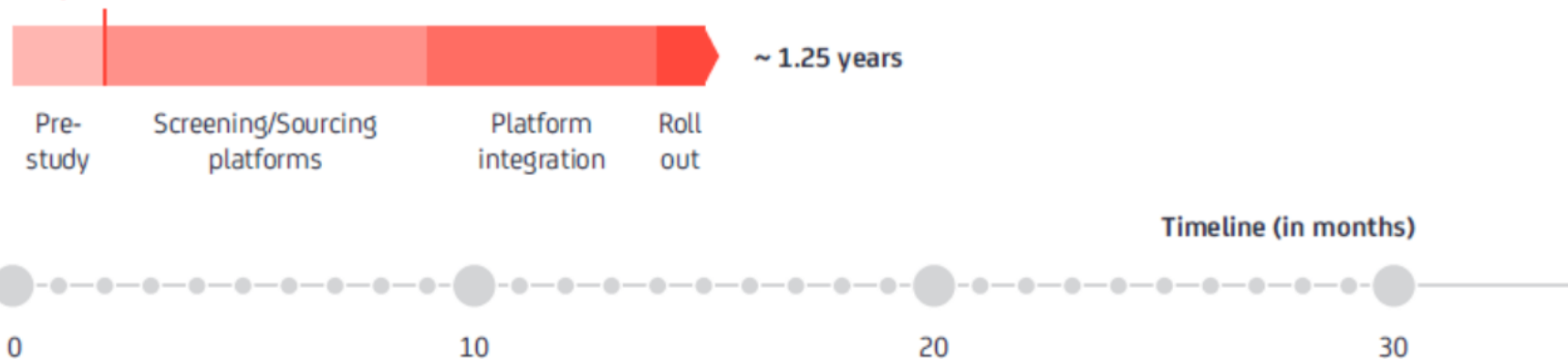
Building your own IoT platform

Make-decision



Sourcing your IoT platform

Buy-decision



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SSC Stakeholders Analysis



- Structure of the ICT City governance
- List of influencing groups
- List of SSC stakeholders (city council, citizens, industry, SMEs, NGOs,...)
- Identify Project sponsors and steering board
- Issue solid project organization plan according to the stakeholders
- Create project communication plan considering all stakeholders
- Establish effective communication with stakeholders to setup solid project mandate

Financial Risks

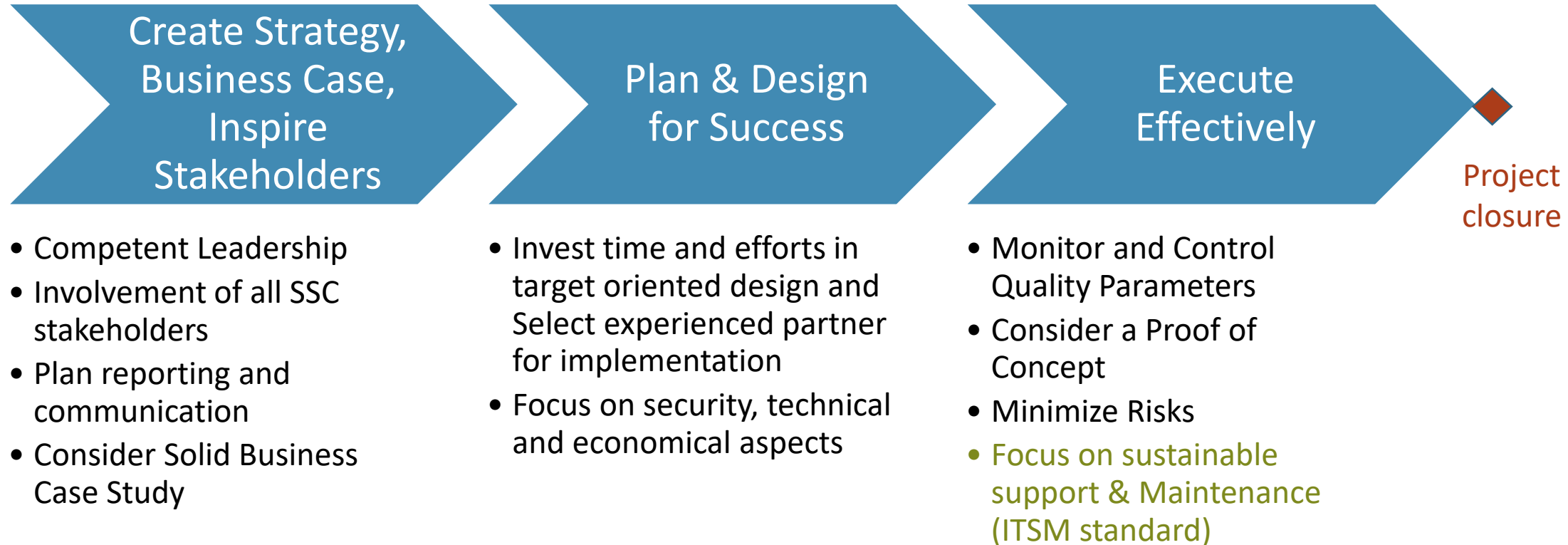
- Project budget and sponsorship
- Continuity of project finance
- Financial governance and controlling

Technical Risks

- Innovative project
- Standardization issue
- Heterogenic architecture
- Emerging technologies and new products
- Maintenance of sensors
- New partners
- Security

Governance Risks

- High number of stakeholders
- Ownership & Responsibility allocation
- Low maturity in ICT
- Continual org.restructuring





Conclusions

- Being pioneer and understand level of city smartness
- Deal with innovations
- Managing IoT for SSC as an **innovative Project/Program**
- Apply Project Management best practices & standards(PMI, Prince2)
- Insure proper governance of the project, involve stakeholders and issue clear RACI matrix
- Setup dedicated and specific risk analysis
- Buy, don't make
- Focus on security
- Assure reliable service management, operation and continual improvement life cycle for the launched systems



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Thank You

