

A man in a dark suit and white shirt is walking on a modern glass and steel balcony. The scene is overlaid with various futuristic digital graphics, including a location pin icon with concentric circles, a thumbs-up icon, a curved arrow icon, and several horizontal and vertical arrows. The background shows a multi-story building with large windows and a glass facade.

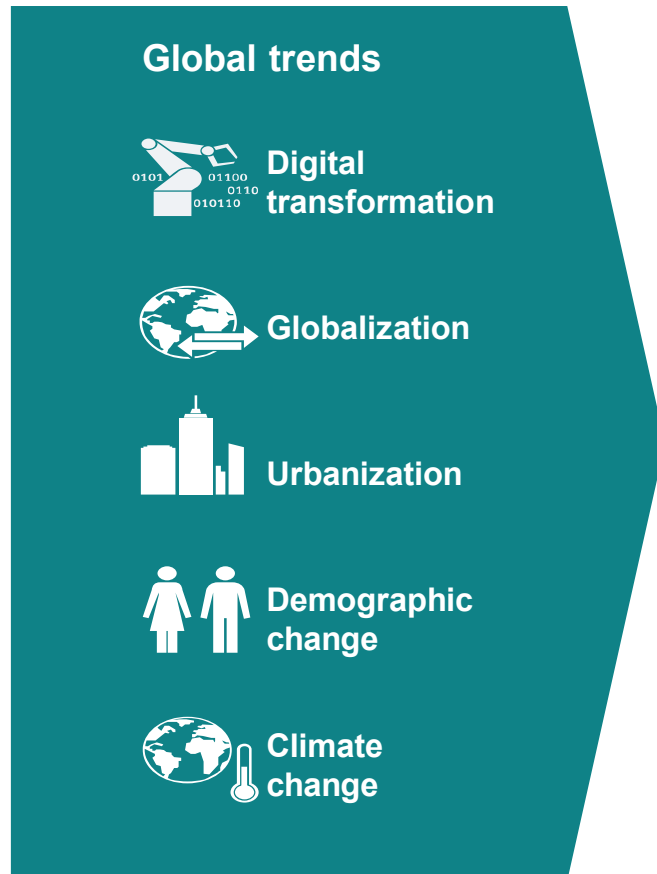
SIEMENS
Ingenuity for life

Smart Controls- Shaping the Future Perfect Place

Unrestricted © Siemens AG 2017

siemens.com

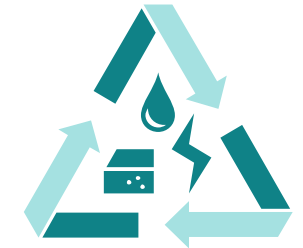
Our world is undergoing big changes...



Higher innovation speed



Increased need for security

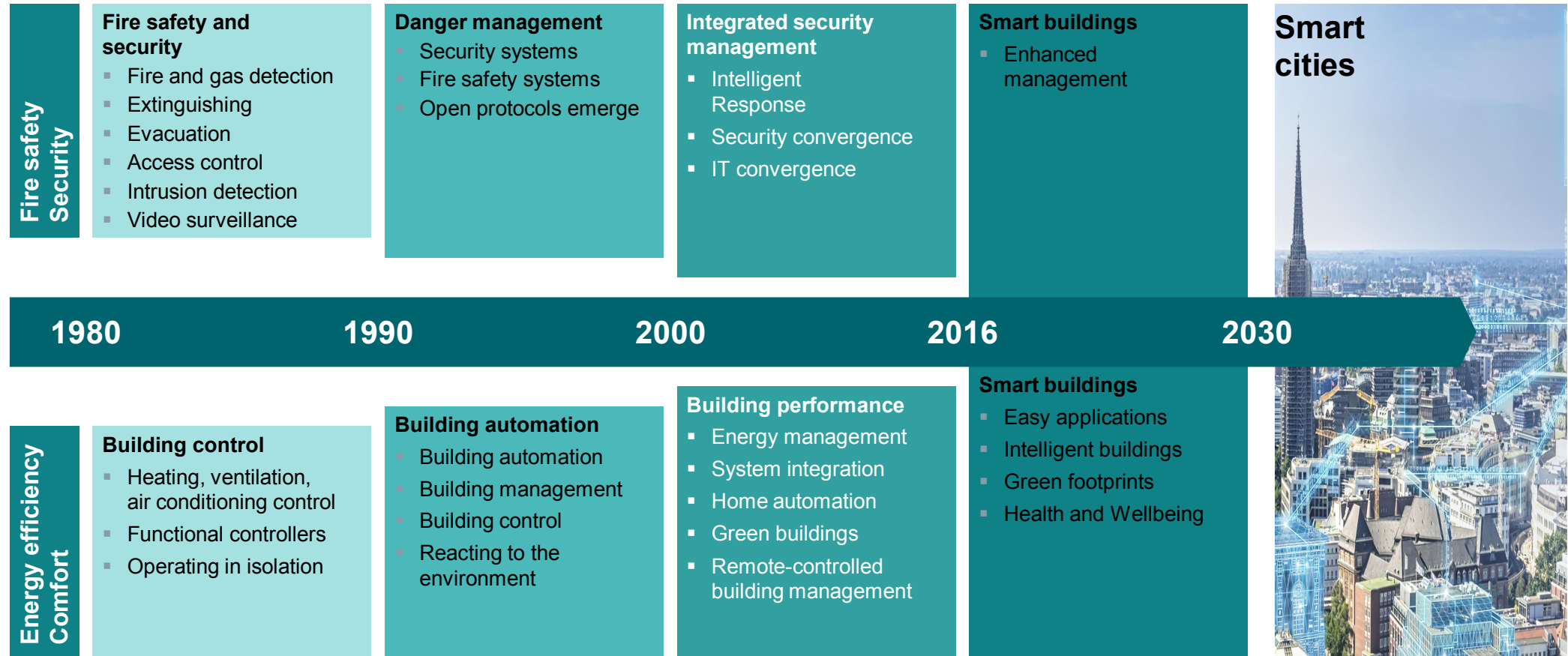


Growing importance of energy efficiency and sustainability

**that influence the
Commercial and Industrial Sectors**

Smart Buildings Creating Perfect Places

Trends Affecting the Industry



Value of Integrated Systems



Integration vs. Integrated



No integration	Little integration	Monitoring integration	Totally integrated platform
Limited functionality	Restricted functionality	Central control	Comprehensive control
No overview	No overview	Restricted compatibility	Full compatibility
Stand-alone	Networked	Managed	All-in-one

Our world is becoming ever more connected

Advancement in technologies
is creating new opportunities
to gain efficiencies



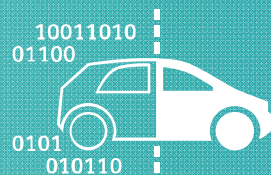
Digitalization is affecting all industries



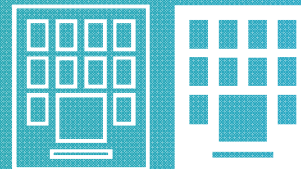
Predictive maintenance



Digital prototyping



Digital twin



Today, it is easier to turn data into value

By 2020
there will be approximately

7 billion

connected devices
in buildings globally

Decreasing data collection costs –

\$500

per 1 m
transistors
in 1990

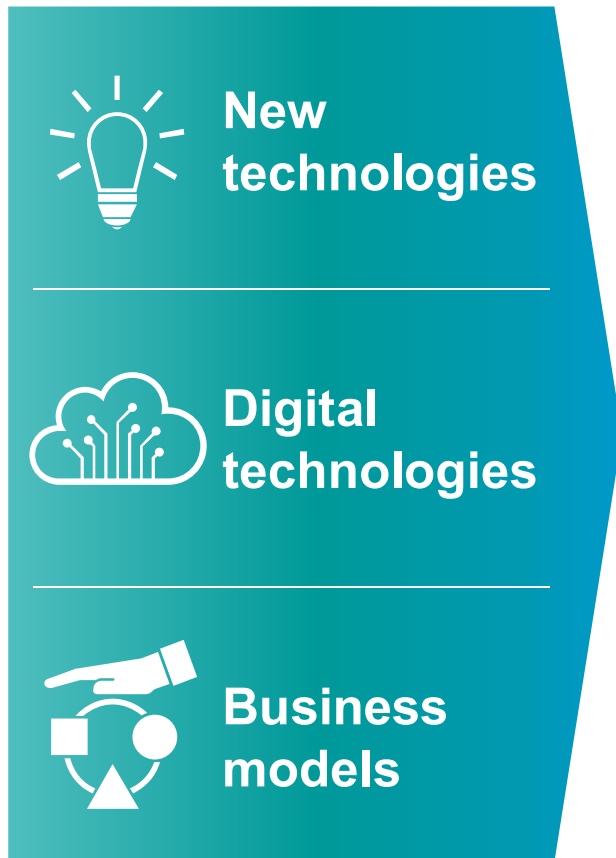
\$0.05

per 1 m
transistors
in 2012

Standardization

of protocols

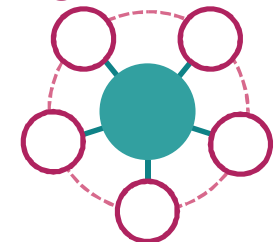
Digitalization and new technologies are changing everything, everywhere



Supply Chain

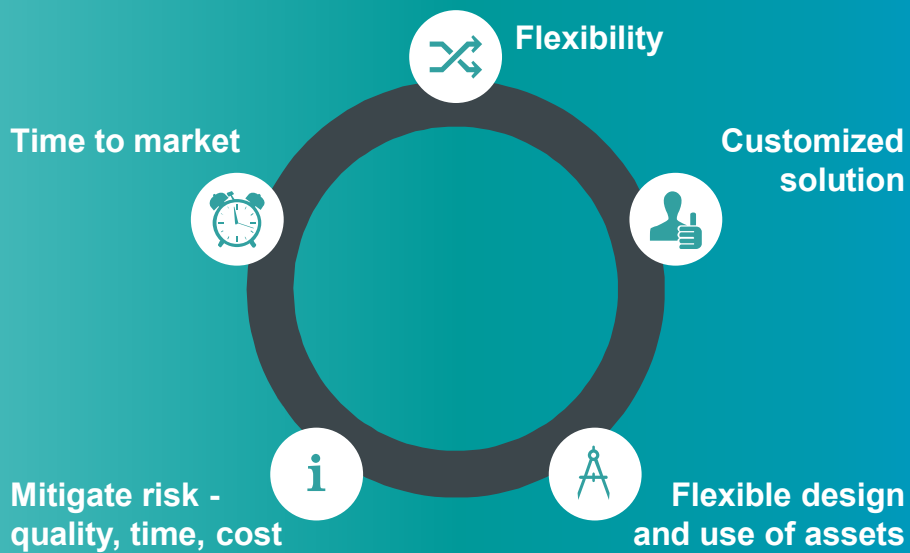


Ecosystems



The digital transformation of infrastructure lifecycle – totally new business models and ecosystems arise

Market/customer demands are changing ...



... new business models/ecosystems arise



From mechanical components to smart and integrated systems



From firmly defined products to customized solutions



From traditional materials and methods to new construction processes



From internet connectivity to Internet of Things and Web of Systems

The real added value of digitalization – unleashing productivity and efficiency



Operating system of a city

Siemens Software

- FlexLTP
- Storage
- Demand Management
- Energy Trading/Blockchain
- Fault Detection
- EnergyIP

Siemens Digital Services

- Navigator
- eCar Charging
- Intermodal Traffic Management
- CyPT Air
- Railigent
- Fleet Management

MindSphere

The cloud-based, open IoT operating system
Platform as a Service

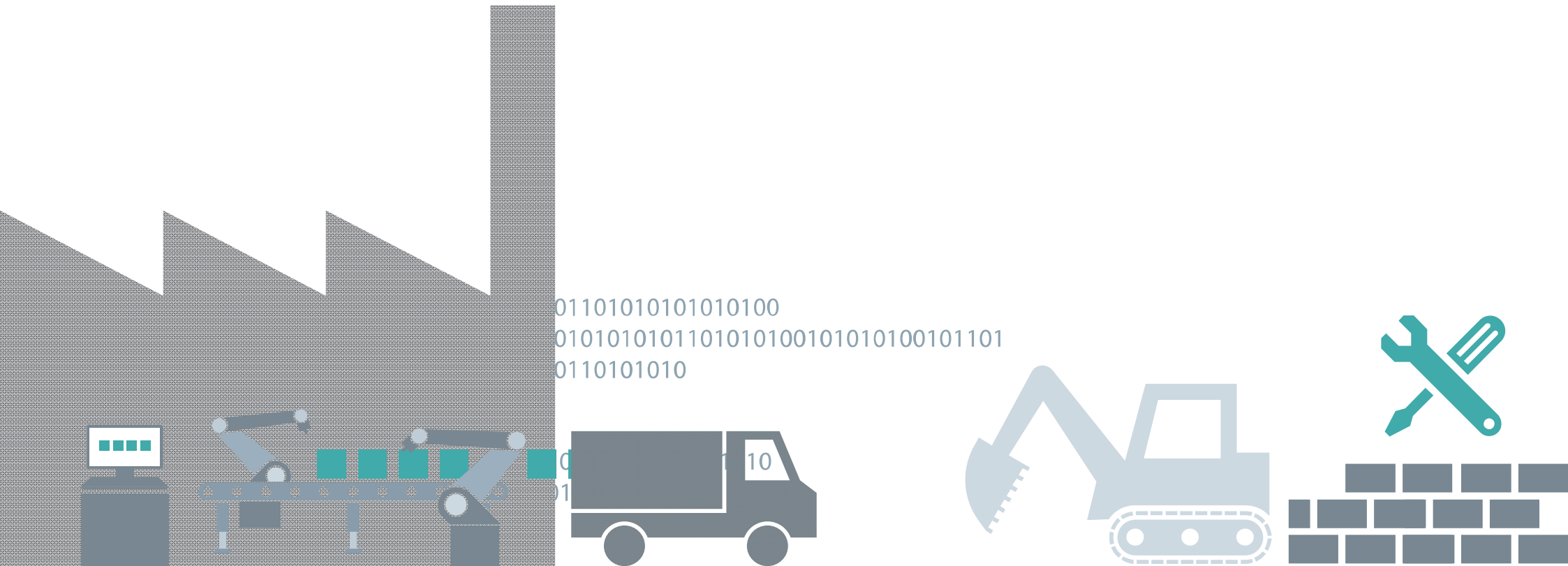
Enabler: Infrastructure as a Service (storage, processing power, provider agnostic)

Electrical field devices of a city



Holistic IT security concept

Siemens digitalization know-how transferred to the all industries



Connected assets enable preparation

- Digital twins provide real-time accuracy
- Unlimited simulation and optimization
- Common data repository
- Static and dynamic building representation



Connected Infrastructure remain secure

- Device, system and network security
- Smart physical security and access control
- Emergency response efficiency
- Secure data sharing and remote access



Connected infrastructure provide flexibility

- Adaptable, agile work-space management
- Optimize space for organizational needs
- Promote collaboration and productivity
- Occupant sensing and engagement



Connected infrastructure

SIEMENS
Ingenuity for life

provide the cities of the future



SIEMENS
Ingenuity for life

Thank you



Azheer Haseeb
Siemens Building
Technologies

SIEMENS

Ingenuity for life