



Gridonomics

A Future History of the Grid

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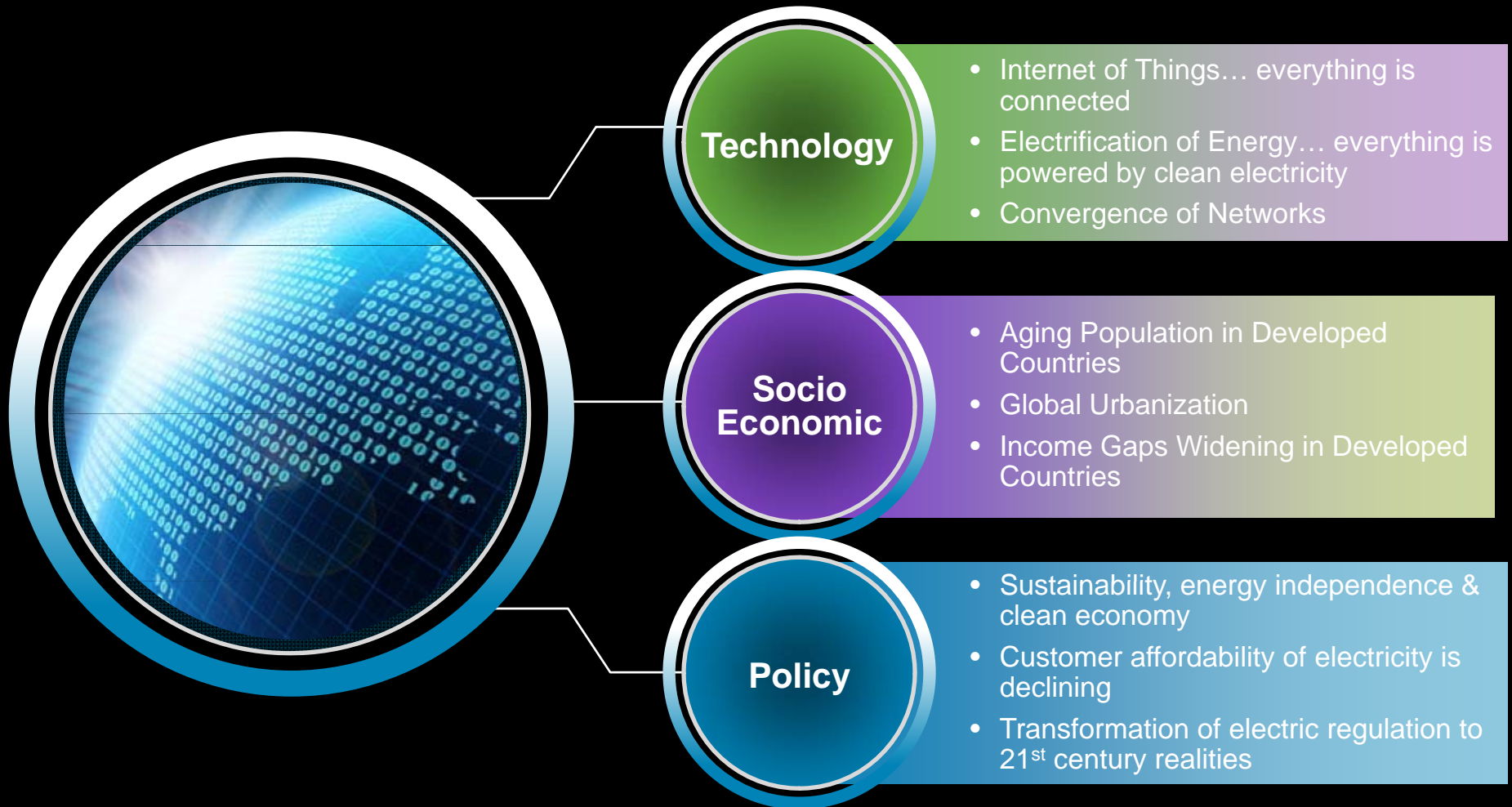
October 18, 2011

Forward-Looking Statements

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Global Megatrends Changing Energy

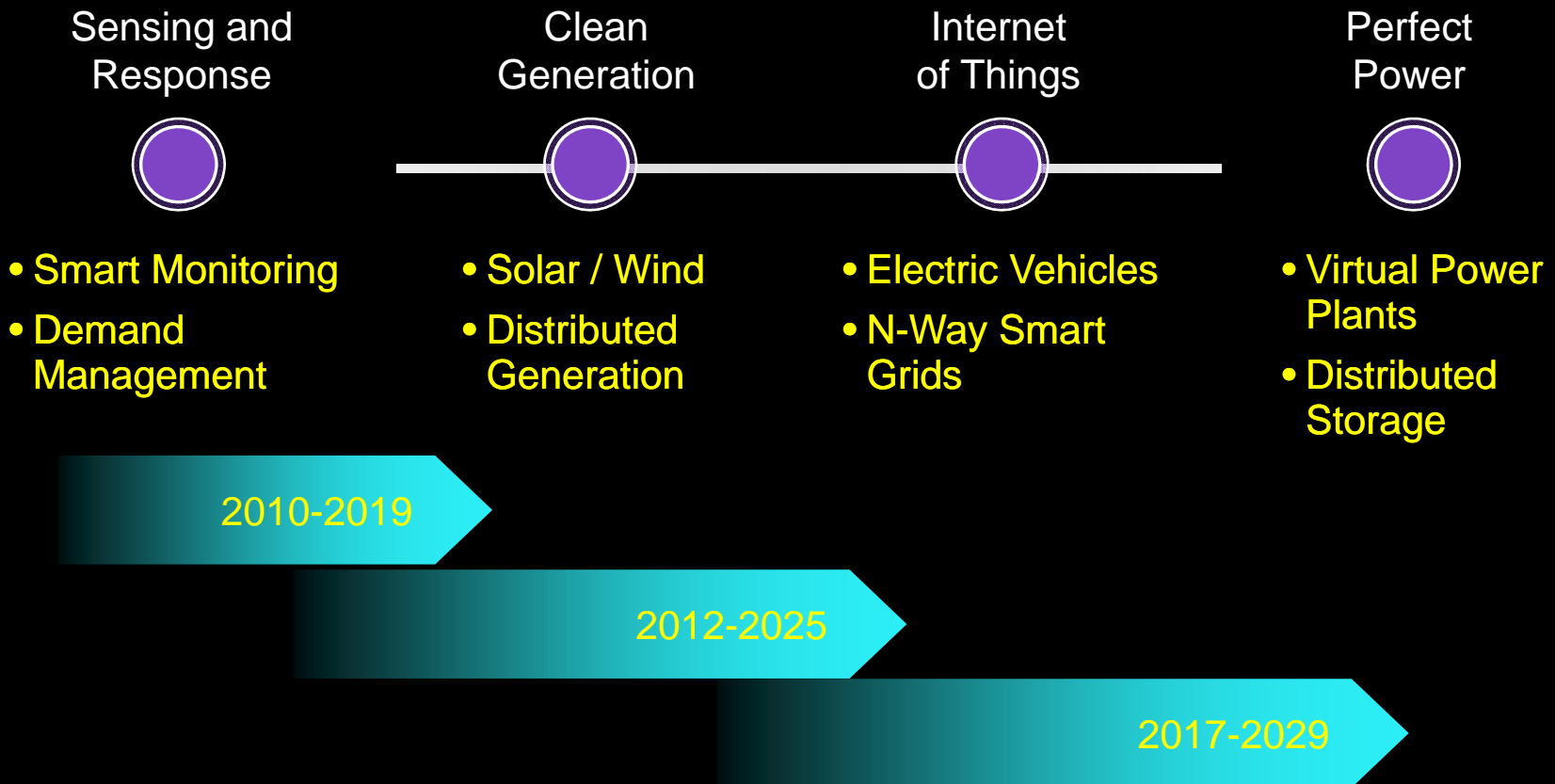
GRIDONOMICS™



A Future History of the Grid

“The future is already here, it’s just not evenly distributed.”

- William Gibson, Author



Energy Technology Megatrends

Limited Sensing

TO

Deep Situational Awareness

Batch Processing

TO

Real Time Processing

Centralized

TO

Distributed

Limited Security

TO

Pervasive Security

Proprietary

TO

Open Standards

Energy Network Platform

The network and networking technologies will enable the electric grid to become:



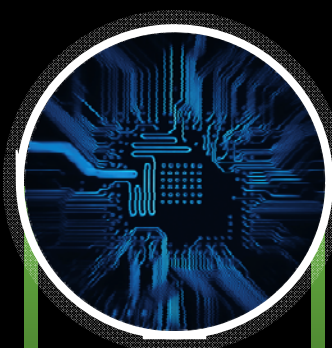
OBSERVABLE

Deep
Situational
Awareness



AUTOMATED

Minimal
Human
Supervision



INTELLIGENT

Distributed
M2M
Intelligence

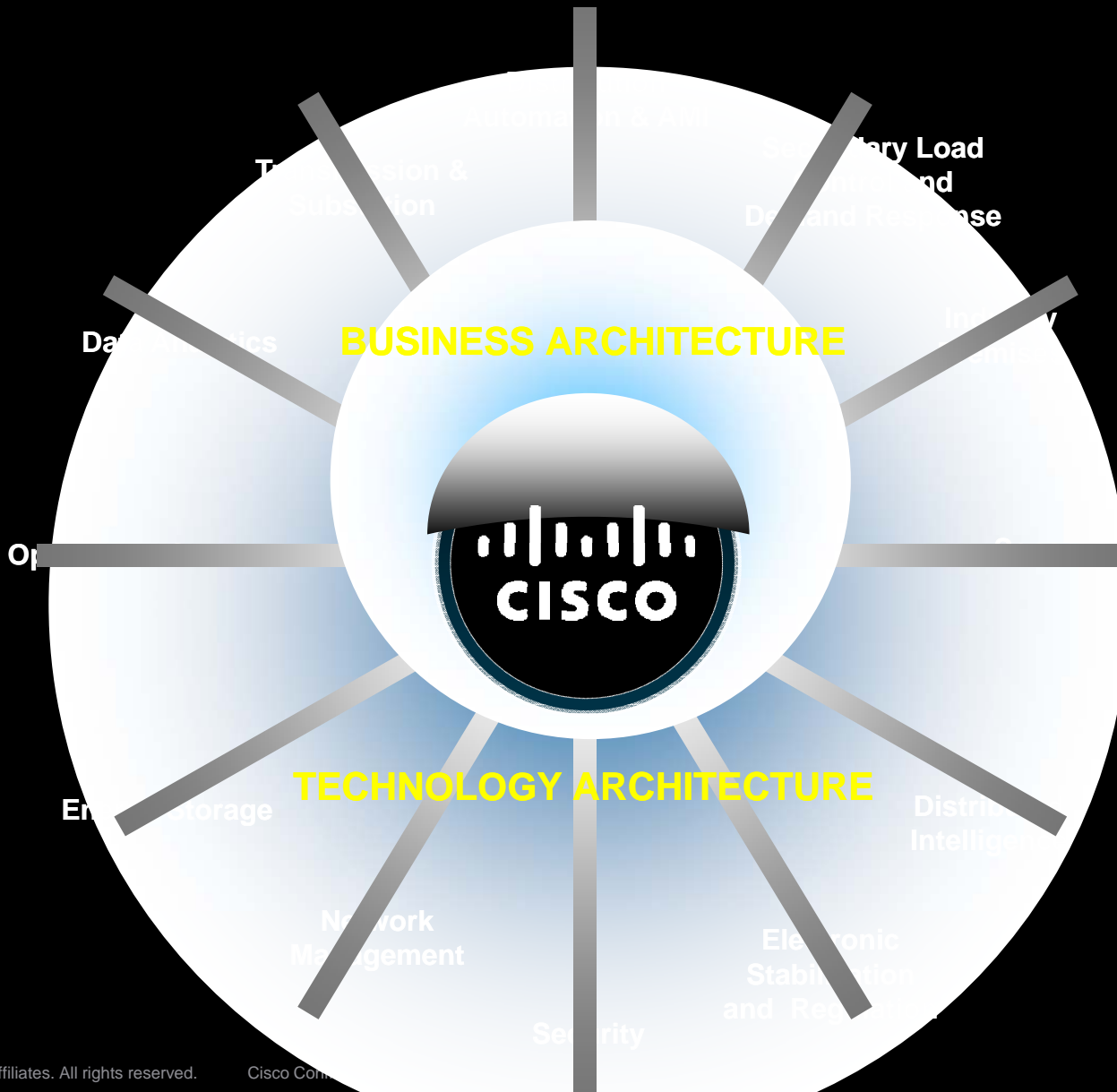


TRANSACTIVE

Distributed
Market
Participation

Utility Systems Convergence

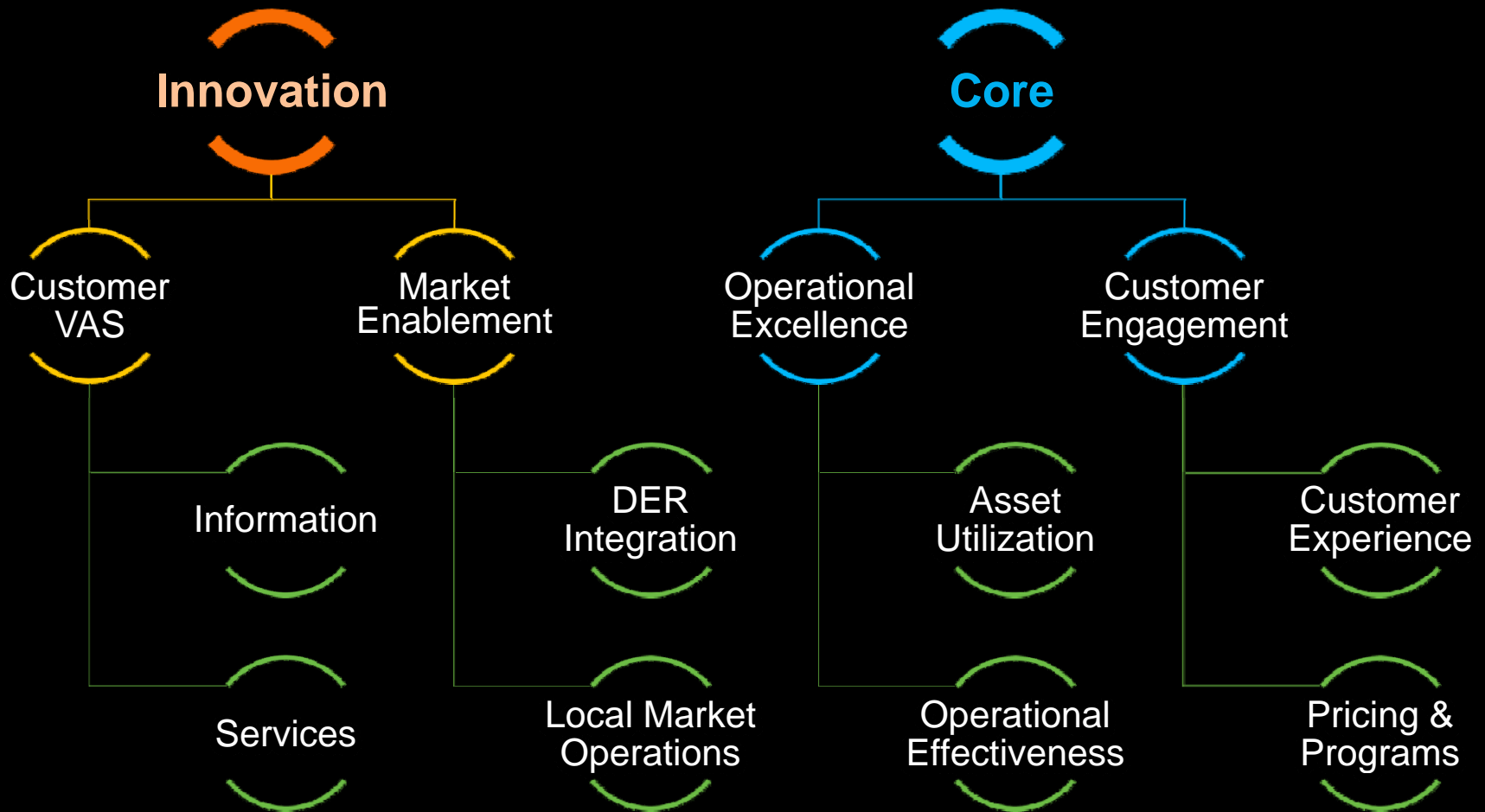
ENERGY TECHNOLOGY



INFORMATION TECHNOLOGY

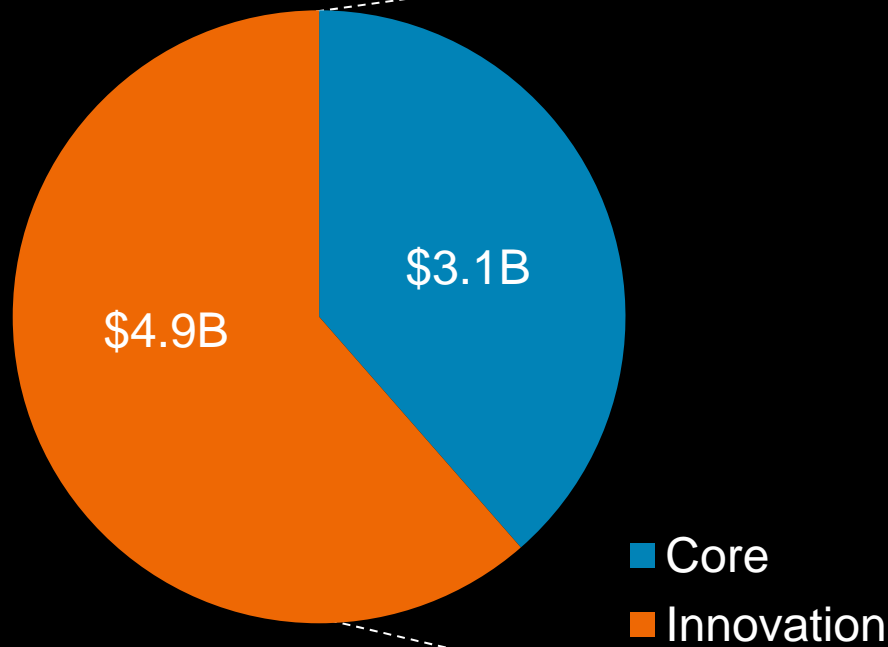
Cisco Business Architecture

Utility of the Future



Smart Grid Value Creation Potential

Georgia, USA: **Vertically Integrated Market**
 Population: ~10 million
 Societal Value: **\$8 Billion NPV**

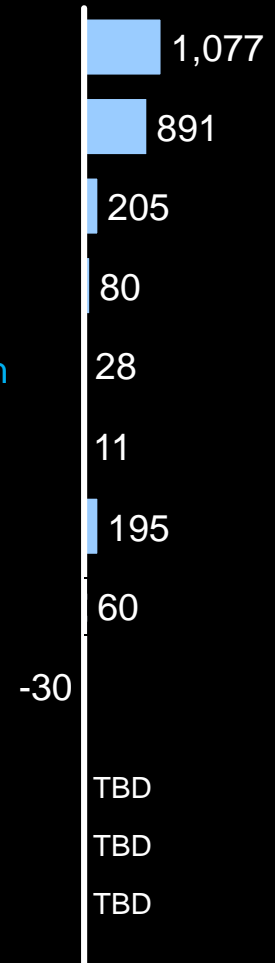


Source: Cisco
 Figures are based on 15-year PV from 2010-2025

Investment

- Energy conservation
- CVR/IVVC
- Demand response
- WAM/DLR
- Substation automation
- Teleprotection
- FDIR
- AMI
- Feeder condition-based maintenance
- Dist Storage
- DG Support
- EV Support

Net societal value creation
 \$M per M customers



Cisco's Innovation Model

Build

Buy

Partner



Your Cisco Contact



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