

IBM Rational Software

# Real Insight. Real Results.

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**Innovation is about taking deep insight to create new value – for business and society.**

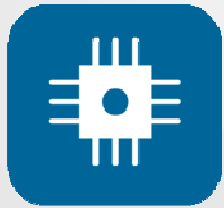


**Innovation resides at the intersection of invention and insight, leading to the creation of social and economic value.**

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**National Innovation Initiative**

# Innovation is required as the world needs to get a whole lot smarter.



## **INSTRUMENTED**

*By 2010, 30 billion RFID tags will be embedded into our world and across entire ecosystems*



## **INTERCONNECTED**

*An estimated 2 billion people will be on the Web by 2011 .... and a trillion connected objects – cars, appliances, camera, roadways, pipelines – comprising the “Internet of Things”*



## **INTELLIGENT**

*Every day, 15 petabytes of new information are being generated. This is 8x more than the information in all U.S. libraries*



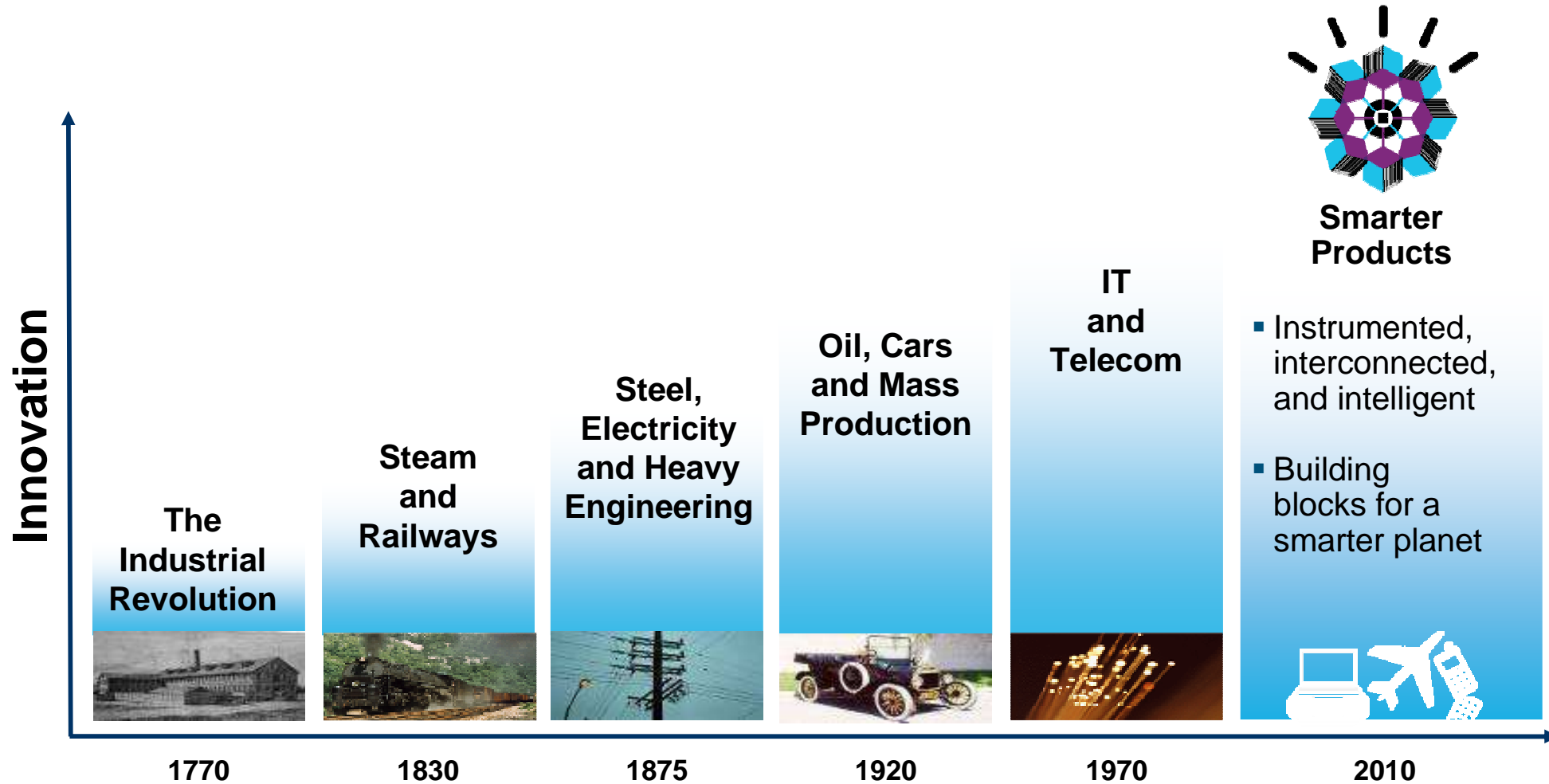
# A smarter planet will require a significant investment in software and systems.

- Imagine the amount of *software* necessary to:
  - Leverage a wealth of information to make more intelligent choices
  - Take action on energy, the environment and sustainability to deliver a greener world
  - Manage an interconnected infrastructure with billions of devices
- Success in building a smarter planet is highly dependent on our ability to *manage effective software and systems delivery*



Let's build a smarter planet

# We are on the verge of a new wave of innovation...



# ...where software becomes even more crucial for product innovation and differentiation.

## Electronics



- Apple's iPhone is completely instrumented, with GPS positioning software that helps the device know where you are

## Automotive



- 90% of innovation is based on electric and electronic systems
- 80% of this innovation is based on embedded software

## Aerospace and Defense

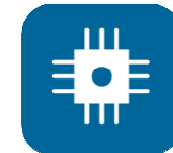
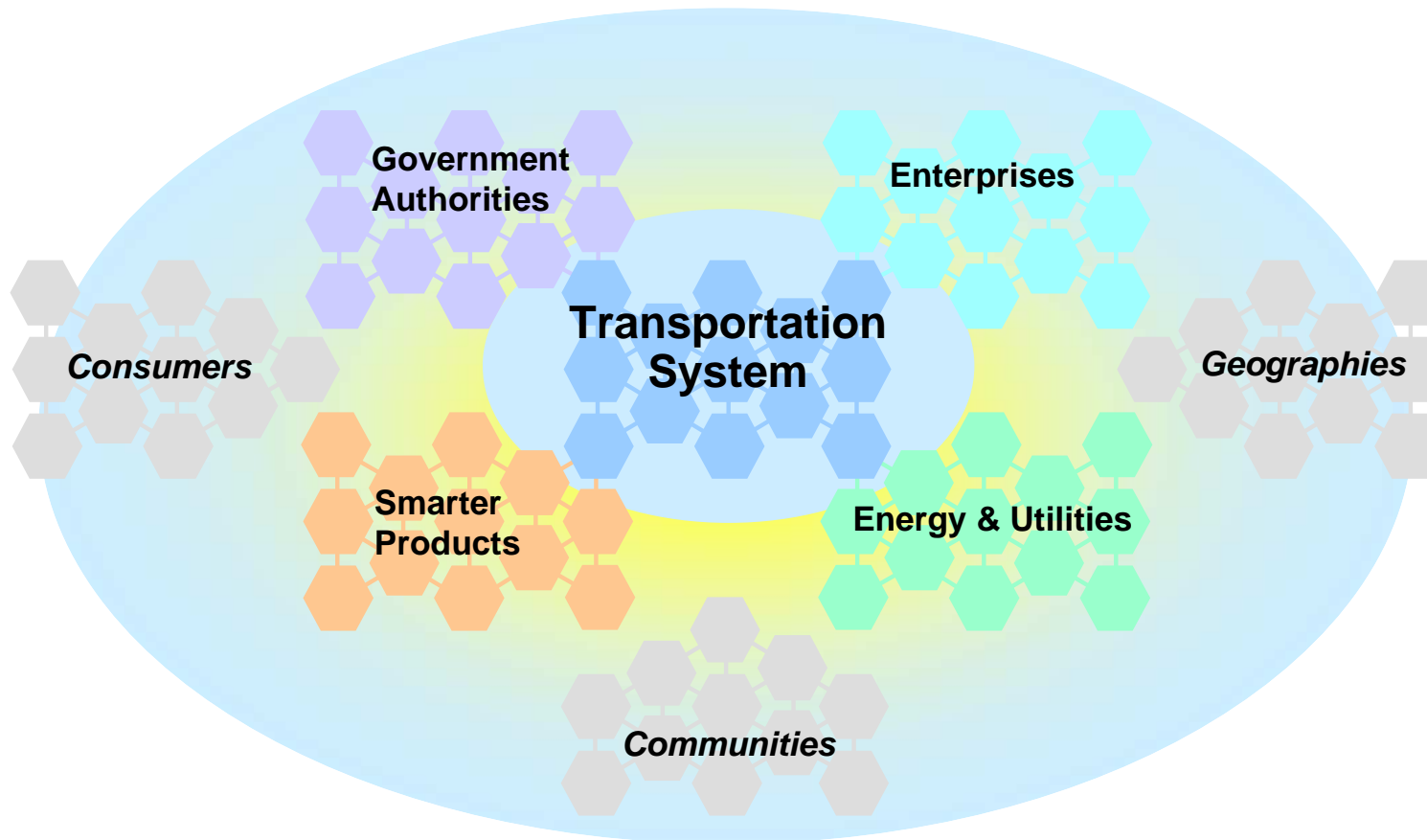


- F-22 Raptor (2003) contains 1.7 million lines of code
- F-35 Lightning II will have 5.7 million lines of code

### Key benefits

- ✓ Create new opportunities
- ✓ Increase revenue / profit
- ✓ Enhance customer loyalty
- ✓ Faster time-to-market

And where smarter products will combine into larger ecosystems enabling new business opportunities.



**INSTRUMENTED**



**INTERCONNECTED**



**INTELLIGENT**

# However, challenges to effective software delivery *remain and expand*

## Individual Challenges

- **Lack of standards** impacts ability to collaborate, automate and report
- Frequent asset updates and **complex dependencies**

## Team Challenges

- **Geographically dispersed teams**
- Effective **cross-organizational visibility** and synchronization

## Organizational Challenges

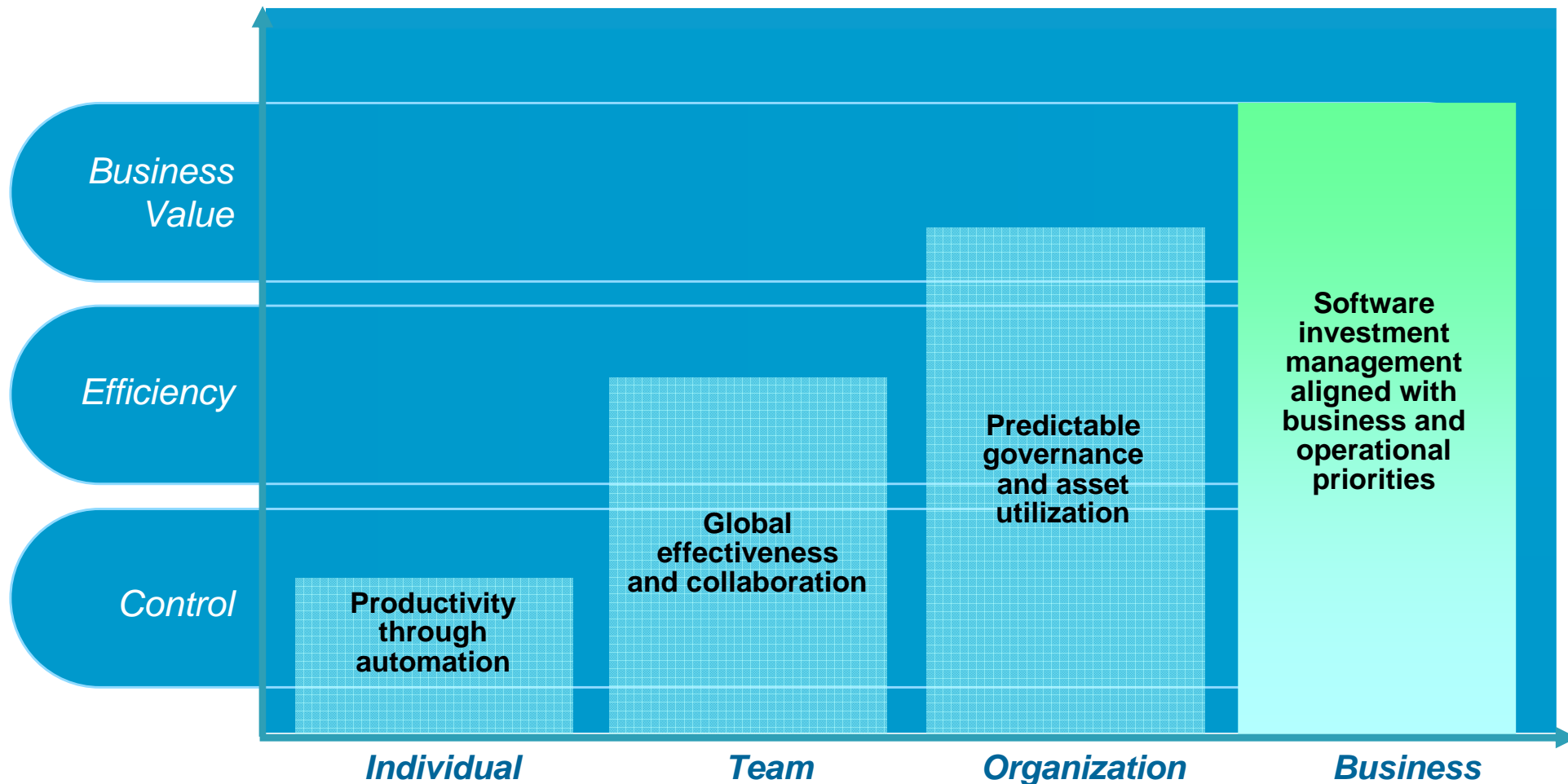
- Greater need for **market experimentation**
- **Blind adherence** to process insensitive to potential business trade-offs
- Need for **agility@scale**

## Business Challenges

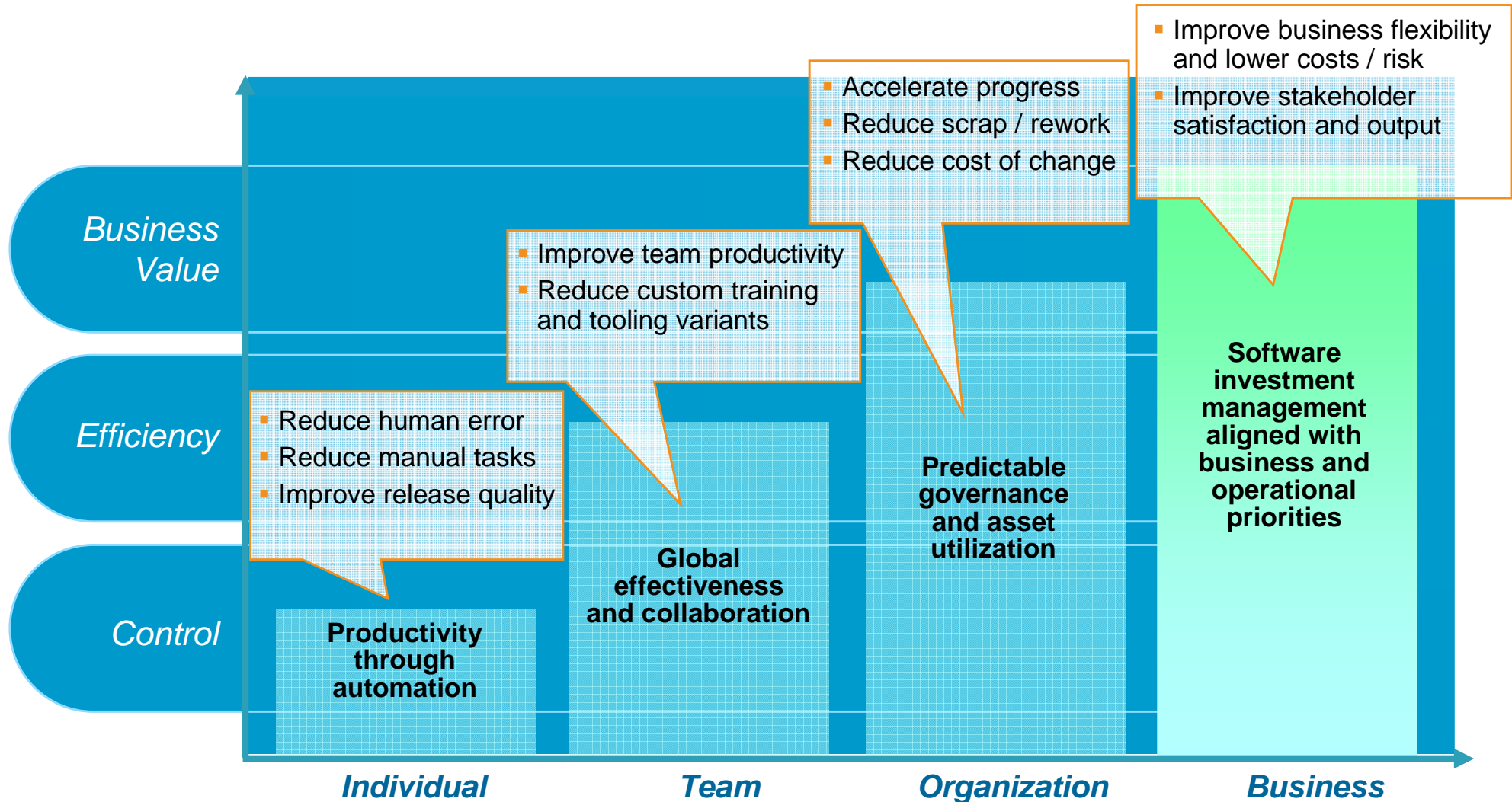
- More granular service functionality and **composite applications**
- **Growing number of assets** including custom, outsourced and packaged



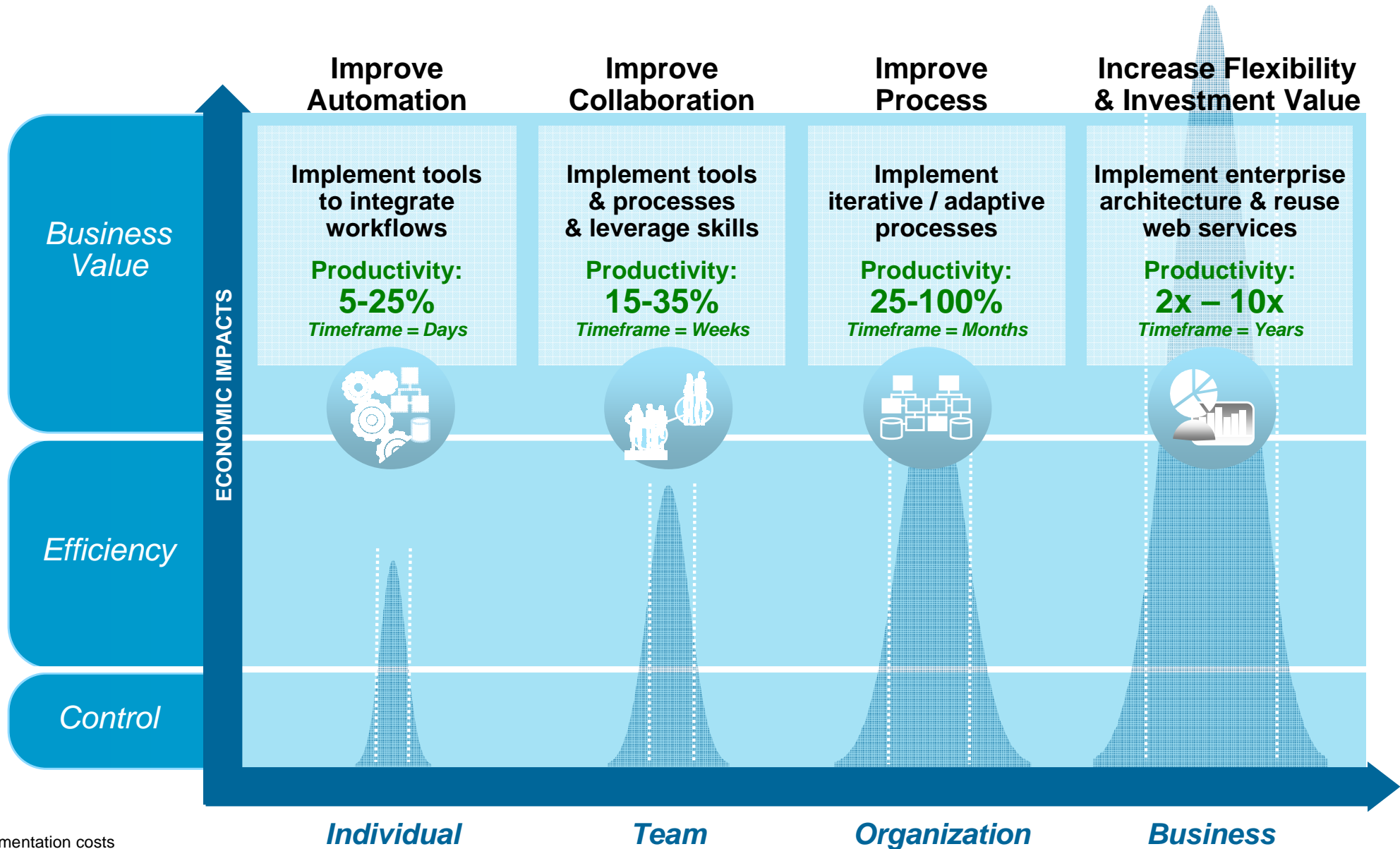
# Requires a maturing approach to software delivery based on *measurement*



# Realized by continuous improvement on *business objectives*



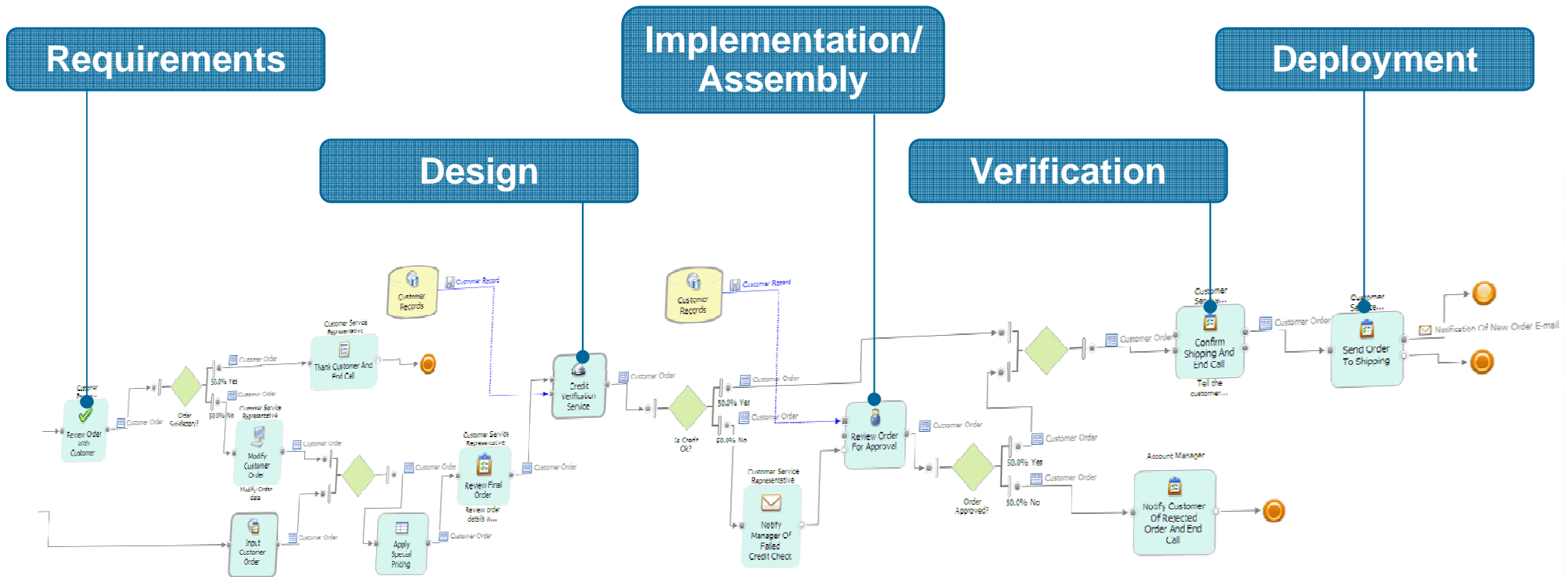
# Invest to manage risks and optimize measured outcomes



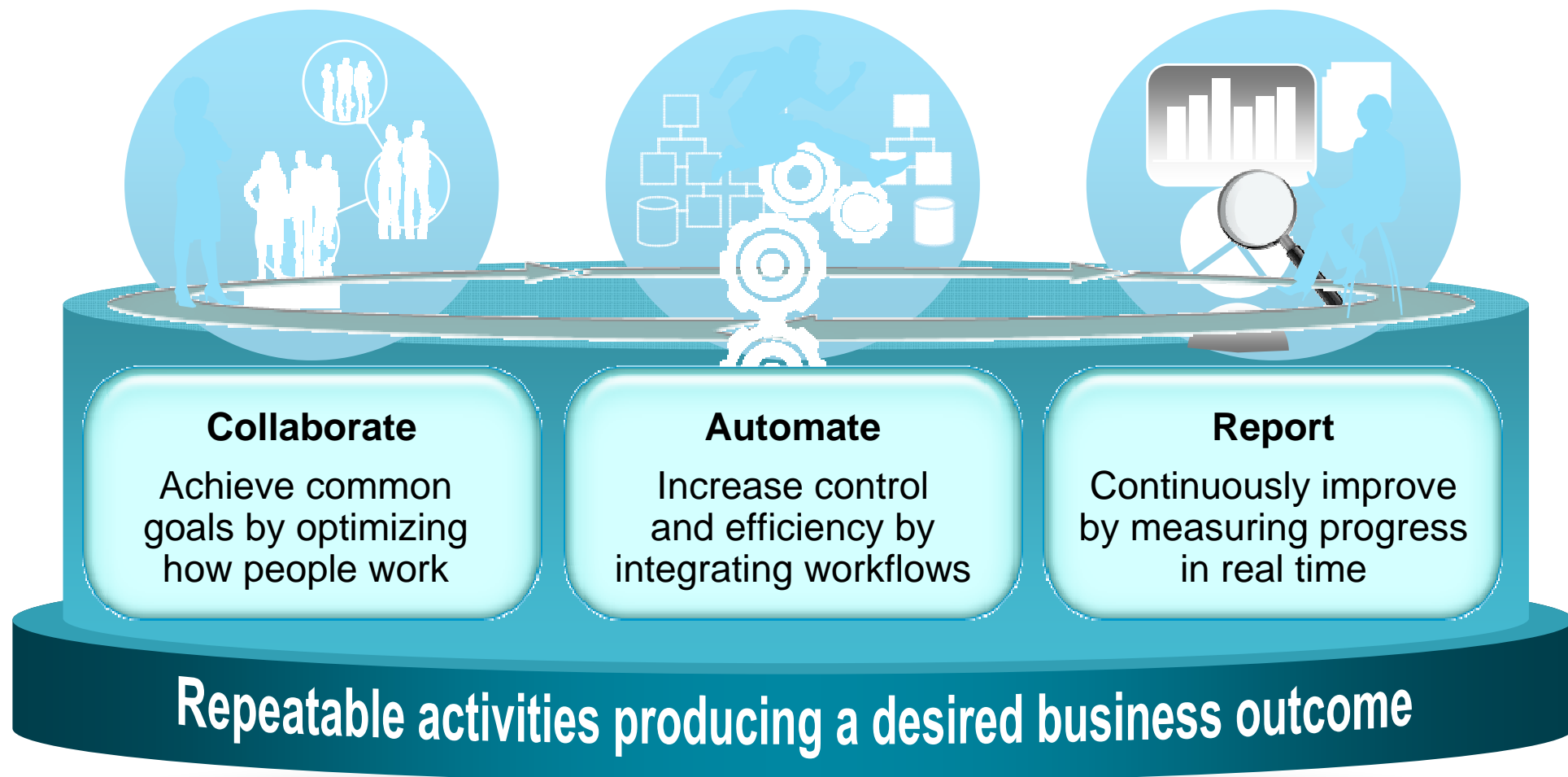
ECONOMIC IMPACTS

Implementation costs are per person per year

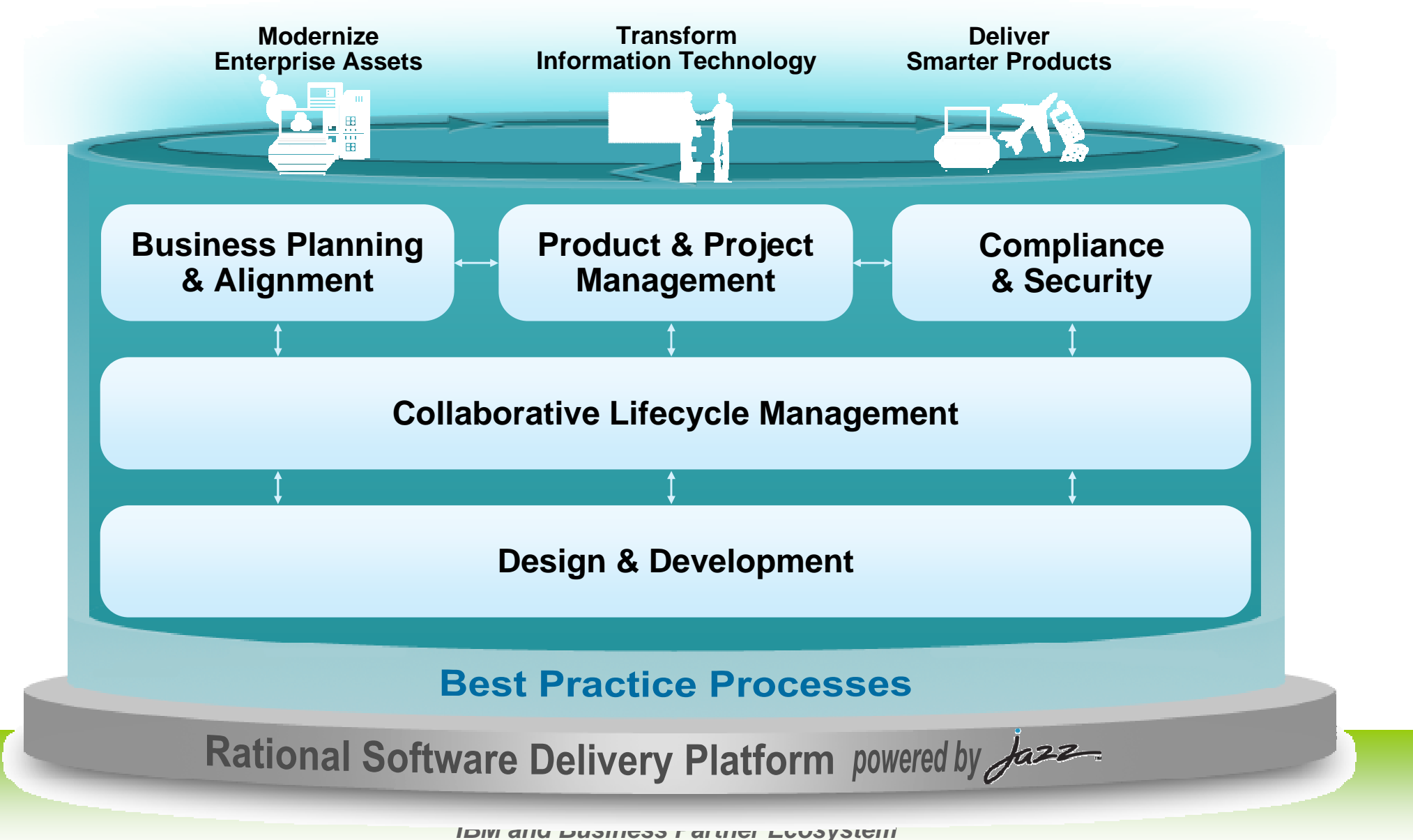
# Successful businesses will manage software delivery as a robust business process, ...



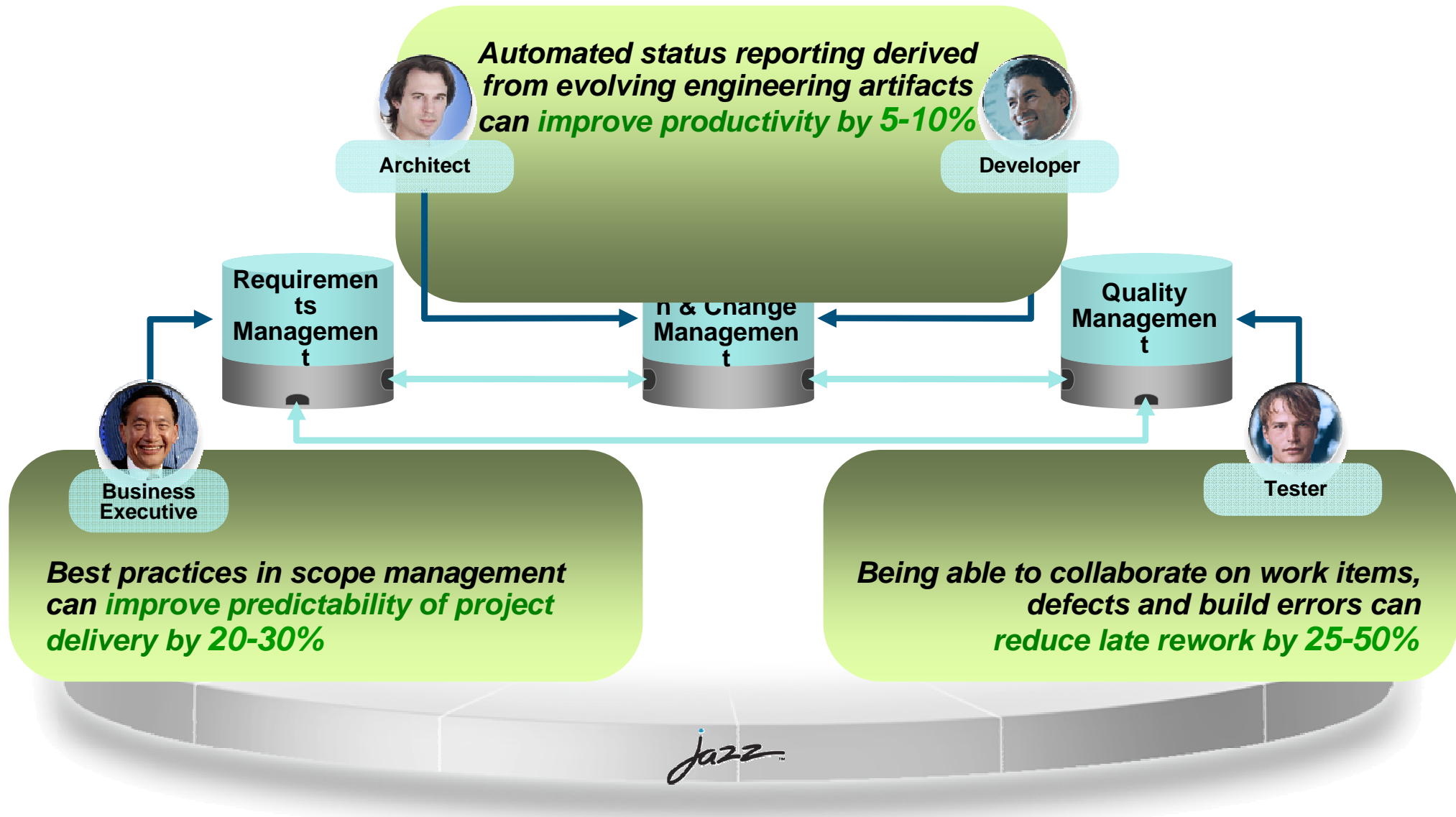
# ...and will adopt a platform that enables iterative improvement



# Rational offers a complete Software Delivery Platform



# Optimizing desired business outcomes with reduced cost and risk



Source: Based on hundreds of client interactions of the IBM Rational Services Organization, as observed by VP Services, IBM Rational

# We've only just begun to uncover what is possible on a smarter planet.

The world will continue to become smaller, flatter and smarter. We are moving into the age of the globally integrated and intelligent economy, society and planet.

The question is, will you be ready?

## ***Rational experience demonstrates how to mature the business process of software delivery***

- We offer an incremental improvement framework
- We deliver a real-time collaborative platform
- It's time to get real – *starting today!*



**Let's build a smarter planet**





**IBM**