



# Digital transformation and cybersecurity— what could possibly go wrong?

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# What is a Digital Business?

One view is ‘demand aggregator’ – asset-light disruptor, born in the digital era, and carrying minimal ‘direct assets’.



The world's largest taxi company owns no taxis



The world's largest accommodation provider owns no real estate



The world's largest phone companies own no telco equipment



The world's most valuable retailer has no inventory



The most popular media owner creates no content



The largest provider of patient data owns no hospitals



The world's largest movie house owns no cinemas



The largest software vendors don't write the apps

Note: Digital businesses do not hold no assets at all. Forbes reports the total assets of these companies as follows: Alibaba, \$43.6B; Facebook, \$40.2B; Apple, \$261.9B; Google, \$131.1B. (Public companies, only.)

# Digital transformation—That's hard.

**transform** ★ [see definition of transform](#) show **all**

**verb change completely**

Relevance A-Z Complexity + Length +

**Synonyms for transform** ☐ Common

*verb change completely*

alter	transfer	switch	sing different tune
convert	translate	transfigure	
mold	commute	transmogrify	switch over
mutate	cook	transmute	turn around
reconstruct	denature	transpose	turn over new leaf
remodel	doctor	make over	
revamp	metamorphose	shift gears	turn the corner
revolutionize	renew		turn the tables

Hewlett Packard  
Enterprise

[https://www.google.com/?gws\\_rd=ssl#q=digital+transformation+2017](https://www.google.com/?gws_rd=ssl#q=digital+transformation+2017) Penske Racing an...

us as business leaders and technology innovators come ...

**Digital Transformation Forums - Forrester**  
<https://go.forrester.com/events/digital/> ▼  
Digital Transformation 2017. Chicago | May 9–10, 2017; Digital Transformation India 2017 ... London | June 8–9, 2016; Digital Transformation Mumbai 2016

**Top 10 Trends For Digital Transformation In 2017 - Forbes**  
[www.forbes.com/sites/.../2016/08/.../top-10-trends-for-digital-transformation-in-2017...](http://www.forbes.com/sites/.../2016/08/.../top-10-trends-for-digital-transformation-in-2017...) ▼  
Aug 30, 2016 - Digital transformation reshapes every aspect of a business. As digital ... Here are the top 10 trends I expect to see in 2017: 1. Adaptability is ...

**Digital Transformation: Predictions For 2017 - Forbes**  
[www.forbes.com/sites/gilpress/2016/11/.../digital-transformation-predictions-for-2017...](http://www.forbes.com/sites/gilpress/2016/11/.../digital-transformation-predictions-for-2017...) ▼  
Nov 3, 2016 - IDC has released its 2017 predictions for digital transformation and for CIOs, in addition to its IT industry predictions. Digital transformation is a ...

**IDC FutureScape: Worldwide Digital Transformation 2017 Predictions ...**  
<https://www.idc.com/getdoc.jsp?containerId=US40526216> ▼  
IDC FutureScape: Worldwide Digital Transformation 2017 Predictions. Nov 2016. Doc # US40526216. IDC FutureScape. Printed Page Length: 16 pages

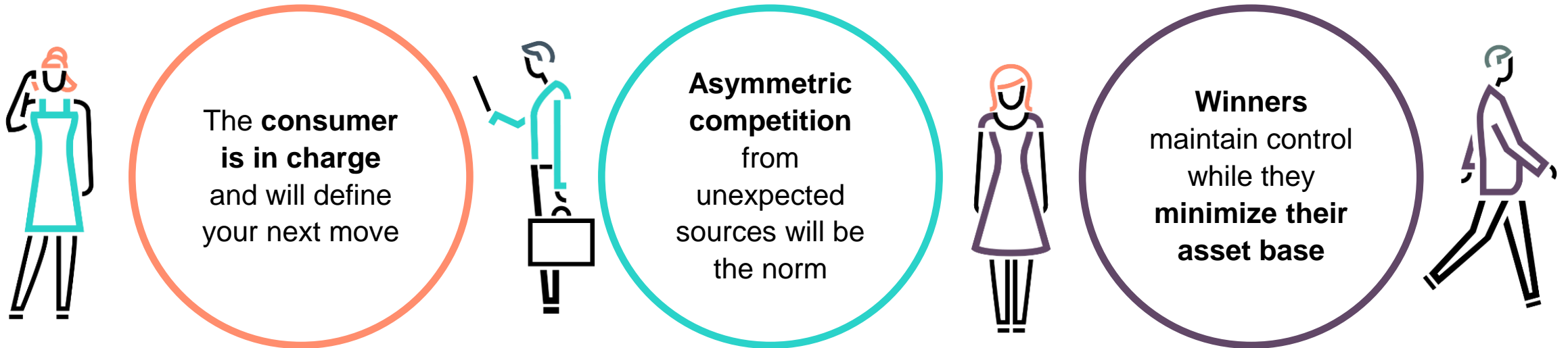
**Gartner's digital transformation, IT crystal ball for 2017: Reading ...**  
[www.zdnet.com/article/gartners-it-crystal-ball-for-2017-reading-between-the-lines/](http://www.zdnet.com/article/gartners-it-crystal-ball-for-2017-reading-between-the-lines/) ▼  
Oct 18, 2016 - The predictions were outlined at the Gartner Symposium/ITxpo in Orlando. The theme for the conference is digital transformation, experiences, ...

**Digital transformation 2017 and beyond: a major wake-up call - i-SCOOP**  
[www.i-scoop.eu/digital-transformation-major-wake-call-2017-beyond/](http://www.i-scoop.eu/digital-transformation-major-wake-call-2017-beyond/) ▼  
Digital transformation 2017 and beyond: from ad hoc and isolated DX to digital transformation as the core of business.

**2017 Predictions: Digital Transformation, CX Top The List - CMO.com**  
[www.cmo.com/features/articles/2016/12/7/2017-predictions-infographic.html](http://www.cmo.com/features/articles/2016/12/7/2017-predictions-infographic.html) ▼  
Dec 15, 2016 - Of the 75-plus responses we received for our 2017 compilation of marketing predictions, five main themes became clear.

# What is digital transformation?

Taking a disadvantage and turning it into a disruptor

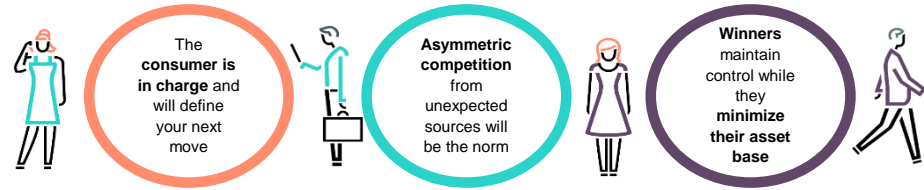


The drive to digital is a powerful business transformation, forcing enterprises to reshape the fundamentals of their businesses to extend, defend, create, and disrupt the ecosystem where...



# Four approaches to digital transformation

Taking a disadvantage and turning it into a disruptor



The drive to digital is a powerful business transformation, forcing enterprises to reshape the fundamentals of their businesses to extend, defend, create, and disrupt the ecosystem where...

## Tangible business value exploited in four ways

New business model innovation

Digital customer experience

Digital business process transformation

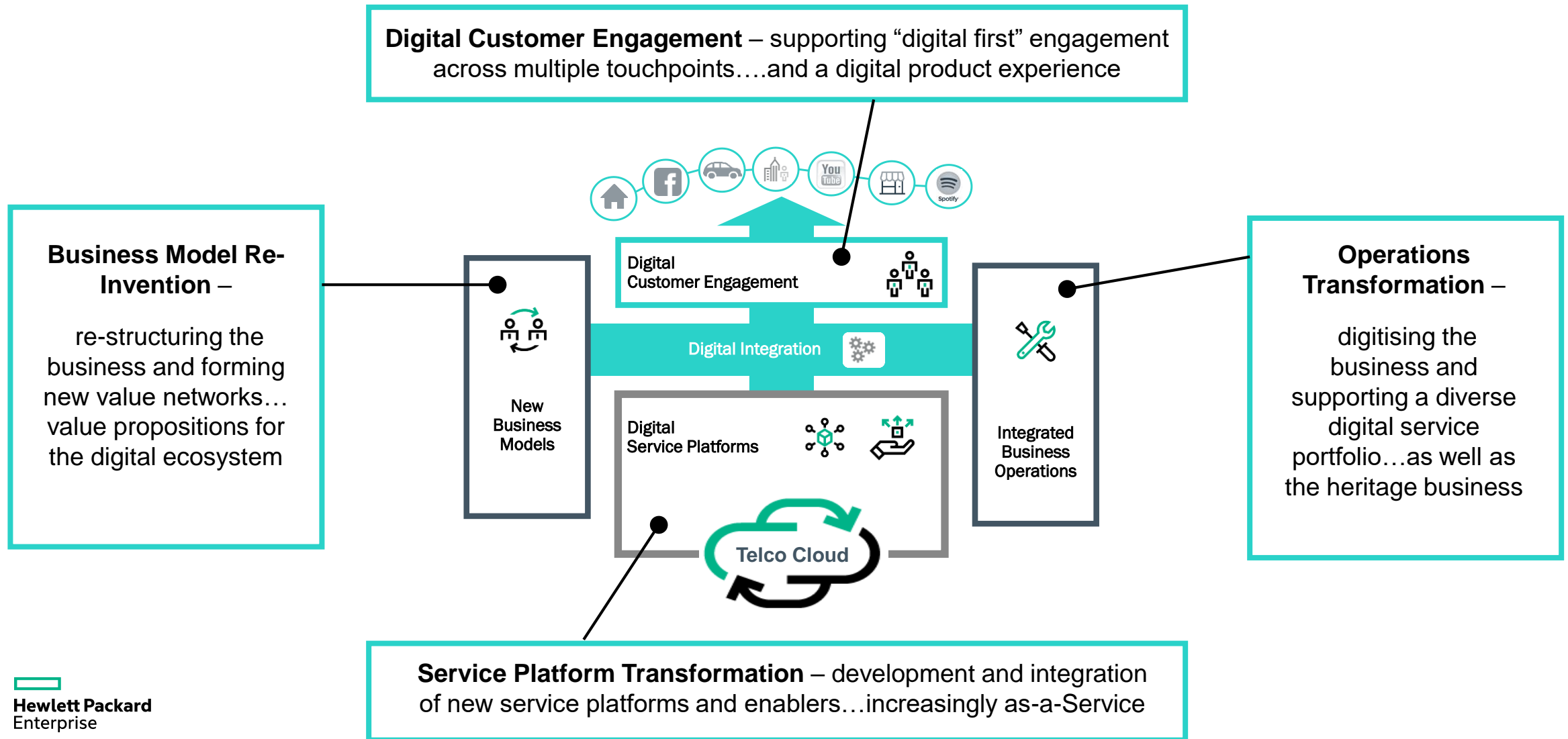
Digital technology enablement

Internal  
Disruption

Potential  
advantage

# Transformation – requires a new ‘Digital Business Context’

Multiple digital transformation contexts require outside-in thinking – analyzing the big picture





# Successful Digital Transformation

## A Case Study: Digital First = Company Magic

# Case Study: Digital transformation was not about...

*Corporate vision:*

*"Taking the friction out"*



- Improving internal business processes
- Leveraging social media to reach customers
- Streamlining supply chains
- Upgrade selling functions and processes
- Improving overall organizational performance

# Case Study: Digital transformation was about...

## Corporate vision:

*"Taking the friction out"*



Rethinking the customer experience

Cross-company discipline

Developing new technology

Expanding offerings

Establishing new business partnerships

# Taking the friction out was about putting the customer in

Upgraded communications

Special code

New wearable tech

Old and new infrastructure

Security operations

Thousands of sensors

Real-time monitoring services

Identity and access control

Internal & customer portals

Automated workflows

New mobile applications

Third party integration

Information analytics

Scalable computing

Digital media management

Integrating a 100 systems



# Digital Magic at the Magic Kingdom











Less deciding, more riding

Explore  
WALT DISNEY World®

List Map

 All Parks & Resorts ▼  All Activities ▼

 Special Experiences  Fireworks/Parades  Character Greetings  Dining Events

Personalized MagicBands—the fun begins



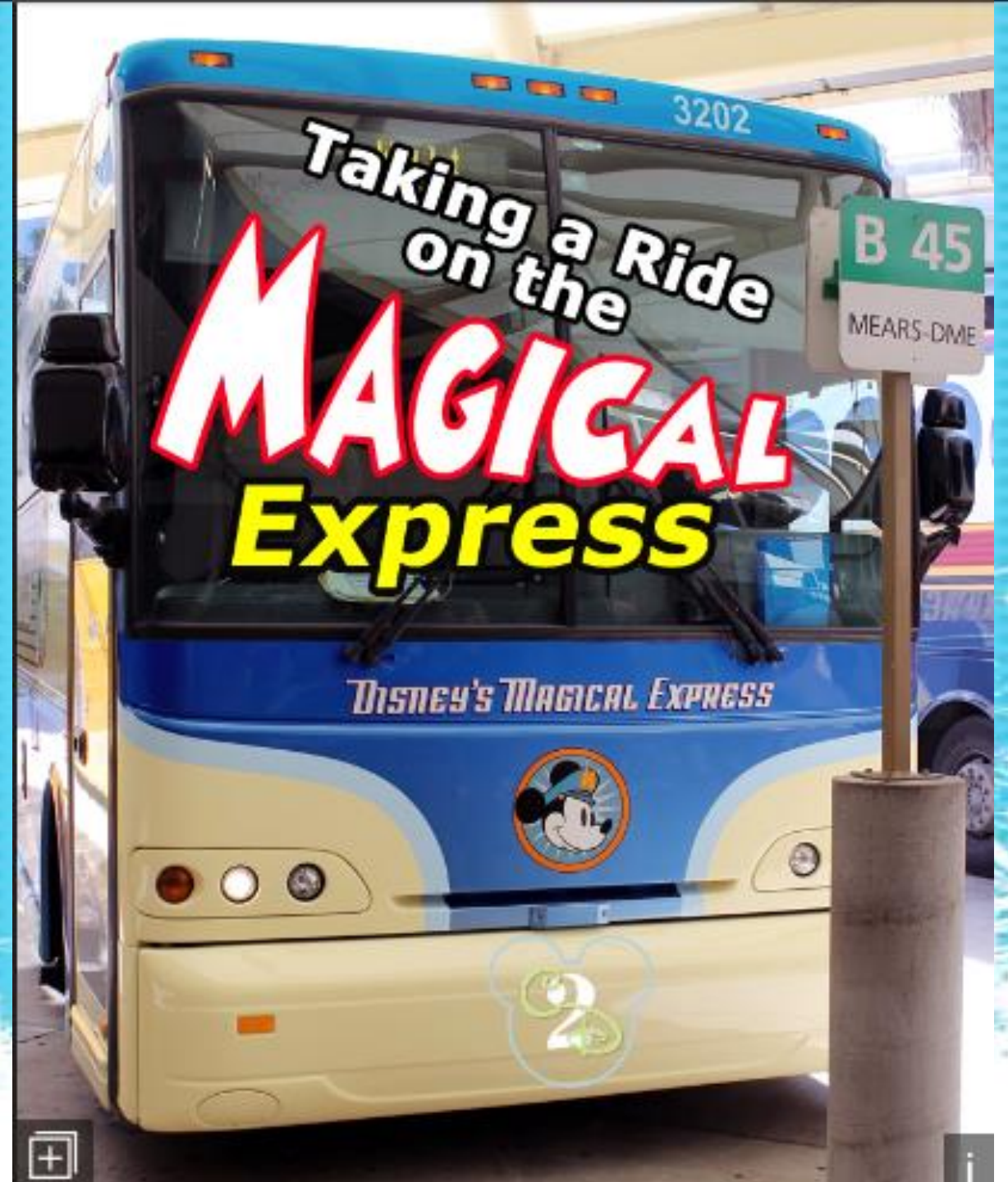
Check your bags—and forget them!





Even the airport knows you're special

From plane to park





Your ticket to ride—around your wrist

Skip to the head of the line



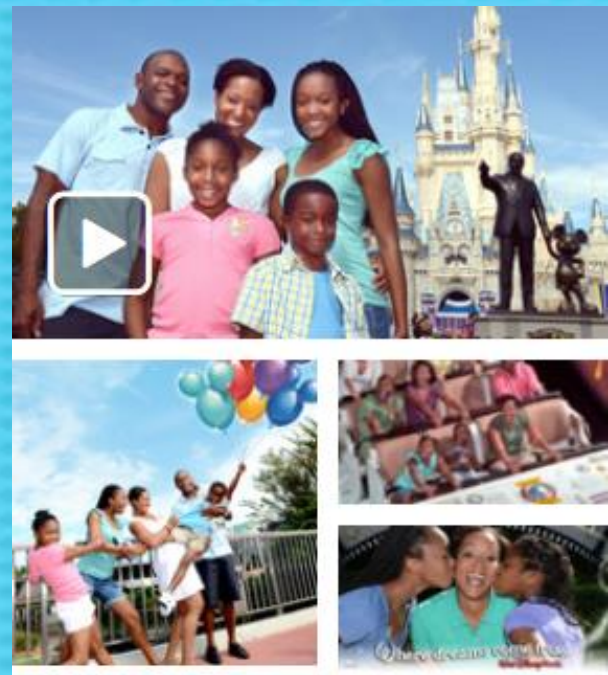


The food you like finds you



Mickey or Minnie greets you by name





Memory makers last forever



Shop but don't drop



Rest up for another day of magic

# Disney's 'Digital Business Context'

## THINKING 2 ... DOING 2

### Business Model Reinvention:

- Travel and Leisure experience
- Orlando airport
- Airlines luggage handling
- Chevy "test track"
- Interactive games that customers design using Disney properties
- Custom experience

## THINKING 1 ... DOING 4

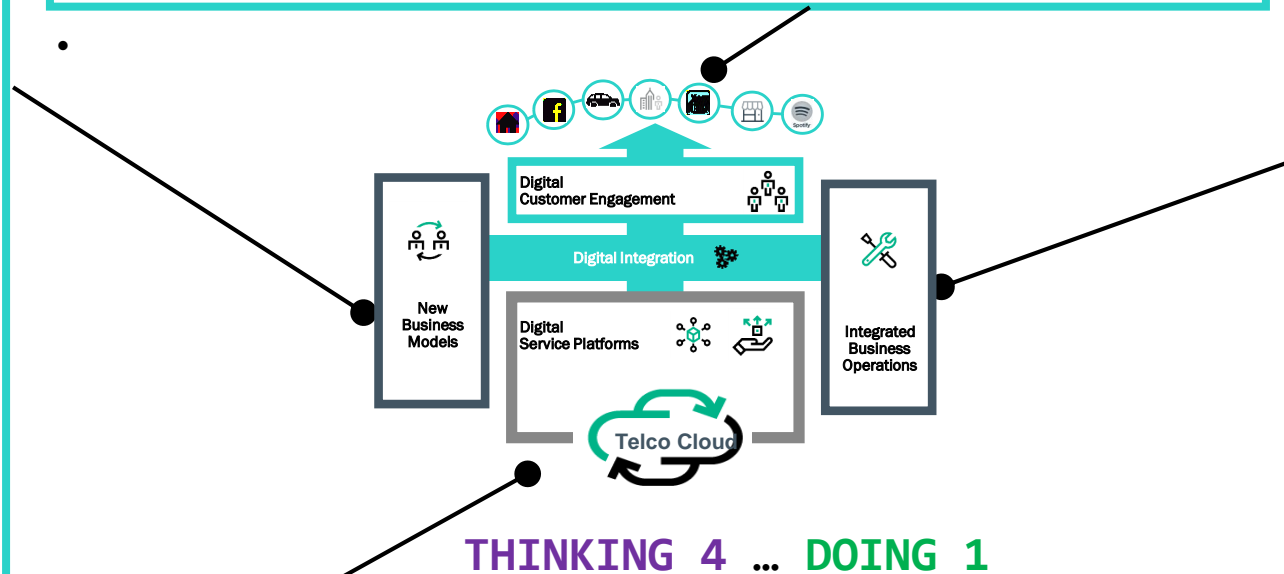
### Digital Customer Engagement:

- Personalized MagicBands
- No contact smart card
- Accessorizing/Bandits
- MyDisneyExperience.com
- Guest mobile interactions
- FastPass+ for rides and entertainment
- Digital photo entitlement
- Test track car designs
- Free Wi-Fi

## THINKING 3 ... DOING 3

### Operations Transformation:

- Workflow design
- "Living blueprint"
- Payment processing
- Cast member mobile apps
- Social media
- Spending limit controls
- 2FA (Band and PIN) > \$50
- Advanced or onsite band purchasing
- Reservations, maps, queue times, itinerary sharing
- Photo/video expiration
- Cast transactions to cast interactions



## THINKING 4 ... DOING 1

### Service Platform Transformation:

- Blueprints & mock-ups
- Massive computing
- Waterproof wearables
- Short-/Long RFID
- 30M Sq Ft of Wi-Fi
- Apps integration
- Digital Photo/video indexing
- Constant data capture
- Real-time analytics
- Trend analytics

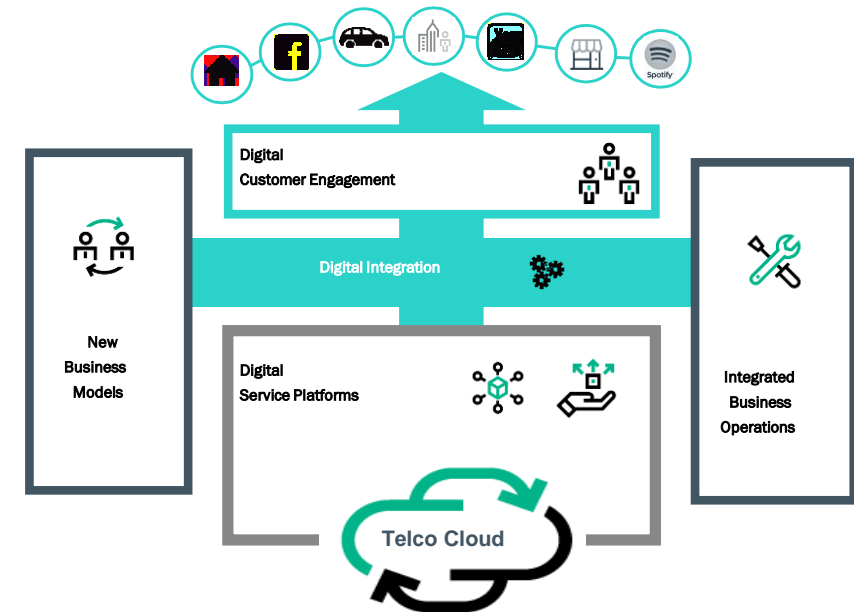


# Digital Transformation and Cybersecurity

It's NOT Magic—It's hard work!

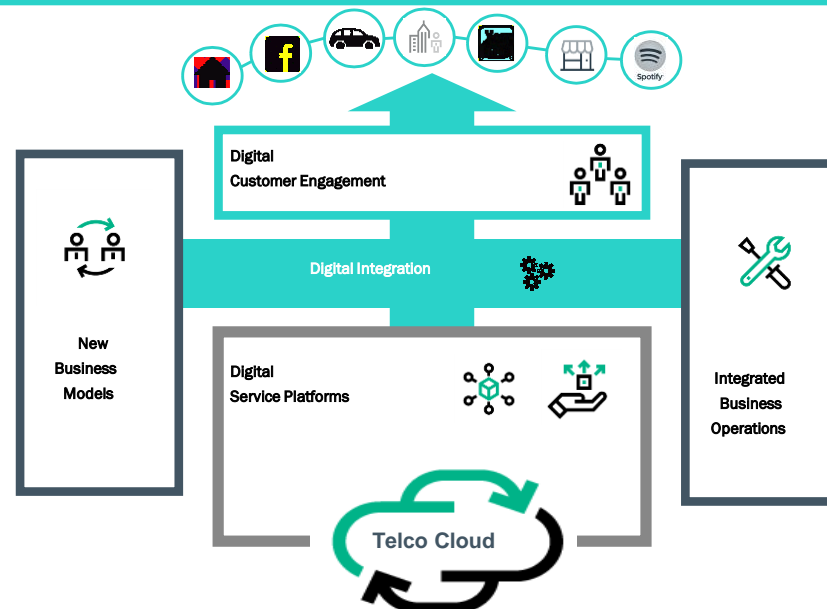
# Cybersecurity Implications of Business Model Reinvention

- **Security governance and visibility**
- **Joint breach planning**
- **Security and privacy risk management**
- **Policy coordination and enforcement**
- **Supply chain security**
- **Secure identity sharing**
- **Shared security metrics and measurement**
- **Legal and compliance monitoring and auditing**
- **Risk-based decision-making between entities**

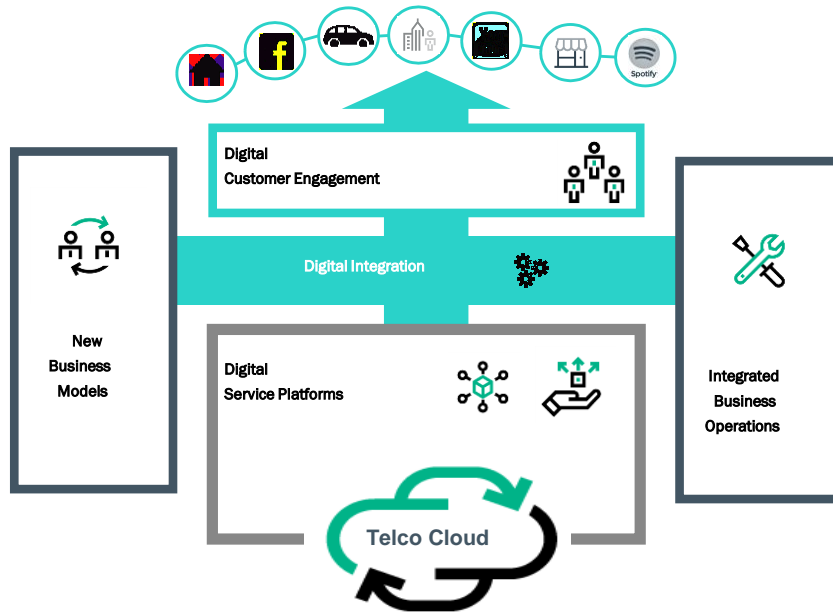


# Cybersecurity Implications of Digital Customer Engagement

- Mobile applications security by design
- Trusted booting and device security
- Secure data communication flows
- Identity management and strong authentication
- Endpoint protection and encryption
- Cloud access security brokering
- Opt in/opt out location-based and other services
- Secure payments processing

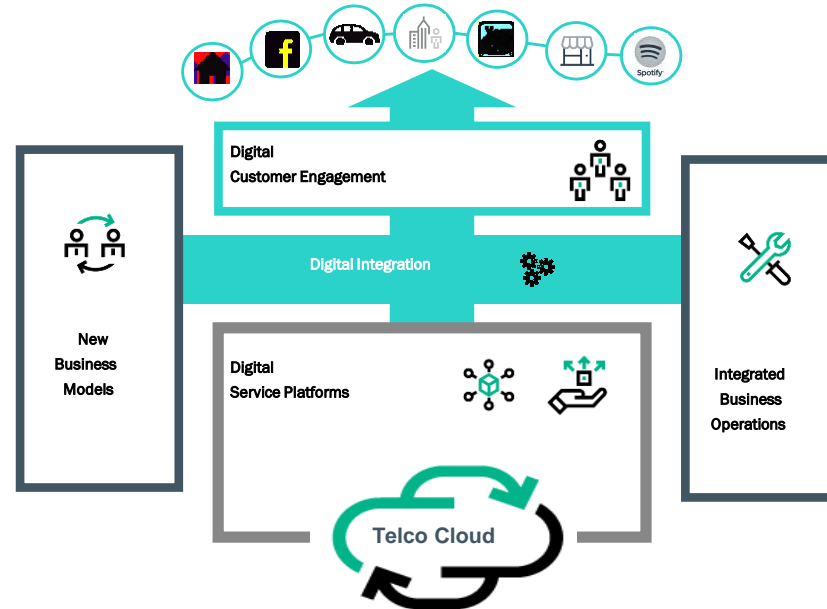


# Cybersecurity Implications of Operations Transformation



- Security and privacy program leadership
- Separation of duties
- Identity management of people, roles, rights (+Multi-Factor Authentication)
- Device recognition and rights management
- Continuity of operations planning, including backup and recovery systems
- Configuration and asset management
- Vulnerability management
- Security incident and response/forensics
- Operational risk visibility and root cause analysis
- Threat intelligence gathering
- Breach exercises
- Intelligence-based decision-making

# Cybersecurity Implications of Service Platform Transformation



- Security architecture and asset classification; asset discovery and configuration control
- Network segmentation and isolation
- Software defined networking and routing
- Network or user anomaly detection, privileged user control
- Security orchestration and automation
- Secure APIs
- Trusted computing platforms
- Data classification and security lifecycle management
- Data protection and encryption
- Secure messaging/email
- Secure analytics platforms, analytics of security
- Red teams, green teams, hunt teams
- Cloud usage security
- Continuous monitoring and forensic readiness
- Architectural resilience
- IOT/Edge security or work arounds

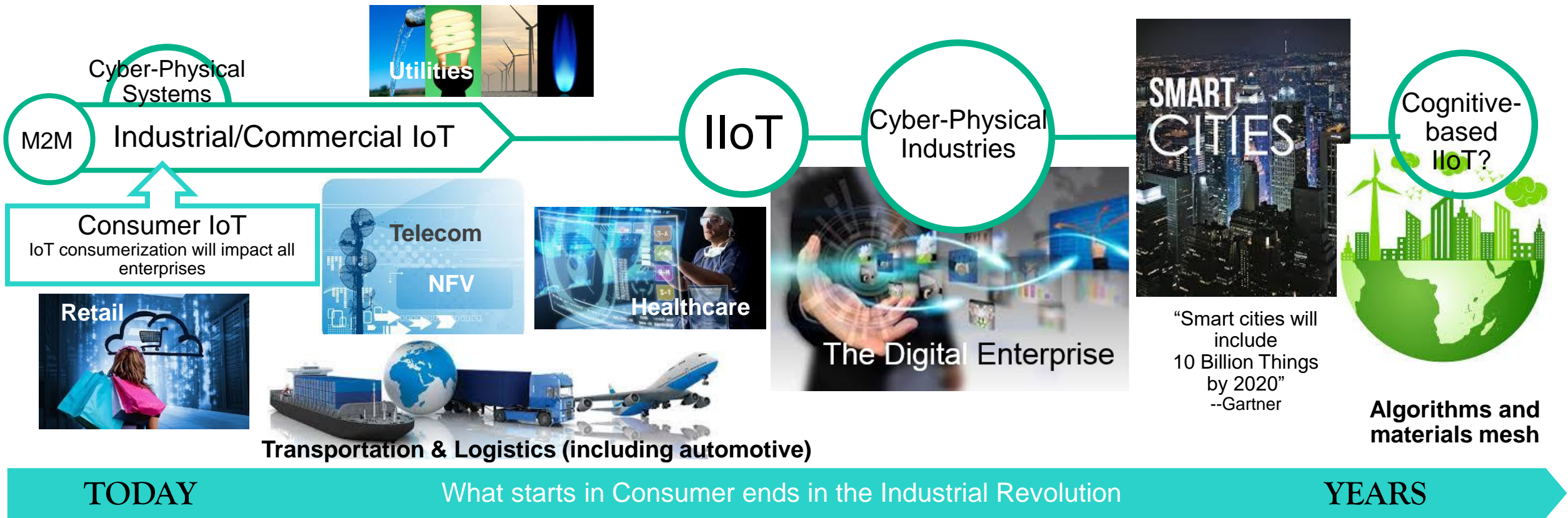


# Emerging Tech Driving Future Transformation

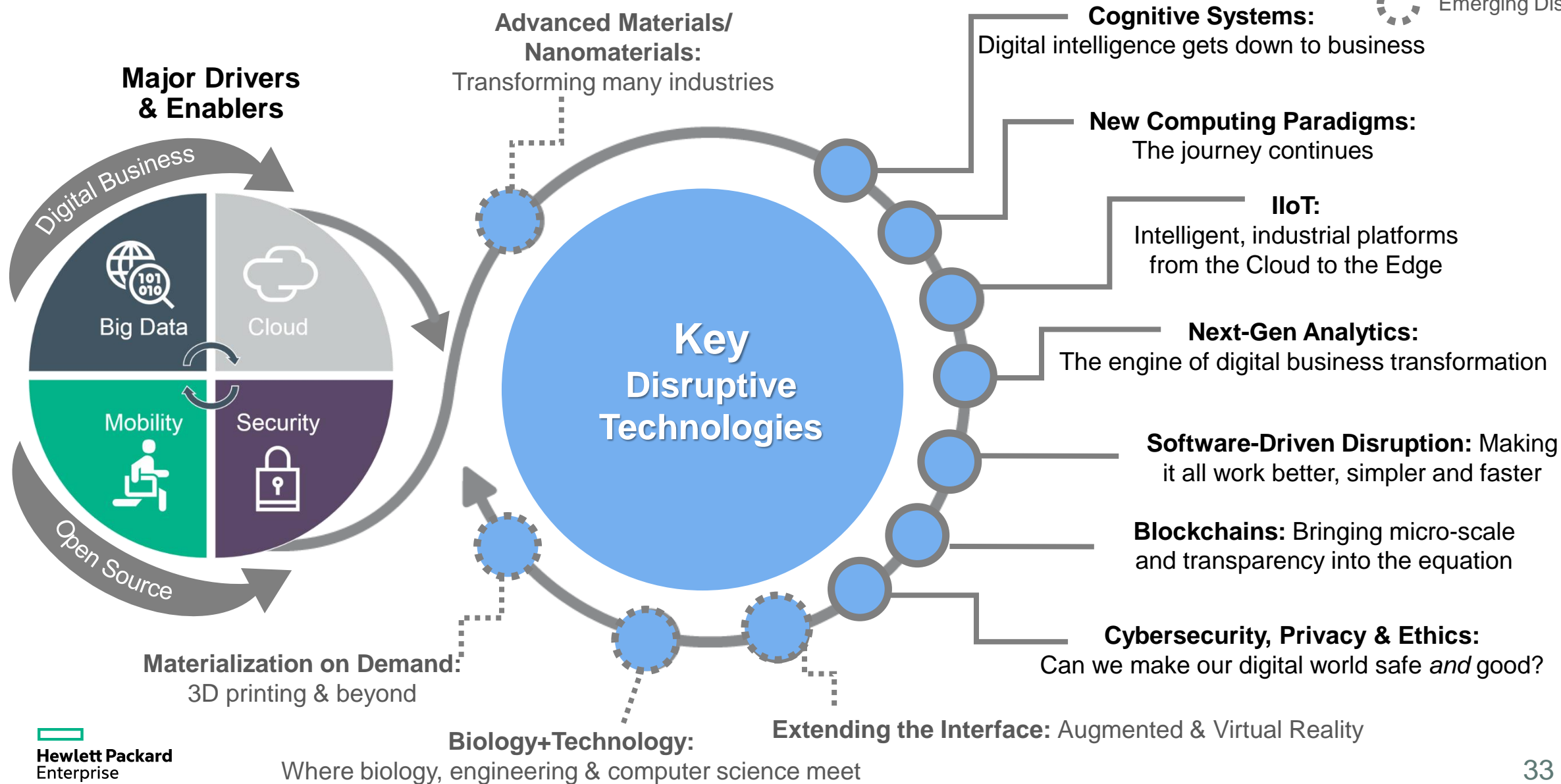
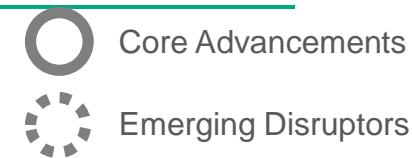
A more secure and private cyberspace?

# IIoT: The rise of digital/cyber-physical industries

Traditional Industries → Transformed, Reinvented or Destroyed → Digital Industries



# HPE POV: Key disruptive technologies





**Hewlett Packard  
Enterprise**

**Thank you**

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Digital X