



Digitization of Business / Finance



Role of CA's in Digital world

The risk of being “Uber-ed”



Digital Shifts that will shape Business landscape



Demand grows more personal



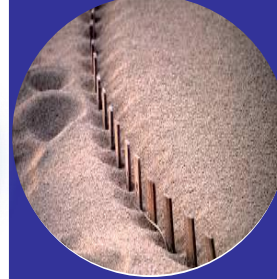
Products become information-rich services.



Data reliance deepens.



Work adapts to machines' broader role.



Internal and external boundaries blur.



Everything accelerates (except large companies).



1. Demand grows more personal



Customers

Customers seek services that align with their preferences and values as individuals (not segments).
Customers demand lower-effort, nonintrusive service.

Components of the Shift—Demand Grows More Personal

Most Significant Related Trends	Related Niche Trends	Beyond 2020
Customized/personalized customer journey Effortless experience Transformation projects Self driven cars - Pizza delivery	Consumerization of B2B Services Social listening Personalized benefits	Curated commerce (I know you and know what you need) Everything on demand Drones, Healthcare

Counter-Forces

Privacy concerns will push back against personalization efforts, as many consumers do not want their every need known or anticipated.

2. Products Become Information-Rich Services



Stand-alone products will be relatively less important to value creation

Customers will demand comprehensive or ongoing experiences with their purchases and will often want to pay through subscriptions rather than up-front transactions..

Components of the Shift

Most Significant Related Trends	Related Niche Trends
Service business model	Concierge services
Brokered services (platform)	Bundling business model
Subscription model	
Caterpillar, GE engines, car sharing	

Counter-Forces

This shift does not imply that products disappear; rather, the delivery methods and sources of value generation will change. Customers will still consume products, but they will increasingly want complementary services to be wrapped

3. Data Reliance Deepens



Data will drive decisions

As the amount of data available for consumption increases, both customers and employees will rely more heavily on data to make decisions. Access to data will help inform purchasing decisions but can affect how quickly consumers and executives take action.

Components of the Shift

Most Significant Related Trends	Related Niche Trends	Beyond 2020
Informed Consumer Peer advice over product information Empowered employees (multiple tools, COE) Online Insurance options and advice, Collaborative banking	Sharing Economy, customer reviews Show – Rooming and Web-Rooming Advertising Aversion	Monetizing Data (Cisco mines customer conversations) Social media replaces telecom Supply chain revolution (Agriculture)

Counter-Forces

The trend toward deeper reliance on data could also be slowed down by concerns about data ownership. Does data belong to the customer who created it or the company that collected it? If, for example, a refrigerator monitors a consumer's purchases, does that data belong to the owner or the distributor of the appliance?

4. Work Adapts to Machines



Automation is moving into more complex, less structured

activities as machines are increasingly able to learn and adapt.

Automation technologies will continue to change work in less skilled activities but also for activities that require greater skill and judgment.

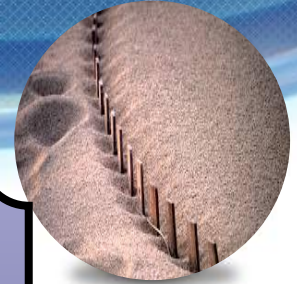
Components of the Shift

Most Significant Related Trends	Related Niche Trends	Beyond 2020
Automation of unstructured work	Next generation Robots (End of low cost labor
Machine learning	RPA, Chatbots (Automated earnings)	Cognitive intelligence – IBM Watson – Cancer diagnosis
High Demand for STEM talent		

Counter-Forces

Headlines about “unemployment driven by robots” are overblown and an oversimplification. Nonetheless, fear or backlash against automation may delay adoption, as will preference for human interaction over machines for certain services, regardless of quality or capability.

5. Internal and External Boundaries Blur



The boundaries across companies, functions and roles are becoming more fluid.

This extends beyond the individual employee to how functions and units within companies interact, and how companies as a whole interact with competitors and partners.

Components of the Shift

Most Significant Related Trends	Related Niche Trends	Beyond 2020
Cross Industry partnerships Flexible working (LinkedIn)	Platform business models	Every worker as a remote worker
Matrix Organizations	Integrator business model (Walgreens has opened up)	
Portfolio careers	Living office space	

Counter-Forces

Despite the rise of flexible, independent workers, their unionization is not likely. In many economies, the pressure that traditional unions already face suggests significant hurdles to these employees' efforts to organize

6. Everything accelerates (Except large companies)



As incumbent companies are pinned down by many operational and regulatory constraints, customers and new types of competitors are able to move faster than ever

Components of the Shift

Most Significant Related Trends	Related Niche Trends
Capital / Asset Light Model	Freemium business model
Competitors	

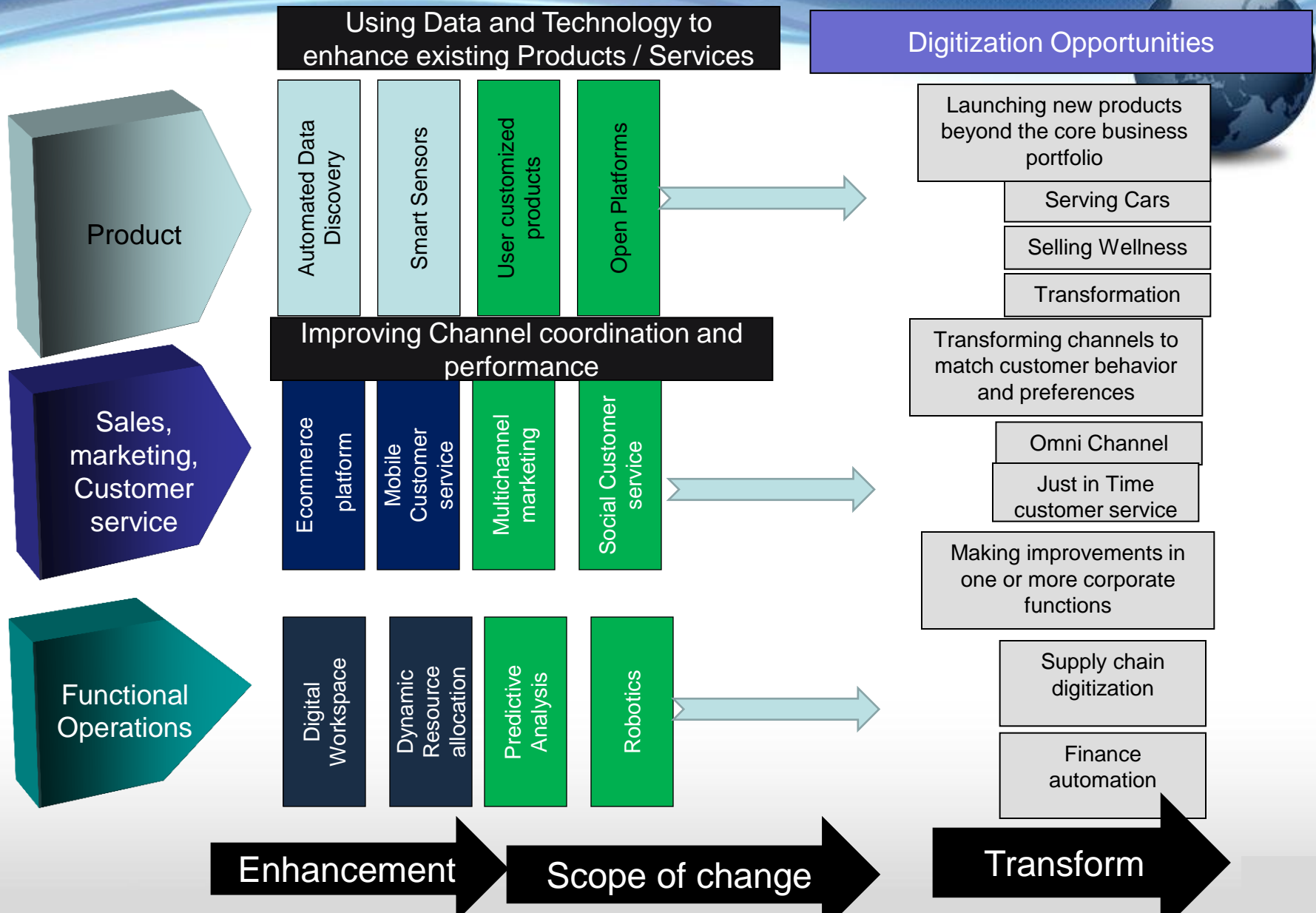
Counter-Forces

Many startups will not successfully steal incumbents' market share because they will fail to find a profit formula after their venture funding phase



What is Digital Business?

What is Digital Business





Some Digital Technologies (Recap)

Technology – Key Digital Trends



Internet of Things

Productivity / Capacity
management by
connecting sites



Cloud

Services model



Big Data
(Analytics based
on data from
multiple sources)

Pricing, Sales, Predictive Models
Euro Kids - New Franchisee - AI / Big data
Cognitive intelligence - Insurance



Artificial
Intelligence
(Digital bank)

Big Data at work in Bank



Big Data, Big Opportunities:
Digital Banking



Technology – Key Digital Trends



5

Massive Computing
Power –
Robotics / machine
learning



6

Digital identity



7

Gamification



Automate Mundane work

Smart License,, Smart cities
etc
GDPR

Animation

New Technologies – Key Digital Trends



Block Chain

Reconciliation, Money Transfer



IPA –
Intelligent
Process
Automation

Cognitive



Conversational
Interfaces

Voice Based Interfaces – Siri
Retail store
HR Onboarding



Augmented
Reality

But Beware of





Members in Industry
How will Finance Change in Digital World

Finance in Digital world

- Transactions will be touchless as automation and blockchain reach deeper into finance operations.
- Realtime metrics and monitoring will be indispensable.
- Workforce is augmented by robots and cognitive agents.
- Talent needed who understands technology and business

The Finance Factory

- With operations automated, Finance will double down on business insights and service.
- Some finance organizations will evolve into full-fledged business service centers / partners
- Routine forecasts by algorithms
- People will spend less time preparing data for analysis, and more time asking "What does this tell me about the business?"

Role of Finance

- Finance goes real time. Periodic reporting will no longer drive operations and decisions
- Both actuals and forecasts can be produced instantly on demand
- Stakeholder expectations for information and insights will increase
- Continuous information
- Finance will place big bets on data scientists
- The mix of talent will challenge old-school

Finance Cycles

Finance in Digital world

- Self-service will become the norm.
- Smart agents will learn what kinds of business information an individual needs, and deliver that information proactively
- Accountants using spreadsheets will be replaced by technology that does 90% of the work without human intervention.

Self Service

- New service-delivery models will emerge as robots and algorithms join a more diverse finance workforce
- Companies will assess the benefits of automation against onshore and offshore operations.
- People will do more human work including exception based and insight driven activities—
- Centers of Innovation
- Finance as a service

Operating Model

- Look for the landscape to shift as new players enter the ERP space with specialized applications and microservices that sit on top of—and integrate with—ERP platforms
- Instead of building customized systems, companies will buy what they need from the growing marketplace of apps and microservices
- Simplify and Standardize

Transform Finance ERP

Finance in Digital world

- Role of Chief Data Officer in finance
- Quality of Data need to improve with governance and single source of truth for MDM
- Continuous data improvement (social data, trend analysis etc)
- API driven data standardization

Data Summits in Finance

- Make sure your new hires represent the future you're striving for (Data scientist, Business analyst).
- People should be able to contribute to elevating the value of Finance in terms of communication, impact, and influence
- The future may require more physical proximity for teams, especially in the early phases of projects and work planning

Workforce and Workplace



Members in practice
Changing Role of CA's

Members in practice

Audit continues to be important but auditors need to remain current, unlearn and learn

Client world is changing

Understand new business models and apply standards

How do you incorporate the new digital world in audit procedures

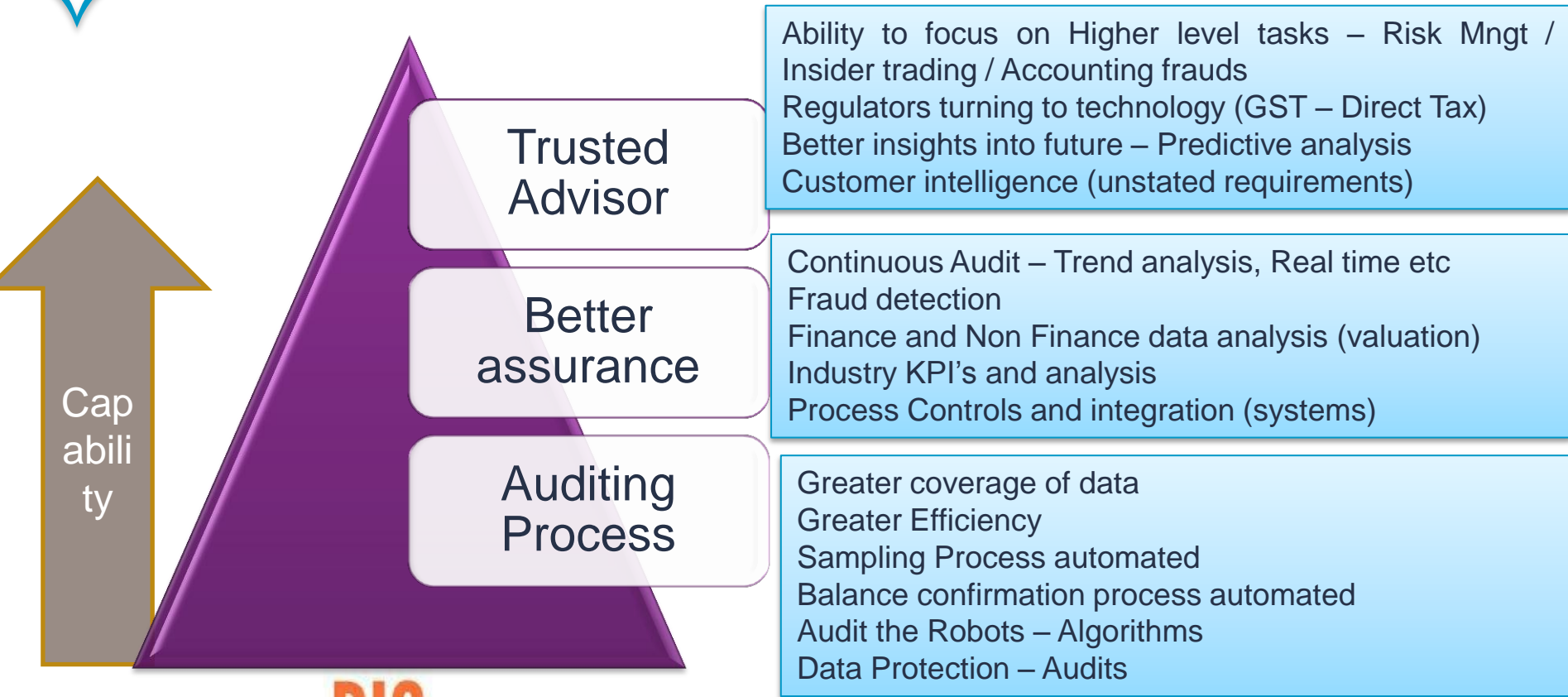
- **Drones are an example of how technology can be incorporated into auditing.**

- <https://youtu.be/R1qtwoPde0U>

Drones are an example of how technology can be incorporated into auditing.



Auditing in a Digital World



BIG DATA and Robotics



Auditing in a Digital World - Opportunities

Artificial Intelligence (AI)



This is very nascent technology and auditors may need to audit (Eg. Understanding customer call and taking action)

- Algorithms
- Data structure and Data sets used for decision making
- Period revision of logic in AI

Internet of things IOT

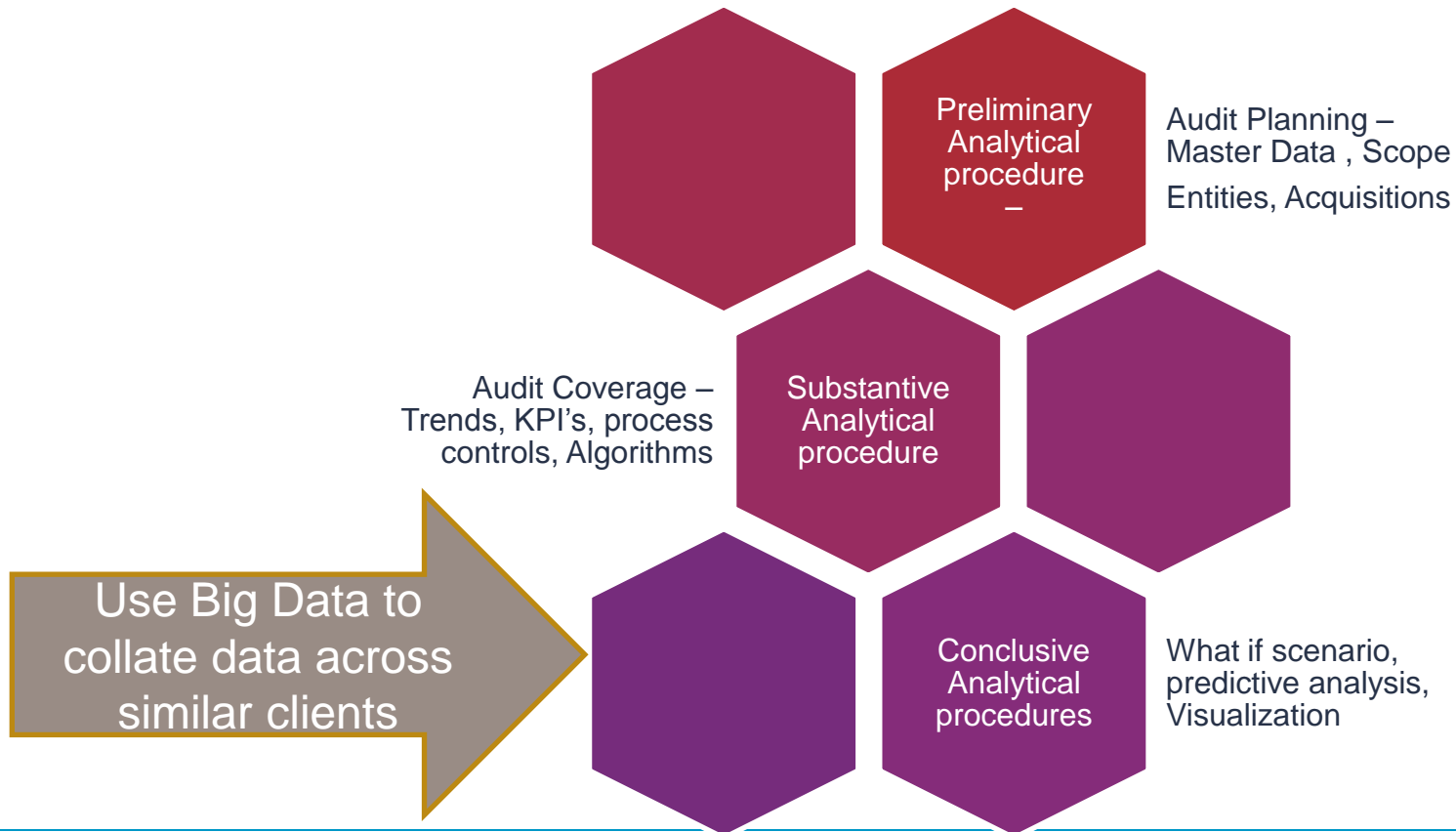


Cyber Security Audit
Data Leakage
Insider threats (Resigned employees access controls)
Mobile technology audit (Encryption)
Data ownership and governance

Develop Advanced ADA - Audit Data Analytics

Audit Data Analytics (ADA) is the science and art of discovering and analyzing patterns, identifying anomalies, and extracting other useful information in data underlying or related to the subject matter of an audit through analysis, modeling, and visualization for the purpose of planning or performing the audit.

<https://www.youtube.com/watch?v=5qhW-u0oAc0> – Audit Analytics in action



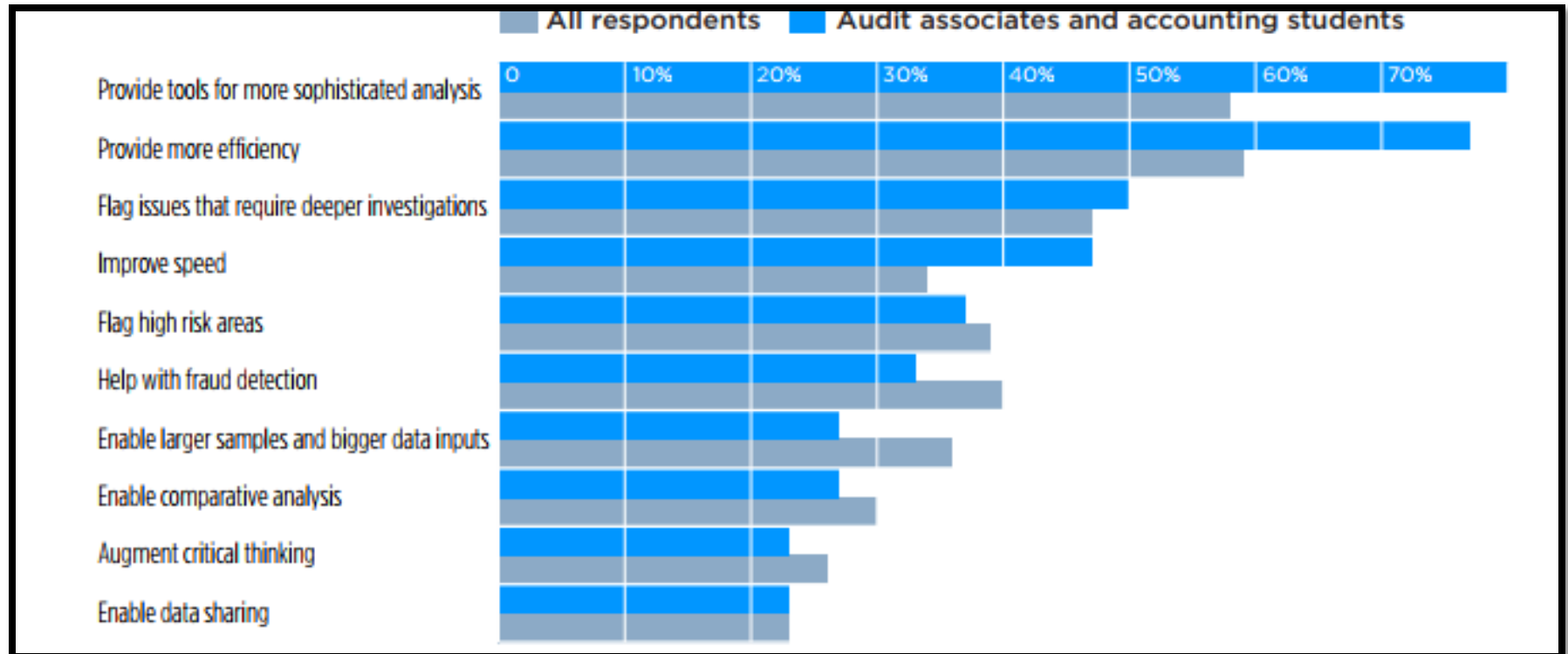
Audit Analytics in action



New Practice Opportunities in Digital world

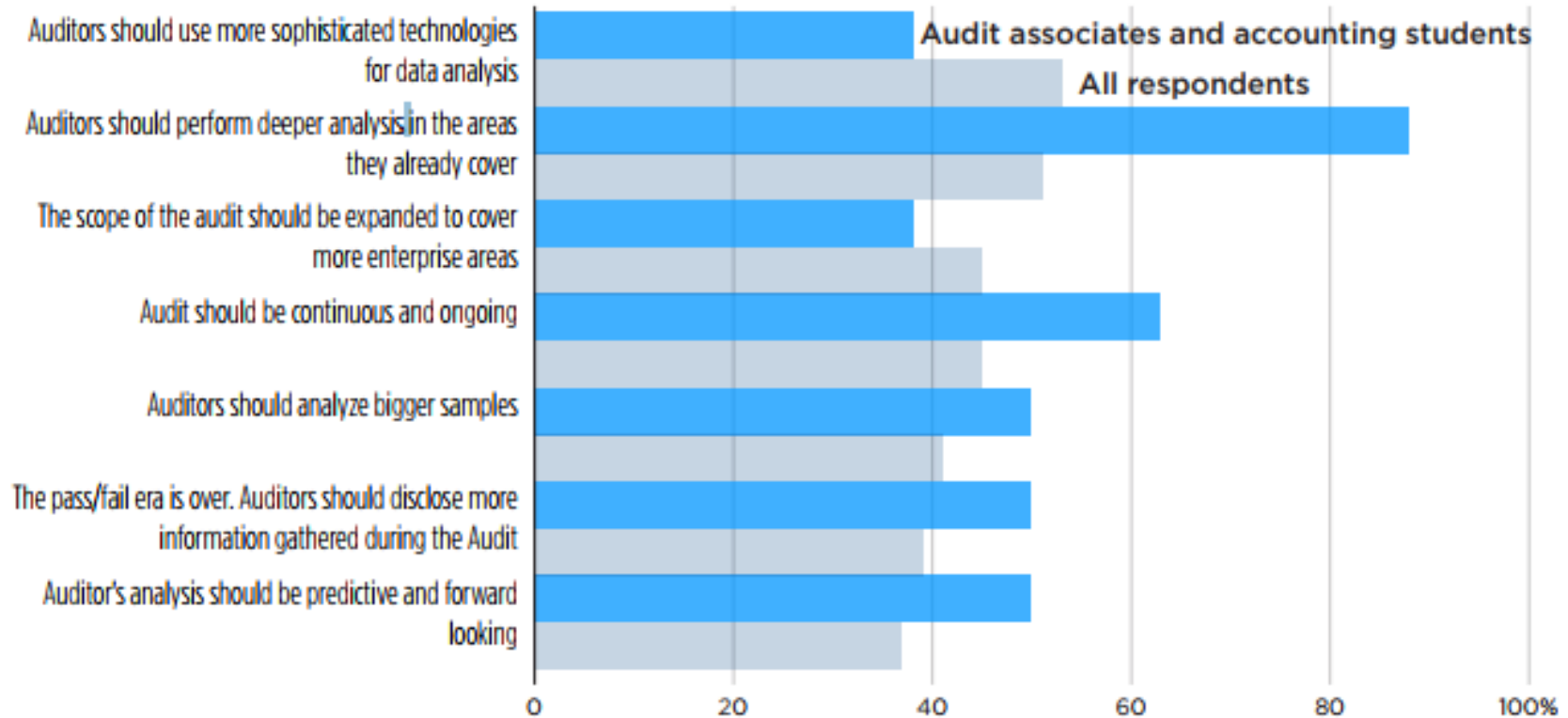
- Standardization of global accounting practices / process for MNC's / conglomerates
- Digital Transformation - Readiness
- Cyber auditing
- Internal audits using Advanced Data Analytics platform
- Revenue leakage / Automated Contract Management audits (with ecommerce / discount campaign)
- Financial feasibility / Business case of Big Data / Robotics / Block Chain implementation
- Valuation of Digital assets
- Privacy Audit / Audit Trail effectiveness – Block Chain
- Testing of new launches – Certified by auditors
- Data sets / Architecture and Algorithm setup for Big Data and Robotics
- Data governance and ownership audits

KPMG Survey - What is the impact of technology on the audit process?



KPMG Survey – The future of Audit

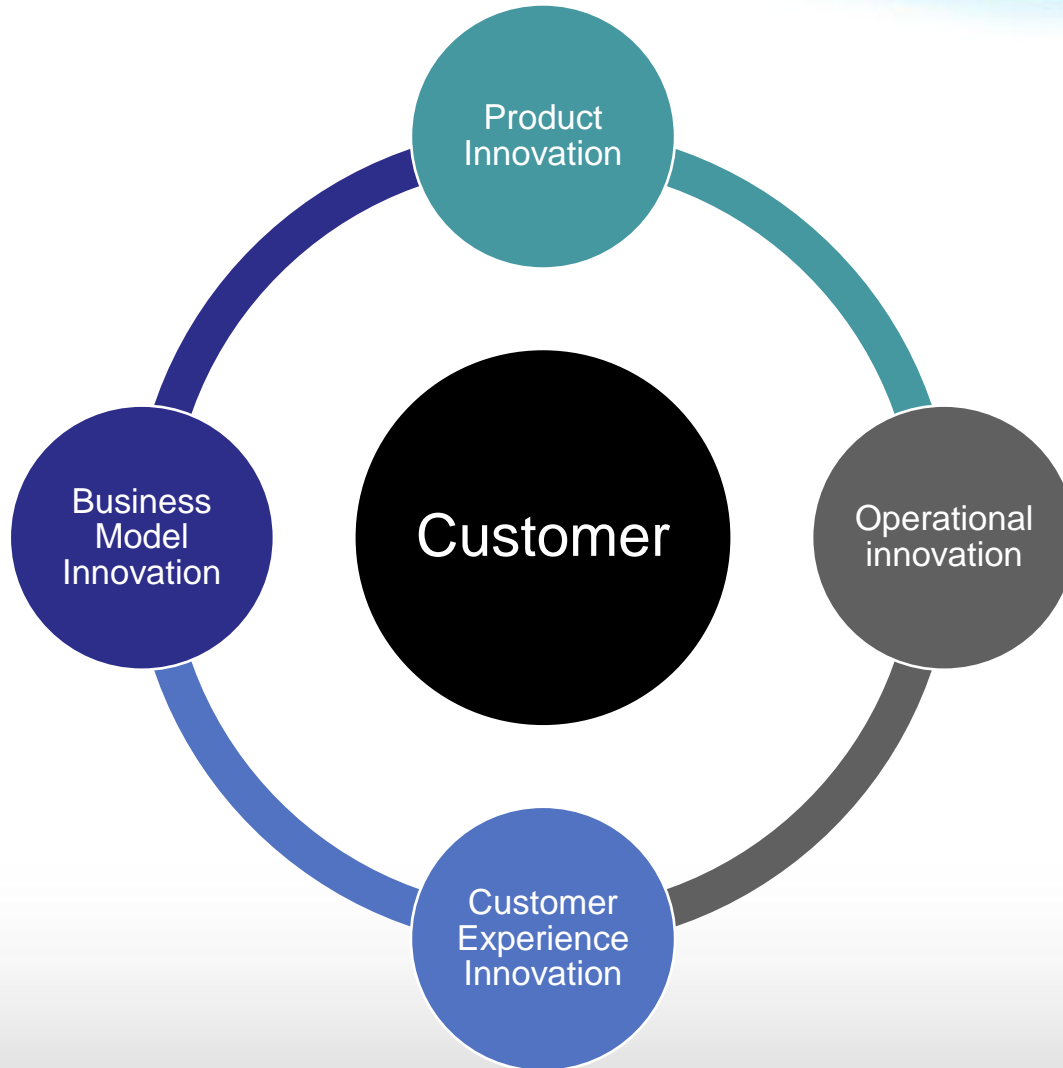
1.1 How should the role of the auditor evolve?



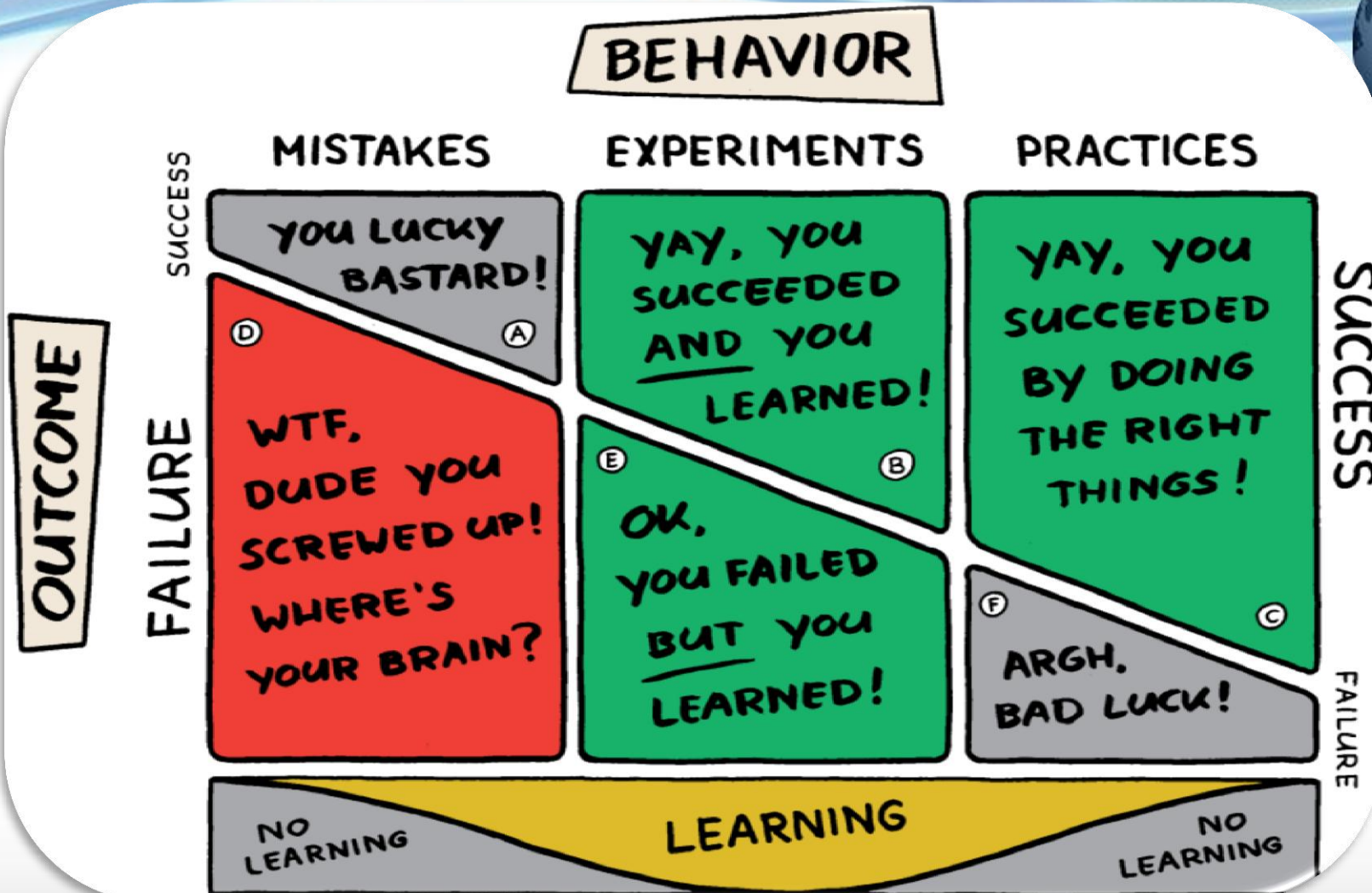


To Conclude – Key Enables for Transformation

Customer Centricity



Culture Centricity



Best Practices + Experiments = Learning

Risk Taking Mindset



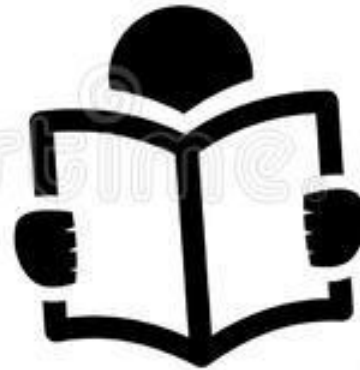
EXPERIMENT



FAIL



LEARN



REPEAT





in 2020

1. Complex Problem Solving
2. Critical Thinking
3. Creativity
4. People Management
5. Coordinating with Others
6. Emotional Intelligence
7. Judgment and Decision Making
8. Service Orientation
9. Negotiation
10. Cognitive Flexibility

in 2015

1. Complex Problem Solving
2. Coordinating with Others
3. People Management
4. Critical Thinking
5. Negotiation
6. Quality Control
7. Service Orientation
8. Judgment and Decision Making
9. Active Listening
10. Creativity

+ Deep Domain Expertise
+ Tech Tools Skills
Employee Initiated Self Serve Model

Finally



In my opinion

*“It’s not so much about Future of Finance, but
about Finance of Future”*



Questions?