

Delivering Digital Transformation

Alan. W. Brown

**Professor, Digital Economy
University of Exeter Business School**

a.w.brown@exeter.ac.uk

Key Topics

Delivering Digital Transformation



<https://AlanWBrown.gumroad.com>

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Surviving and Thriving in the Age of AI



<https://SurviveAIBook.com>

Insights into AI-at-Scale



<https://Dispatches.AlanBrown.net>

Topics

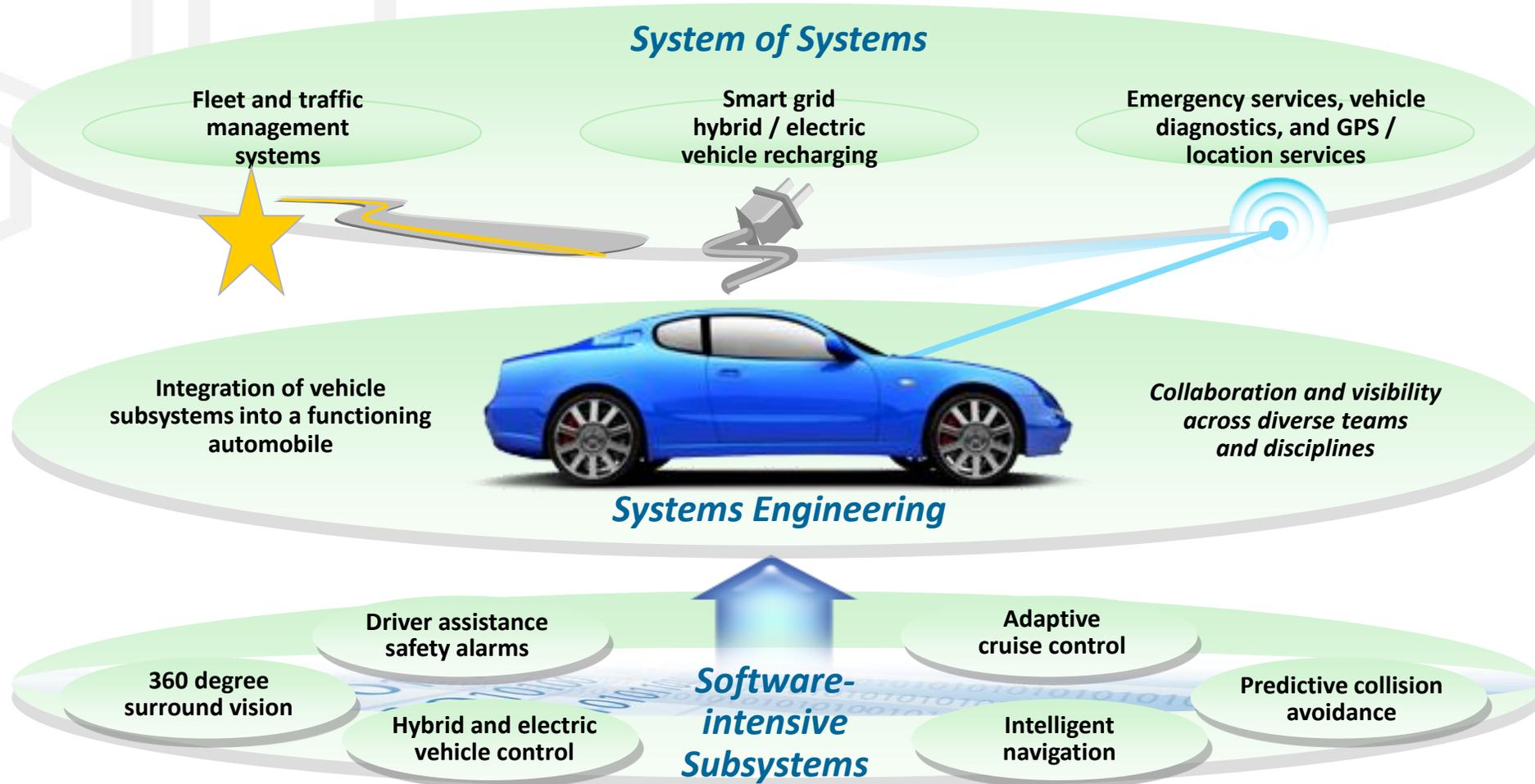
- Digital Disruption
- Digital Innovation
- Digital Transformation
- Digital Leadership



What is this?



What is this?



How Many People Do You See?



<https://www.youtube.com/watch?v=sjAZGUcjrP8>

What Has this Done to the Car Industry?

Telematics (172 Companies)
 MOBILEYE, Jasper, Telogis, HUGHES, GREENROAD, Airbiquity, CLOUDCAR, Zobie, ETHERIOS, Aeris, THE FLOW, ZONAR, ROADSENSE, ThinAir, NECOM, CarMD, teletrac, TOMTOM, Beek, DRIVEN

Ride Hailing (66 Companies)
 Lyft, Shuddle, MOOBITAXI, bandwagon, CabForce, TaxStartup, HAIL, mytaxi, Dispatch, Sidecar, Taxi

Location/Mapping (106 Companies)
 dash, deCarta, viamante, Urban Mapping, MAPPLS, TELENAV, here, intuvi, SPS, Safety, Track, multi map, GPS, MAP.TO

Car Sharing (49 Companies)
 zipcar, RelayRides, Zoom, tamyca, wadeeny, WhipCar, SunnyRide, pine, drivy, amovens.com, car2go

Connected Car
 Contact info@venturescanner.com to see all 622 companies

Fleet Management (92 Companies)
 SMARTDRIVE, ConnectM, INRIX, xata, Fleet Management Solutions, BigRoad, gofleet, Fuel Express, SageQuest, FieldLogix, e-drive, Trafflog, TELARGO, celtrak, FleetRisk, SKY GUARD, Advisors, SafeFleet

Infotainment (42)
 REAL VC, npa, ALPINE, NUANCE, Open Automotive Alliance, FEV, ARICENT GROUP

Smart Parking (41)
 Primo Spot, spoton, ParkMe, Opsit, carenta, SpotHero, Pango

Auto Clean Tech
 achatesPOWER, RYPOS, WRIGHTSPEED

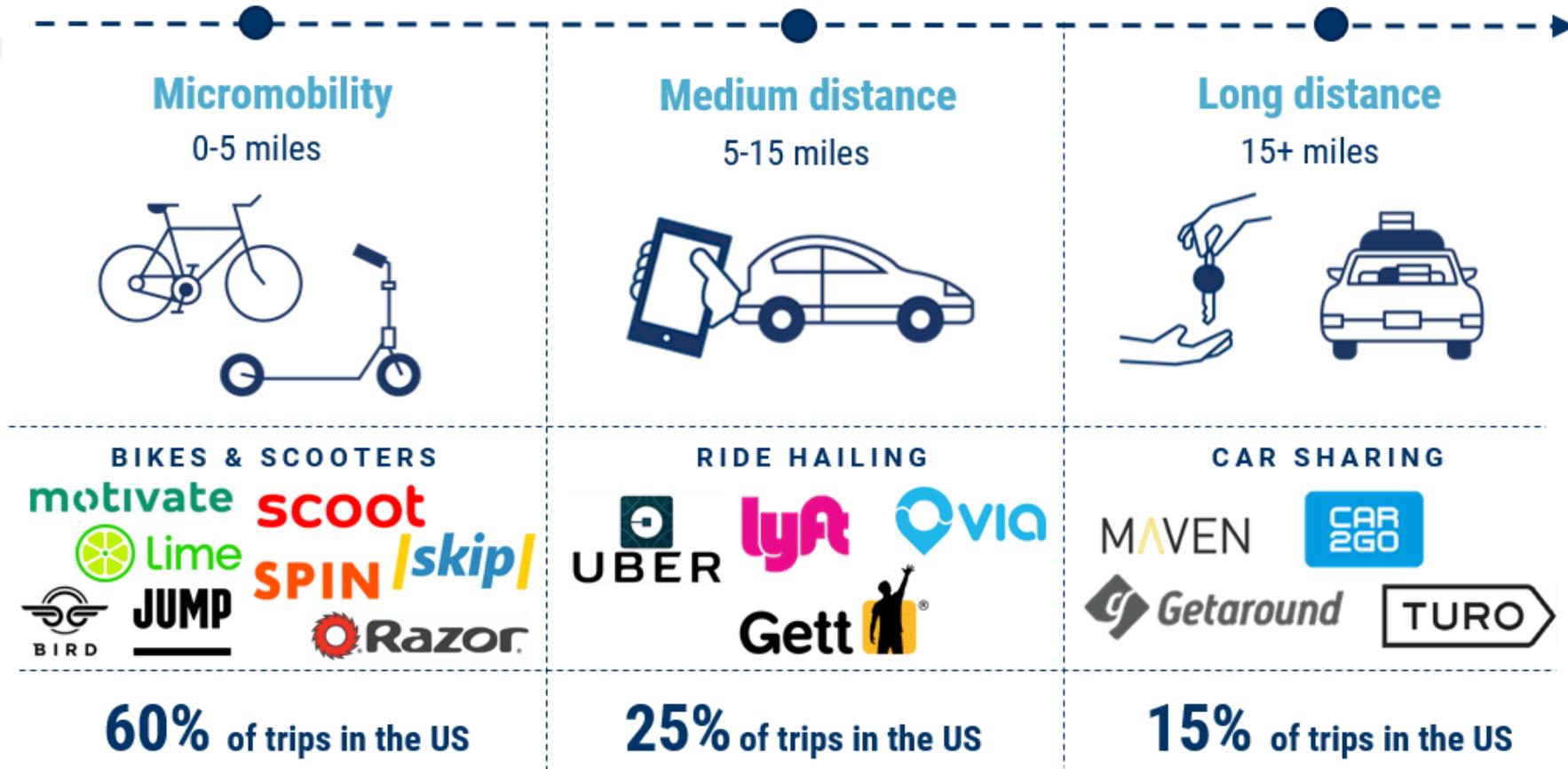
Enhanced Ownership
 beepi, ingenie, Broker, bright box, cars active, Instamotor

Public Transit Tech
 mavvit, masabi, Scopia, STOP, unwire, TransitChatter

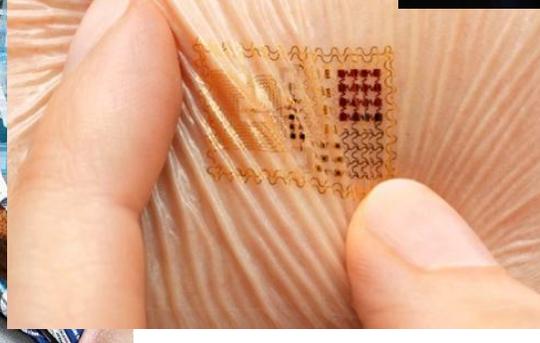
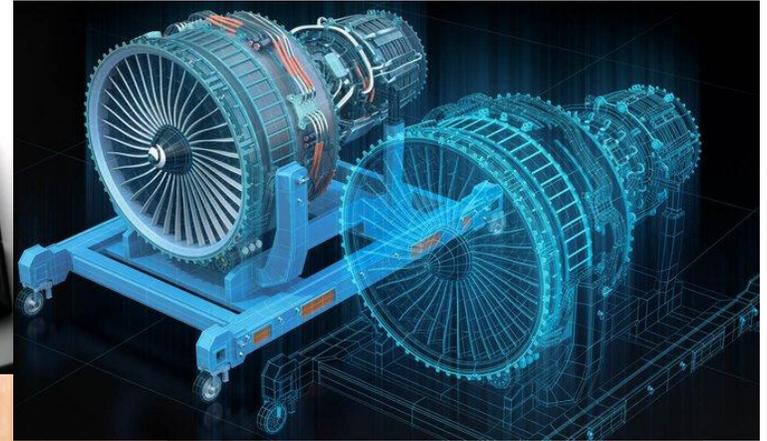
Intelligent Transit
 SENSYS, CTRAFICAST, Aldis, RacoWireless, mad, OpenXC, avtodoria, Savari

Venture Scanner

How is it Changing Mobility Services?



Welcome to the Future!



Activity 1

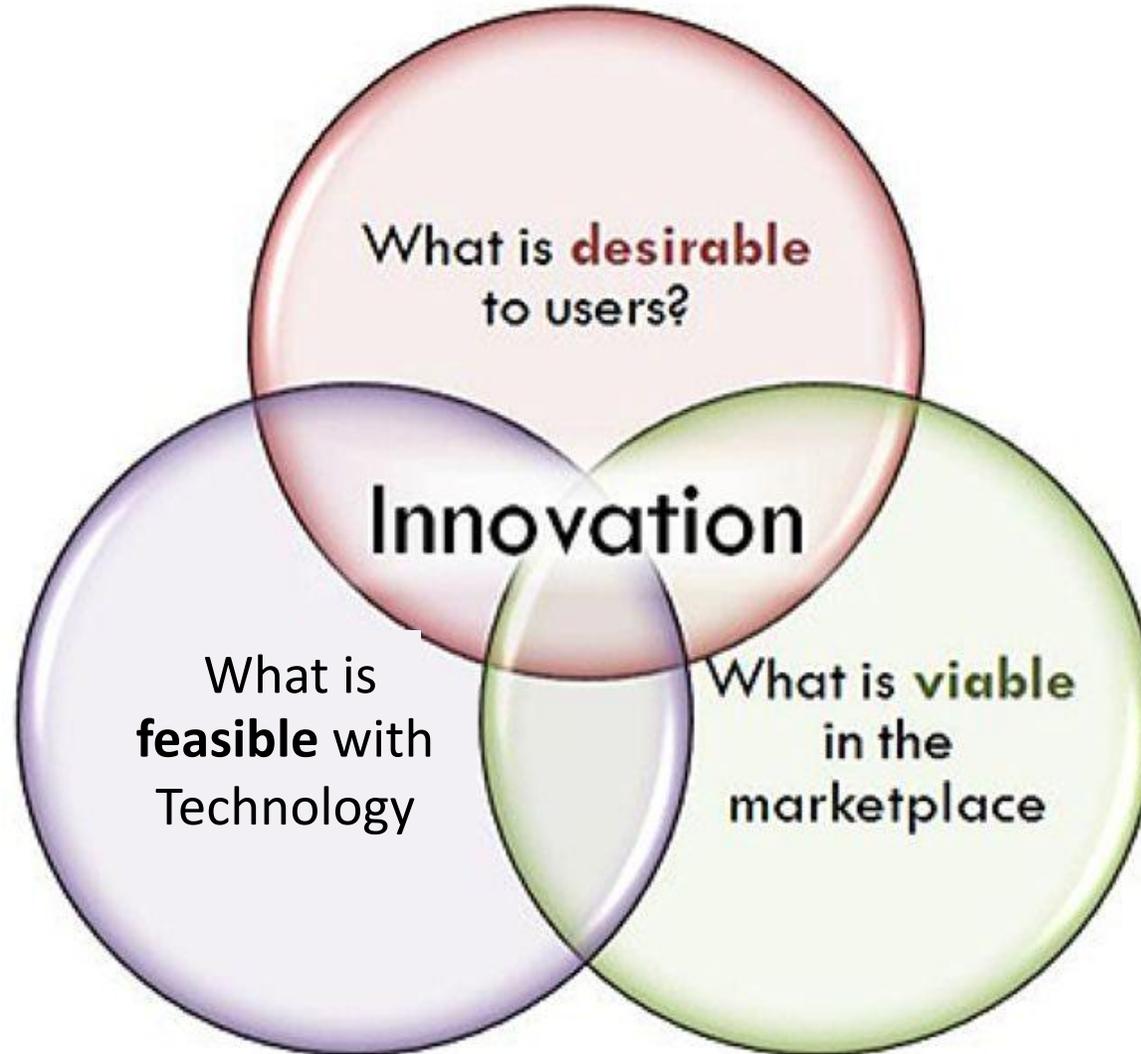
Go to amazonworkshop.exeter.digital

Pick an industry or domain of interest to you.

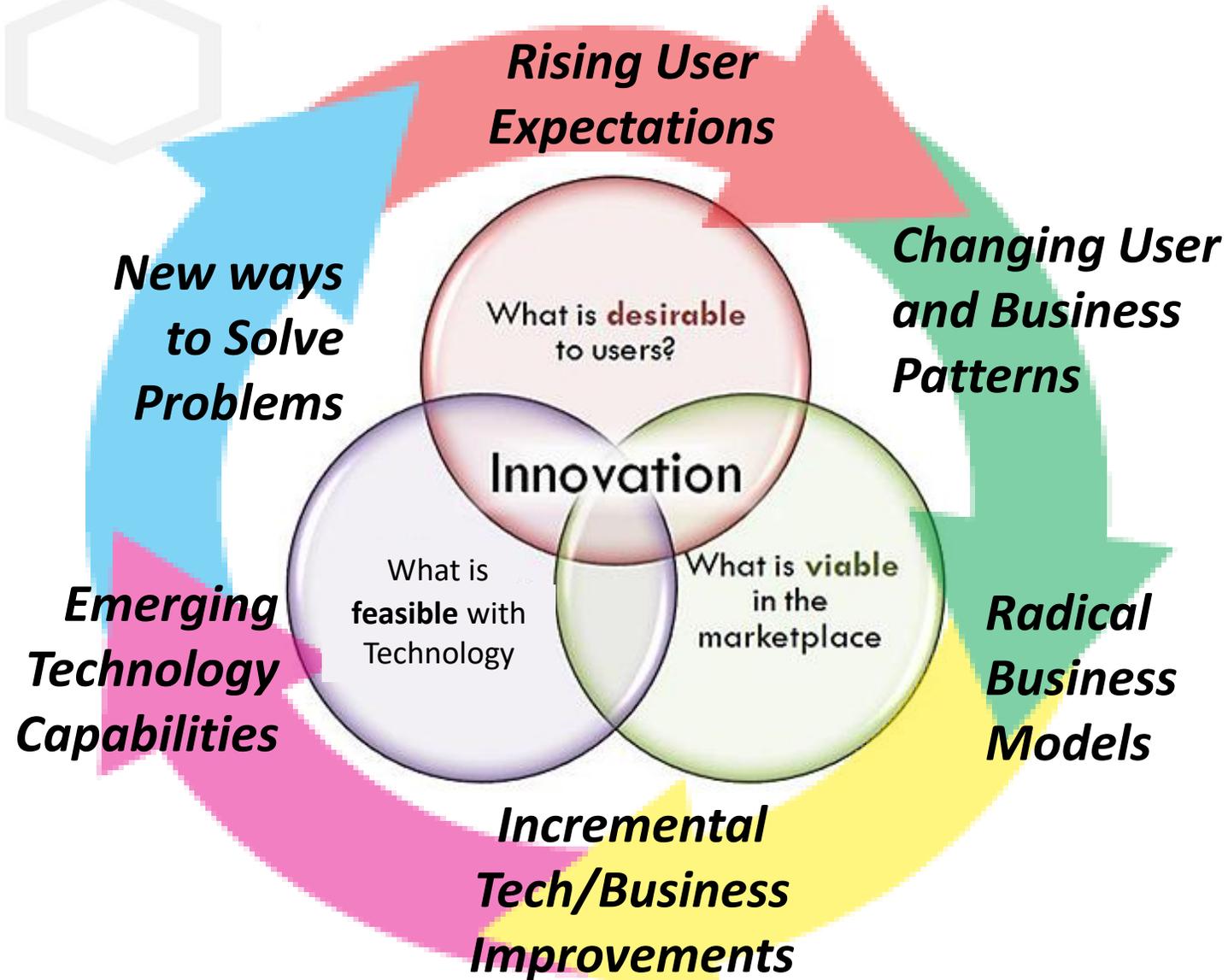
- How has digital technology changed that industry?
- How has this sector changed in relation to others?
- What is driving that change? What is holding it back?



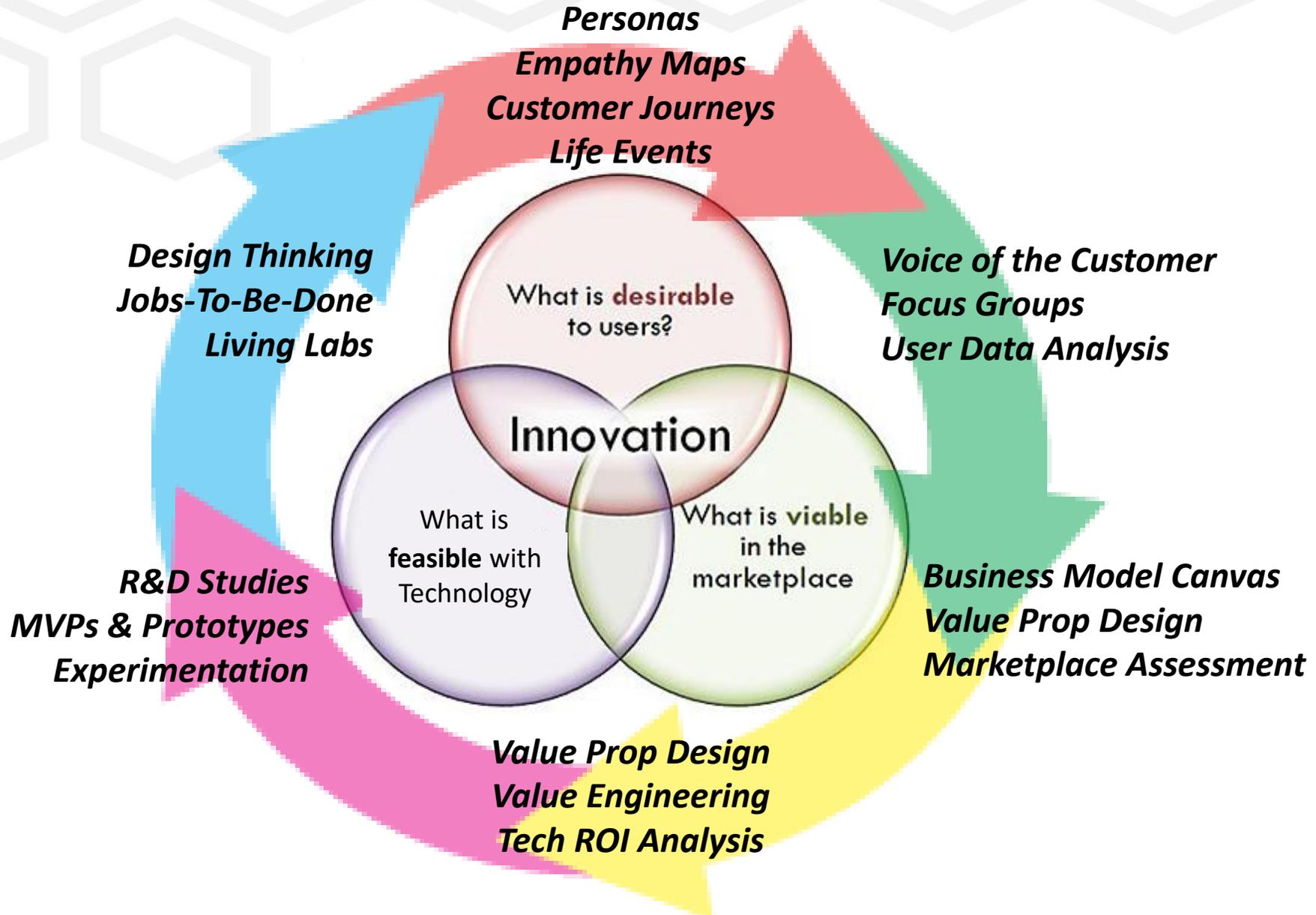
Driving Innovation in a Digital World



Digital Innovation is a Response to Change

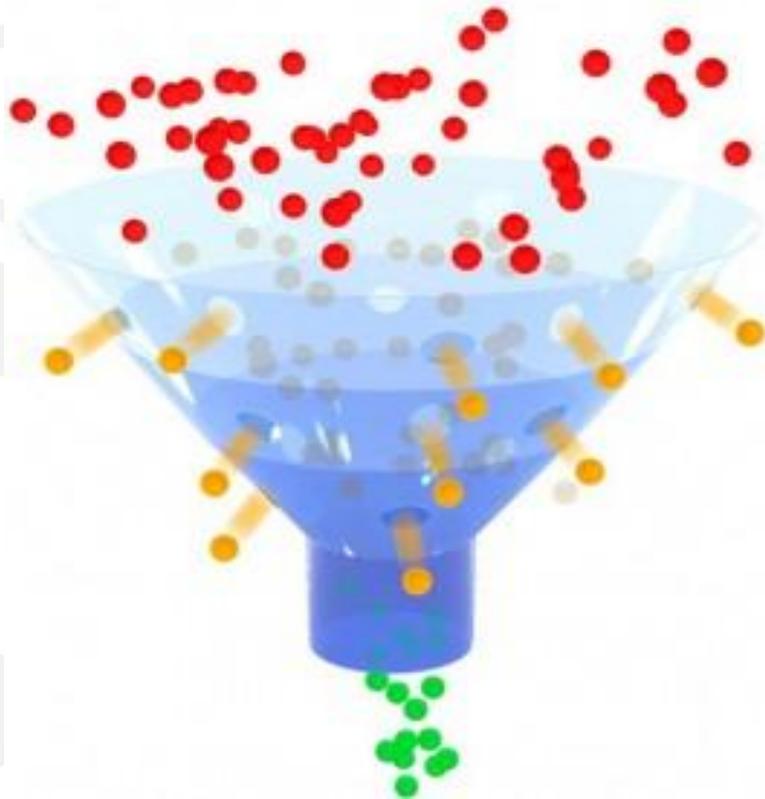


Digital Innovation Requires New Techniques



R&D Meet E&S

Ideas



Action

Research & Development (R&D) Model:
Traditional approach to innovation

- Stage-gate model from ideas to action
- Multiple layers of control and decision making
- Strong alignment across the organization
- Well-developed governance processes
- Relatively slow and inflexible
- Optimized to avoid surprises

When is this appropriate? When is it not?

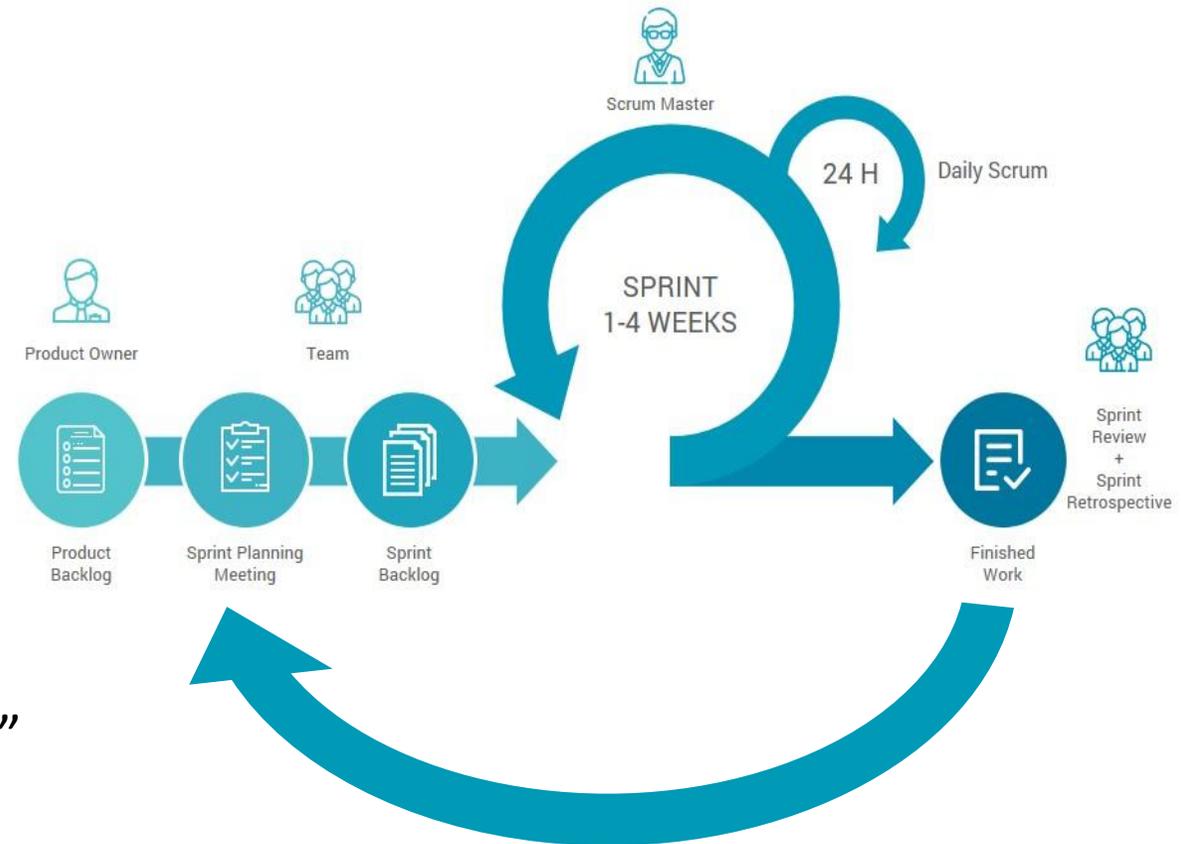
R&D Meet E&S

Experimentation & Scaling (E&S) Model:
Agile approach to innovation

- Based on agile software methods
- Scientific approach based on hypothesis testing
- Short, time-boxed iterations

- Quickly test new ideas and gain knowledge
- Minimize overheads to “fail fast”

- Disruptive to on-going working approaches
- Focused on fast learning & broad “bet spreading”



When is this appropriate? When is it not?

What is a Digital Culture?

Observations of digitally-driven organizations show that they prioritize different kinds of behaviours from traditional organizations

The Spectrum of Digital and Traditional Practices

Here's what culture typically looks like in digital and traditional organizations. Practices range from rapid experimentation to strict rule adherence, with some overlap between the extremes.

DIGITAL PRACTICES			TRADITIONAL PRACTICES				
Rapidly experimenting Constantly and systematically experimenting, learning from the results, and quickly applying new insight	Self-organizing Collaborating fluidly across functional, geographic, hierarchical, and organizational boundaries to get things done	Driving decisions with data Collecting and using accurate data to make decisions and solve problems	Obsessing over customers Maintaining continual focus on meeting the stated and unstated needs of current and potential customers	Focusing on results Continually striving for measurable results instead of just processes and promises	Acting with integrity Being honest, behaving ethically, and striving for positive outcomes for all stakeholders	Seeking stability Aiming for reliability and predictability in stakeholder interactions, operations, and employee work life	Strictly conforming to rules Seeking to avoid problems and maintain reliability through rules orientation

The Hard Truth About Digital Leadership

Digitally-driven innovative cultures are misunderstood. The easy-to-like behaviors that get so much attention are only one side of the coin. They must be counterbalanced by some tougher and frankly less fun behaviours.

- A tolerance for failure requires an intolerance for incompetence.
- A willingness to experiment requires rigorous discipline.
- Psychological safety requires comfort with brutal candor.
- Collaboration must be balanced with individual accountability.
- Flattening hierarchical decision making requires strong leadership.

Digital leadership skills are paradoxical. Unless the tensions created are carefully managed, attempts to create an innovative environment will fail.

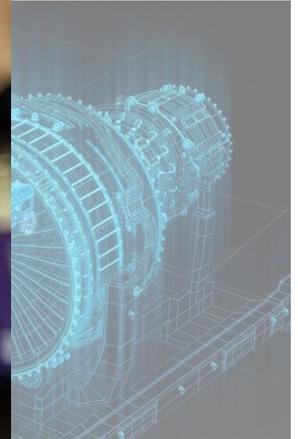
Activity 2

Go to amazonworkshop.exeter.digital

- What impact is digital technology having in your domain? Use the lenses of Desirability, Feasibility, and Viability to describe it.
- How will these Digital Disruptions drive change in your domain?
- Which of these innovation techniques are most important? Why?



Welcome to the Future (again)!



Amazon's Millionth Warehouse Robot Is Here And It's Getting Smarter

By [Ron Schmelzer](#), Contributor. © Ron Schmelzer is an expert covering AI and dat... [Follow Author](#)

Published Jul 07, 2025, 10:56am EDT, Upd... Jul 1, 2025, 9:09am EDT

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AI is Driving Digital Transformation.....

STEVEN LEVY THE BIG STORY FEB 1, 2019 2:53 PM

Inside Amazon's Artificial Intelligence Flywheel

How deep learning came to power Alexa, Amazon Web Services, and nearly every other division of the company.

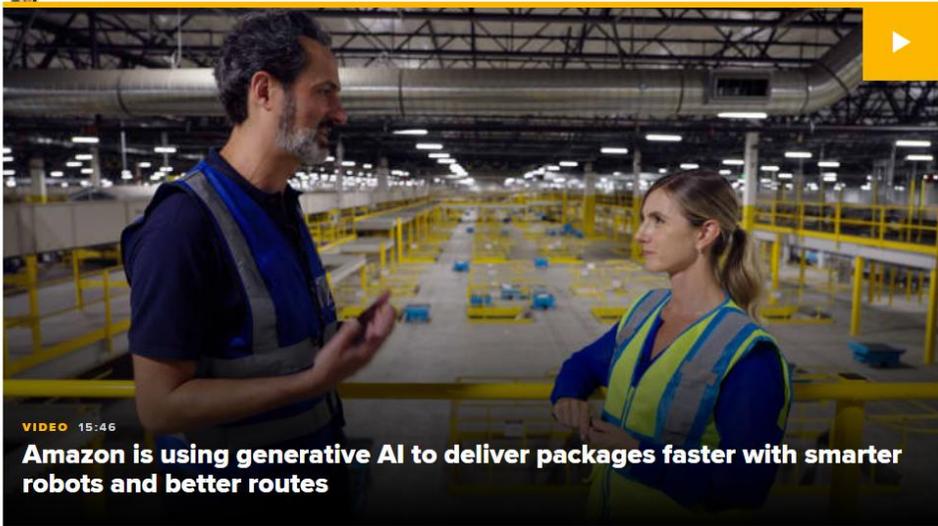
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TECH

Amazon is using generative AI to drive more same-day shipping using smarter robots and better routes

PUBLISHED TUE, SEP 17 2024 8:00 AM EDT

[Katie Tarasov](#) @KATIE TARASOV



VIDEO 15:46

Amazon is using generative AI to deliver packages faster with smarter robots and better routes

How Amazon Is Using AI To Become the Fastest Supply Chain in the World

by Sifted Team

Jul 2, 2024

5 min read

[View All Articles](#)

Did you know that Amazon has been using machine learning and AI for more than 25 years? Yes, 25 years! That's probably why they're way ahead of other supply chains.

Forbes

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Amazon boss says AI will replace jobs at tech giant



GETTY IMAGES

Natalie Sherman
Business reporter, BBC News

17 June 2025 · 173 Comments

Amazon boss Andy Jassy has told staff to embrace artificial intelligence (AI) and warned the technology will lead to a smaller corporate workforce in the next few years.

GeekWire News | GeekWork | Events | Lists | Members | Studios

What happens here matters everywhere.

AMAZON MICROSOFT STARTUPS AI SCIENCE TECH MOVES SUSTAINABILITY CIV

Amazon's 'model factory' is training the next generation of AI on the tech giant's own business

PC MAG Best Picks Reviews News How-To Search

PCMag UK > News > AI

Amazon CEO to Employees: Yes, AI Will Probably Take Some of Your Jobs

Generative AI and agents mean 'we will need fewer people doing some of the jobs that are being done today, and more people doing other types of jobs,' says CEO Andy Jassy.



By [Jibin Joseph](#) Jun 18, 2025

f X in P

INDEPENDENT Bulletin Club World Cup

NEWS SPORT VOICES CULTURE LIFESTYLE INDYBEST DEALS TRAVEL MORE INDEPENDENT

News > World > Americas

Amazon plans to cut corporate jobs as it turns more to AI

Amazon plans to "reduce our total corporate workforce as we get efficiency gains from using AI extensively across the company," CEO Andy Jassy said.

...But Also Creating Huge Disruption.....



The Context for AI adoption in Large Established Organizations

“AI won’t take your job....but someone more accomplished at using AI will!”

Common internet meme

“AI isn’t yet at the point where it can take your job....but it is past the point where an AI salesperson can convince your boss it can!”

Cory Doctorow

Discussion

Is Your View of Today's AI Capabilities Positive or Negative?

A: AI should be freely and rapidly adopted

B: AI use should be limited and closely controlled



AI State-of-the-Art

"Within the next few years, AI will be more capable than humans at the vast majority of economically valuable work."

Sam Altman, OpenAI CEO, 2023

"AI will probably be smarter than any single human next year... probably smarter than all humans combined in 5 years."

Elon Musk, 2024

AI State-of-the-Art vs.

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"AI will probably be smarter than any single human next year... probably smarter than all humans combined in 5 years."

Elon Musk, 2024

AI State-of-the-Practice

"More than 80% say their organizations aren't seeing a tangible impact on enterprise-level EBIT from their use of GenAI."

McKinsey State of AI Survey, 2024

"95% of enterprise GenAI pilots are failing... about 5% of AI pilot programs achieve rapid revenue acceleration; the vast majority stall, delivering little to no measurable impact on P&L."

MIT NANDA Initiative, 2025

AI fundamentally changes the constraints on delivering quality services at scale and sustainable cost

Triage and prioritise	<ul style="list-style-type: none">• Automate decisions• Match complex cases to experts
Speed up analysis	<ul style="list-style-type: none">• Summarise real-time data• Gather and analyze sources
Inform citizens	<ul style="list-style-type: none">• Answer specific questions• Target comms and style
Improve services	<ul style="list-style-type: none">• Link citizen data• Pre-approve services
Forecast demand	<ul style="list-style-type: none">• Accurately predict demand• Optimise supply chains, workforce and capital assets

Ensure fairness	<ul style="list-style-type: none">• Monitor for bias• Prevent fraud and waste
Model complex systems	<ul style="list-style-type: none">• Collate present-time data• Simulate impact of decisions
Accelerate research	<ul style="list-style-type: none">• Interrogate vast data sets• Draft summaries and letters
Understand opinions	<ul style="list-style-type: none">• Aggregate and interpret views• Analyse consultations
Run the private office	<ul style="list-style-type: none">• Schedule and prepare briefings for meetings• Surface critical issues

Government jobs-to-be-done involve the management of three types of workflows – all of which AI can improve



Citizen engagement

Providing information, distributing or accepting citizens' payments and providing non-financial transactional services.



Operations

Processing casework, fulfilling legal obligations like FOI responses, recording, managing and sharing data, and running procurement processes.



Decision-making

Developing new policies, monitoring and improving existing policies, and ensuring broad operational awareness including forecasting activities.

Existing AI tools, if scaled widely across the public sector, would have a transformational impact



Eliminate or reduce backlogs and waiting times

A hospital trust in Wales reduced delayed patient discharge by 35%. A social care provider reduced hospitalisations by 52%.

Across the whole NHS, this could bring bed occupancy down to 85% and prevent >10,000 deaths p.a.



Make government a better, more productive workplace

National Crime Agency analysts are processing batches of 1,000s of referrals 90% faster.

A backlog of 250,000 cases in DWP could be cleared in 3-10 months at an extra processing cost of <£100,000.



Improve and accelerate decision-making

Public opinion researchers are reviewing 7x more transcripts a day with generative AI summaries.

Consultation responses could be processed in 12 days not 3 months, saving 80% of cost (£65.8m).

State of Digital Government Review, January 2025

“As we move into a new era of opportunities created by AI and other technology innovations, we must take a realistic and unflinching view of how much more we have to do to create a modern digital government and reform public services.”

- Fragmented technology
- Underused data
- Funding not reflecting modern digital practice
- Low service reliability



Key Facts From UK Government Digital Review

- **£26 billion** spent annually on digital and data in 2023 across the public sector.
- **47%** of services offered by central government which still rely on non-digital methods like phone calls and paper forms.
- **97,000** digital and data permanent employees and contractors in the public sector.
- **9%** of major tech programmes assessed as 'Green' (successful delivery highly likely); tech programmes are **60%** more likely to be assessed as 'Red' (successful delivery highly at risk) than non-tech projects.
- **50%** of digital and data recruitment campaigns failed in 2024; a decline in performance from **22%** in 2019.
- **35%** pay gap between public and private sector for technical architects.
- **3x** average cost of a digital or data contractor relative to a permanent employee.

Digital Transformation: 5 Key Lessons

1. Complexity and Technical Debt Kills Progress
2. All Management is Change Management
3. Organizational Alignment is Fragile
4. Keep the Focus on Value Creation
5. People Break Before Technology



The Keys to Digital Leadership in the AI Era

At least 5 critical dilemmas that must be addressed

1. The Productivity Dilemma
2. The Value Dilemma
3. The Ethical Dilemma
4. The Leadership Dilemma
5. The Human Dilemma



The Value Dilemma

- In a digital revolution we must rethink “who does what, who gets what”
- Moving from Value-in-exchange to Value-in-use
- All value is co-created

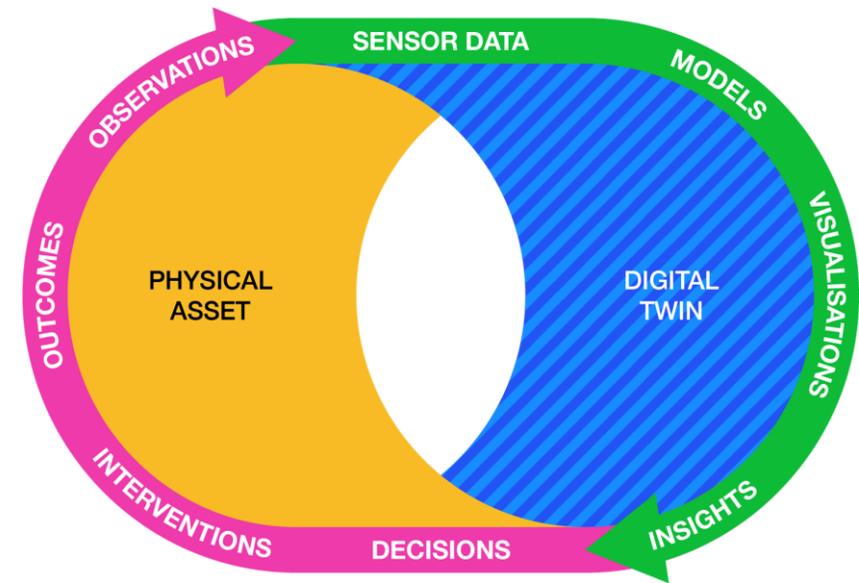
What the customer buys and considers value is never a product. It is always utility, that is, what a product or a service does for the customer.

— Peter Drucker —

- *How is value created, shared, managed, and maintained?*

Value-in-Use and Outcome-driven Strategy

- Digital transformation enables data about use
- A data-driven strategy drives the journey from Product-to-Service-to-Outcome
- Product offerings need to refine their outcome-driven strategies
- Some examples:
 - Amazon seamlessly improves shopping outcomes.
 - Apple seamlessly improves entertainment outcomes.
 - Google seamlessly improves knowledge outcomes.
 - Facebook seamlessly improves friendship outcomes.
 - Centrica seamlessly improves comfort outcomes.
 - Rolls-Royce seamlessly improves aircraft utility outcomes.

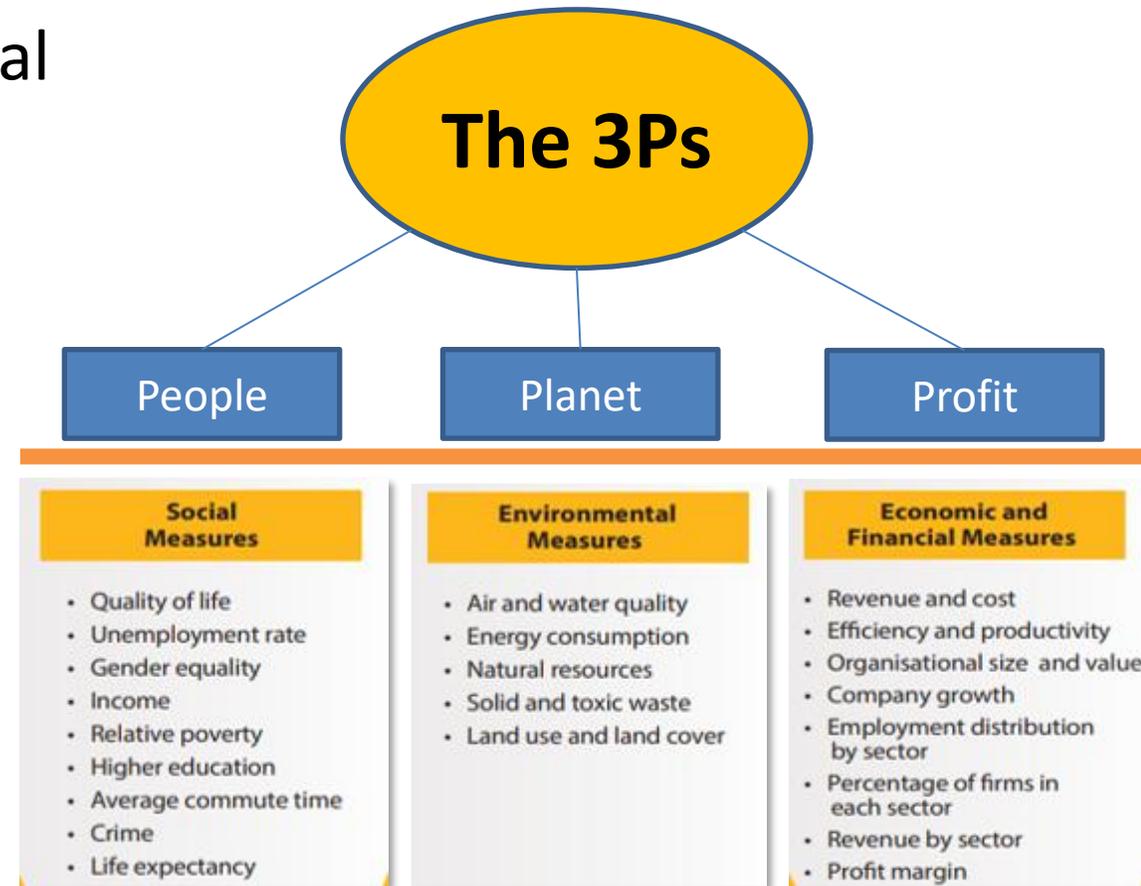


Outcome-driven Strategy

- Several important pre-cursors for a successful outcome-driven strategy
 - A strong understanding of the clients and their needs
 - Clients as buyers vs Clients as users
 - A well-developed ecosystem of partners in value creation and value sharing
 - Cross-organizational alignment of incentives and compensation models from research to sales
 - e.g., who gets paid for selling an outcome and when
 - Constant monitoring and adjustment as outcomes shift
 - Outcomes require careful review of “context”
 - Client and partner relationships matter more than contracts
- Significant implications for staffing, organization, performance measures and compensation models

Evolving Range of Ethical Concerns

- Digital approaches bring a range of ethical opportunities and challenges
 - Real-time data access
 - Algorithmic decision making
 - Cyber concerns
 - Knowledge and power redistribution
 - Resource use and management
 - Increasing transparency
 - Surveillance Economy



AI Adoption Raises Many New Questions

Privacy / Personal Data Protection

As AI-systems are enabled and powered by data, what are the privacy implications instance, in terms of government surveillance or corporate influence over customers?

Use of Force / Law Enforcement

As AI-based systems are now involved in making decisions about the use force, how much human control is necessary or required? Who bears responsibility for the AI-based decisions?

Safety and Certification

Particularly where AI-based systems drive physical machines, how do we define and validate safety thresholds, for instance, through standard-setting and certification?

Justice and Equality

How can AI systems be implemented to reflect human values such as, fairness, accountability, and transparency, avoiding (new) inequalities and biases?.

Displacement of Labour and Taxation

To what extent will AI-based machines replace jobs previously performed by humans, or at least transform what labour means? What are the effects of AI on public finances if robots don't pay taxes?

The Digital Leadership Dilemma

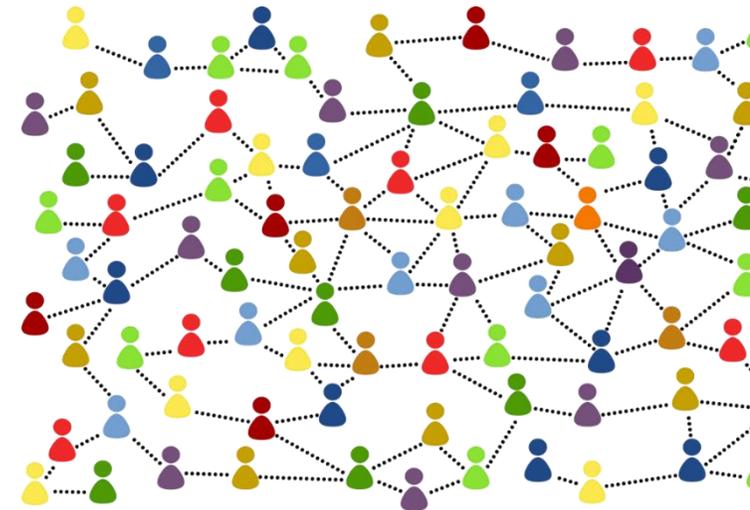
- Digital native companies use different organizational forms
- Push to learn new leadership skills for the digital era

Bureaucracy Position is privileged	Meritocracy Knowledge is privileged	Adhocracy Action is privileged
Coordination via... By Rules	Coordination via... Mutual adjustment	Coordination via... Around opportunity
Decisions via... Hierarchy	Decisions via... Logical argument	Decisions via... Experimentation
People motivated by... Extrinsic rewards	People motivated by... Personal mastery	People motivated by... Achievement

- What is the role of a leader in a decentralized, disrupted, data-driven world?

The Human Dilemma

- Digital technology can complement or replace human activity
 - Do digital technologies support us to enhance creativity?
 - Or dehumanize the workplace and replace us?
- Digital technologies are contributing to record levels of disengagement, absenteeism, and mental health issues
 - Technostress
 - VUCA
 - Always-connected with no off button
 - Supporting digitally-disadvantaged and excluded groups
- How do we accelerate digital ways of working while supporting and enhancing our people?



Activity 3

Go to amazonworkshop.exeter.digital

Consider barriers to digital transformation in your domain:

- What are the main barriers to be addressed? Why?
- Which of these are the highest priority for you?
- What are the implications for an organization's digital strategy?



Summary

What Matters Now?

Advances in digital technology have forced a recalibration of the challenges, opportunities, and priorities for digital leadership.

1. Value

- Value-in-exchange to Value-in-use
- Rethinking Value and Values

2. Trust

- Who does what, who gets what
- Data ownership, tracking, monitoring

3. Risk

- Delivery risk vs. Operational Risk
- Cost of Agility vs. Cost of Inflexibility



Summary

Leading Innovation in a Digital World



- We need to be looking forward to drive change and deliver value
- The volatility and uncertainty requires looking ahead, not looking behind in the rear view mirror

How can you use digital technologies to help you look ahead?

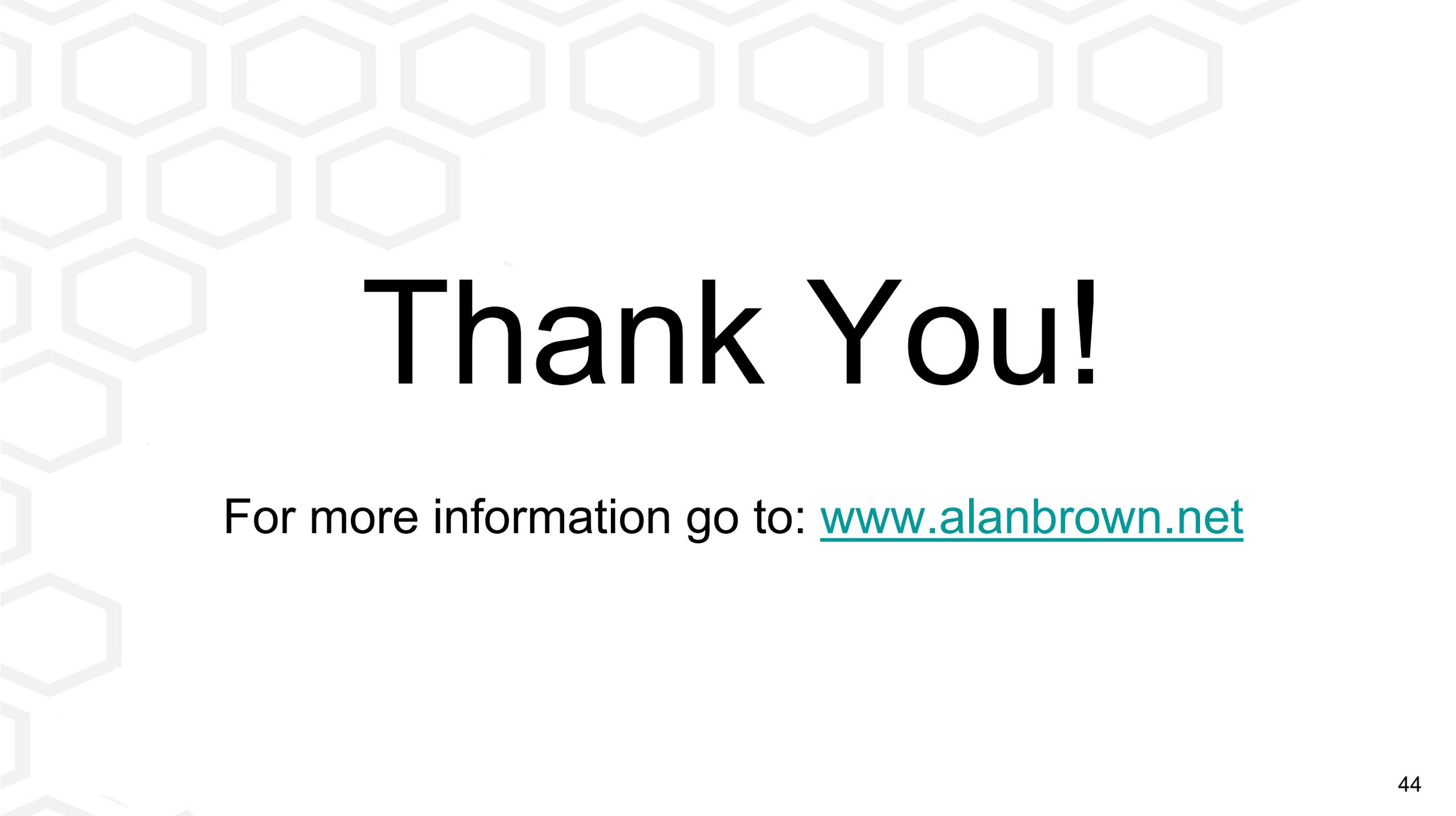
What approaches to leadership will help you be more innovative?

Additional Materials

Access Additional Materials and Downloads at:

- An overview of key topics and issues in “Delivering Digital Transformation”
alanwbrown.gumroad.com
(Use Code: “**exeter100**” for a 100% discount)
- Sign up for weekly “Digital Economy Dispatches”:
dispatches.alanbrown.net
- DIGIT Lab, www.digit.ac.uk
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