IS6640
IS Planning and Strategy
Lecture 4

Strategic Alignment of Business and IS &
Digital Transformation & AI

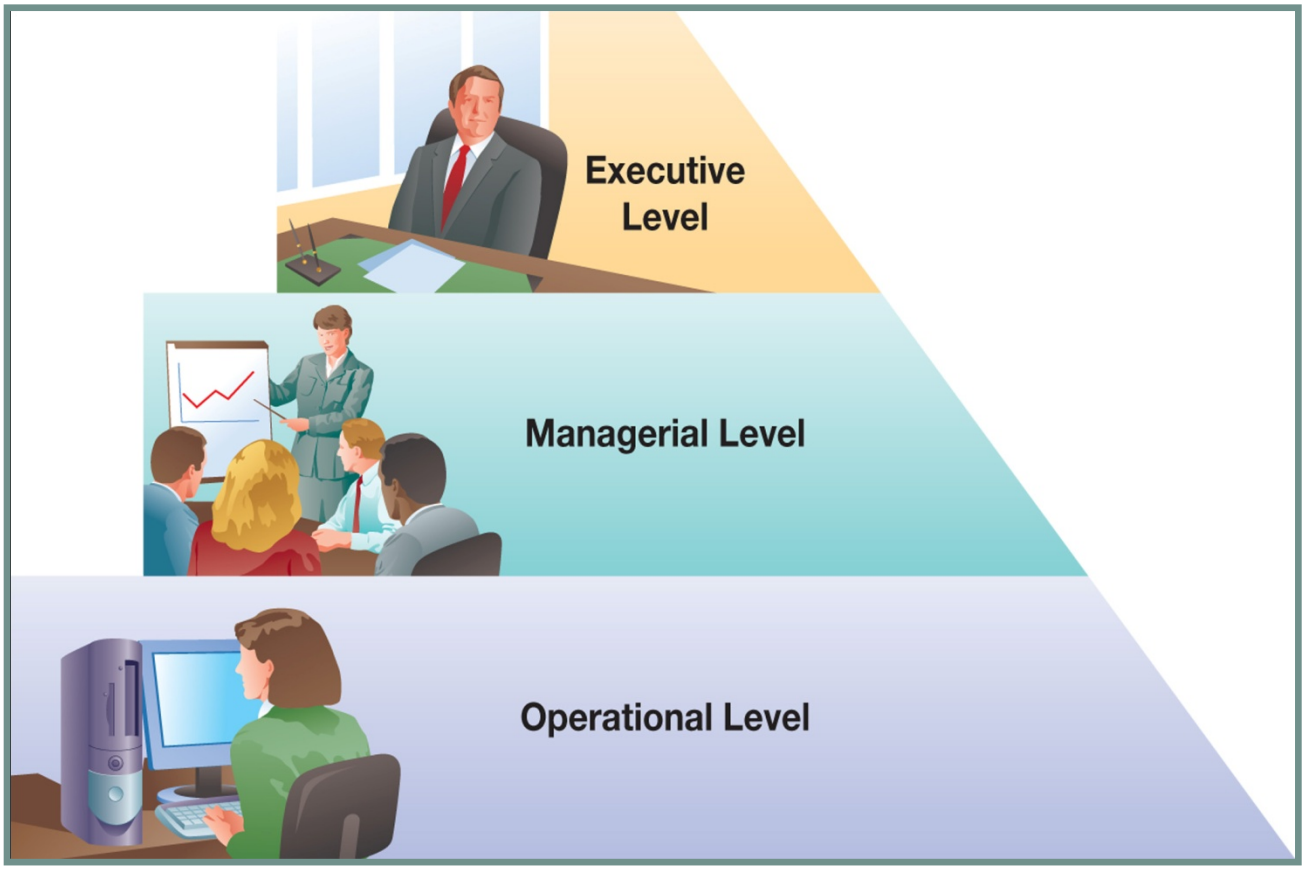
Additional Reference: Valacich, J., and Schneider, C. Information systems today: Managing in the Digital World, 8th Edition, Pearson Education Limited, 2017

Courtesy of Bernard Tan and Peng Chih Hung

Friendly Reminder

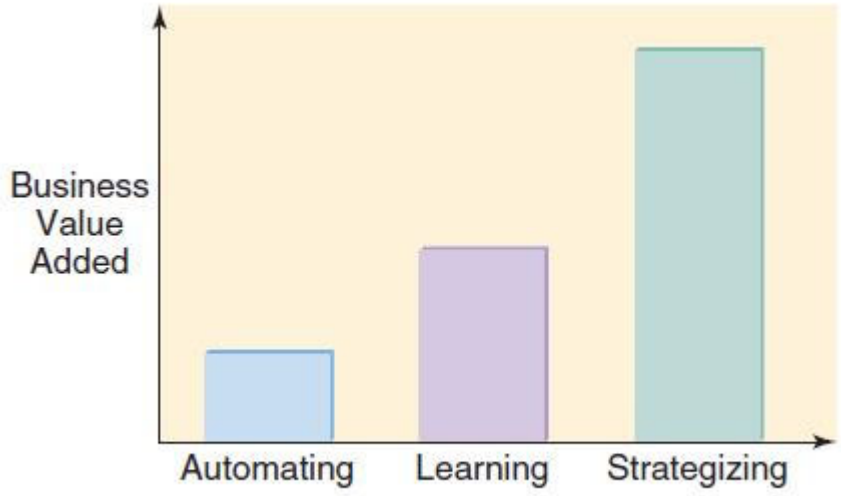
- Individual Assignment Submission (Week 8, Monday 10 Mar 2025, 12noon)

Decision-Making Levels of an Organization



Major IS Tasks: Business Value Added

- Automating: Doing Things Faster
- Organizational Learning: Doing Things Better
- Supporting Strategy: Doing Things Smarter



Class Discussion

- Citibank Prestige Credit Card (Mastercard)
  - Costs/Requirements
    - HK3800 annual fee
      - but will have equivalent of HK$1800 of Citi points deposited automatically
      - minimum annual salary of HK$600K
  - Benefits
    - - Airport lounges
      - Hotel bookings 4 nights free 1 night
      - All expenses get 1% rebate
      - Air tickets get travel insurance automatically
      - Above 5 receipts over HK$500 and above will enjoy 8% rebate
- Discussion:
  - Impact on card holder behavior?
  - Impact on Citibank?

Strategic Information System (SIS)

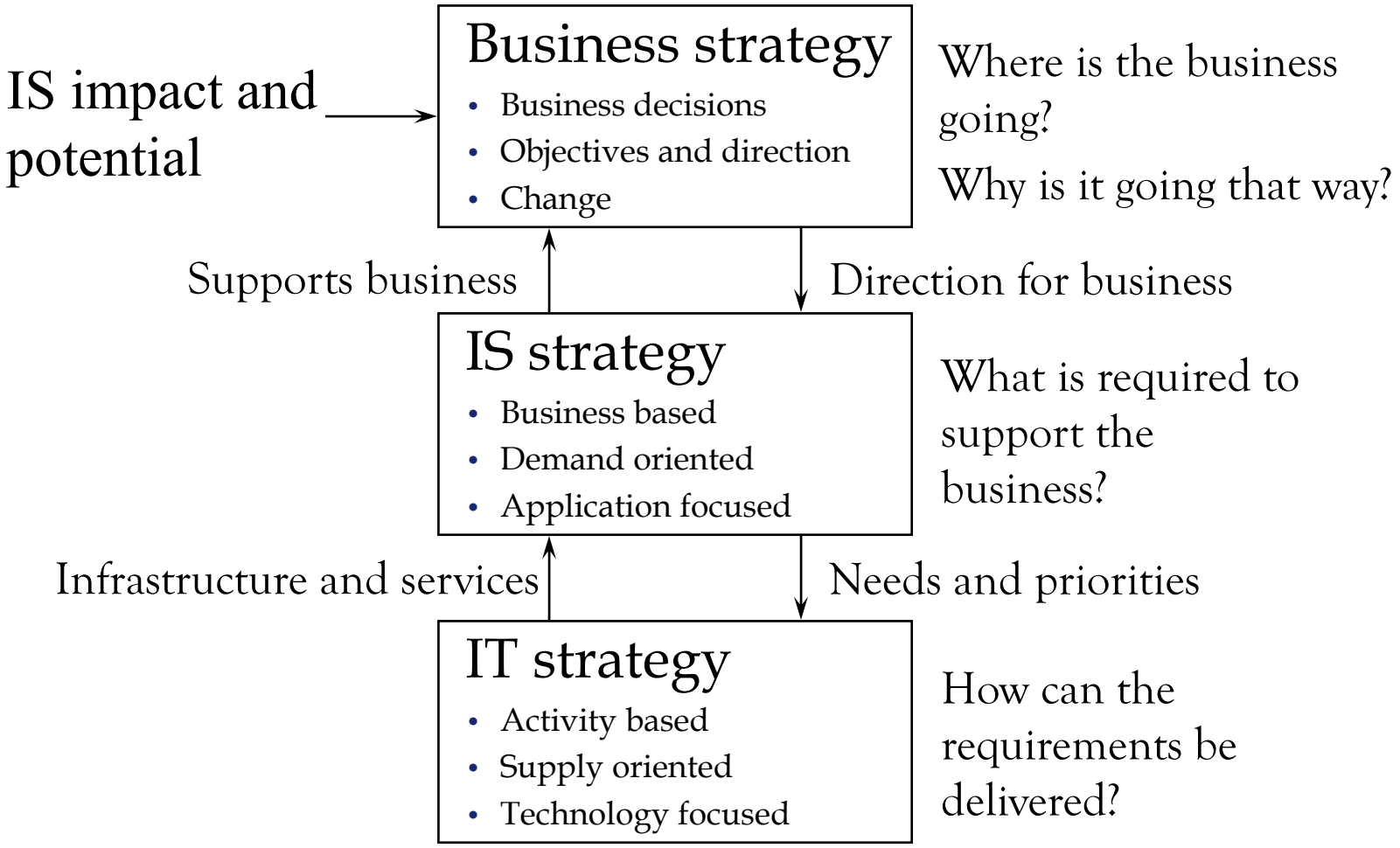
Any information system--EIS, TPS, KMS--that changes the goals, processes, products, or environmental relationships to help an organization **gain a competitive advantage** or reduce a competitive disadvantage.

- Competitive Advantage
  - An advantage over competitors in some measure such as cost, quality, speed, or market share
  - A difference in the Value Chain Data
- Improving Core Competency
  - Employee productivity
  - Operational efficiency

Success Factors of SIS

- External instead of internal focus
- Adding value instead of cost reduction
- Sharing the benefits internally and externally
- Understanding customers and their needs
- Business instead of technology driven innovation
- Incremental instead of total development
- Using information gained to develop business

Planning Implications in the SIS Era



Planning Maturity in the SIS Era

	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
Main task	Map IS applications	Define business needs	Detail IS planning	Strategic or competitive advantage	Link to business strategy
Key objective	Seek management understanding	Agree on priorities	Balance the portfolio	Pursue strategic opportunities	Integrate IS and business strategies
Summary description	Technology driven	Method driven	Administration driven	Business driven	Organization driven

Applications Portfolio in the SIS Era

Strategic applications Critical for future success Examples • Just-in-time links to suppliers • Sales forecasting system • Market analysis system • Big data and analytics applications	**High potential applications** May be critical for future success Examples • IoT applications • AI/machine learning systems • Robotics
Key operational applications Critical for current success Examples • Inventory management system • Product costing system • Maintenance scheduling system	**Support applications** Valuable but not critical for success Examples • General accounting system • Time recording system • Payroll system

Types of SIS

- Those that link the organization to its customers or suppliers to share information
- Those that effectively integrate the use of information in the organization value chain
- Those that enable the organization to develop new or enhanced products or services based on information
- Those that provide managers with better information for strategy development
- Examples: Walmart – JIT Supply Chain, TAL Apparel - VMI, SABRE (American Airlines), and Valuelink (Baxter Healthcare)

Definition of IS Strategy

- Definition of IS planning
  - The process of deciding the objectives for organizational computing and identifying potential computer applications which the organization should implement
- Definition of IS strategy
  - It brings together the business aims of an organization, an understanding of the information needed to support those aims, and the implementation of computer systems to provide that information

IT spending is significantly increasing

Newsroom \ Announcements \ Gartner Says Worldwide IT Spending on Pace to Reach $3.8 Trillion in...

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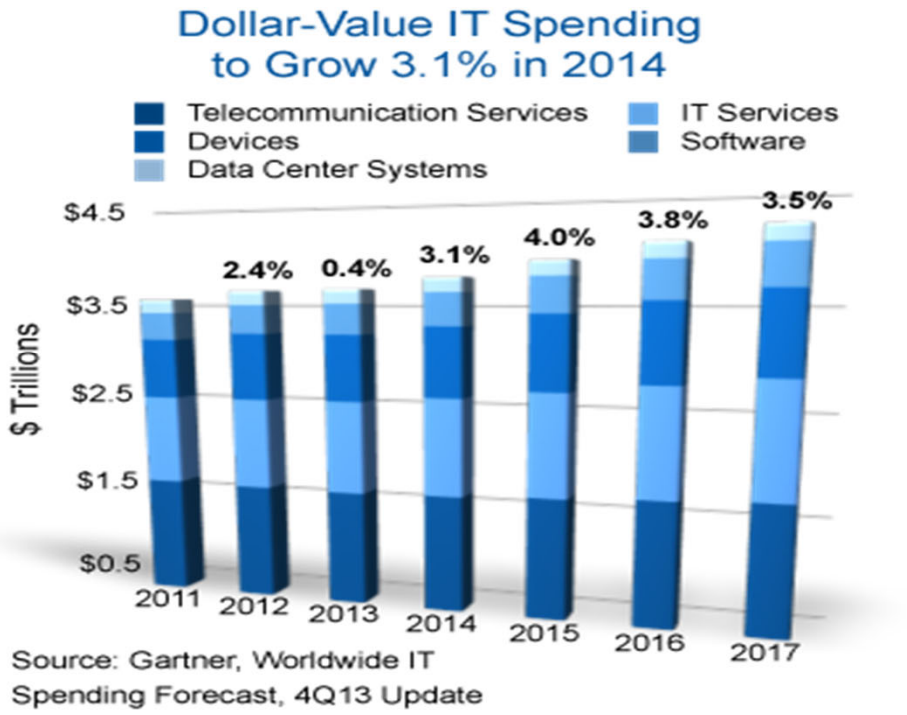
Gartner Says Worldwide IT Spending on Pace to Reach $3.8 Trillion in 2014



The role of Information Technology (IT)

- Does IT matter?
  - IT is commodity
    - IT is highly replicable
    - IT is subject to rapid price depreciation
  - Thus, IT could no longer enable competitive advantages.

- Do you think so? What can IT do for your firm/university?

Information Systems – Enables Strategic Management

- Low Costs – e.g. JIT of Walmart, Supplier bidding portal (e.g. SAP Ariba, …)
- Product Differentiation – e.g. Customizable products such as Nike,, Ferrari, Porsche, Dell, YouBike, Uber, AirBnB, …
- Niche Marketing – Apple iPhone/Mac users, VeganKindSupermarket, Premium Banking

- New Business Models
  - E.g. Low Cost Airlines, Netflix, Spotify, AirBnB, Uber, etc.
- Innovative applications
  - Create innovative applications that provide direct strategic advantage to organizations.;
  - E.g. Google, Tencent
- Competitive weapons
  - Information systems themselves are recognized as a competitive weapon
  - E.g. SABRE of American Airlines, TAL's VMI
- New products
  - A firm can leverage its investment in IT to create new products that are in demand in the marketplace
  - E.g. Mercedes – Connected, Autonomous (https://www.youtube.com/watch?v=_J0KfREjCzM; https://www.youtube.com/watch?v=MaGb3570K1U ; https://www.youtube.com/watch?v=ekgUjyWe1Yc); Crowdsourcing; Crowdfunding; DeepSeek
- Cost reduction
  - IT enables companies to reduce costs
  - E.g. JIT of Walmart
- Competitive intelligence
  - Collect and analyze information about products, markets, competitors, and environmental changes
  - E.g. using Hadoop Big Data; Cambridge Analytica;
- ……

IS capabilities & impact

- Efficiency: Do things RIGHT
- Effectiveness: Do RIGHT things to achieve org goals/objective
- Strategic/competitive advantage: against competitors
  - Value creating strategy of which others are unable to duplicate benefits or find it too costly to imitate
- Example Alibaba Hema Store- https://www.youtube.com/watch?v=UDIvWdwVZMg
- Example : Alibaba Keyless & Cashless Hotel - https://www.youtube.com/watch?v=rnGpSZmj-cA

IS capabilities & impact

IS Capability	IS Impact
Analytical	Incorporate complex analytical methods within business processes (e.g., through the use of BI, CRM)
Automation	Replace or decrease human work by computerizing repetitive procedural tasks (e.g., through the use of TPS)
Disintermediation	Connect two entities directly rather than going through an intermediary by permitting communication and collaboration
Geographical	Reduce the impact of geographical distances by transmitting information rapidly
Informational	Inform organizational members of the most up-to-date information

- References: Davenport, T. H. and Short, J. E., Sloan Management Review, 1990.

IS capabilities & impact

IS Capability	IS Impact
Knowledge Management	Capture, create and disseminate expertise to raise effectiveness of business processes
Tracking	Permits monitoring, tracking and control of intermediate work, process status, inbound logistics, outbound logistics
Transactional	Provides support for unstructured tasks
Sequential (Transform)	Facilitates the effective coordination of business processes by rearranging sequences of workflow (Fundamentally redefine business and industry processes and relationships) – Schein (1992)

- References:
- Davenport, T. H. and Short, J. E., "The New Industrial Engineering: Information Technology and Business Process Redesign," Sloan Management Review, Vol. 31, Issue 4, 1990, pp. 11-27.
- Schein, E. H. "The Role f the CEO in the Management of Change: The Case of Information Technology," in Transforming Organizations, T. A. Kochan and M. Useem (Eds.), Oxford: Oxford University Press, 1992, pp. 325-345.

IS Capabilities and Role in Business

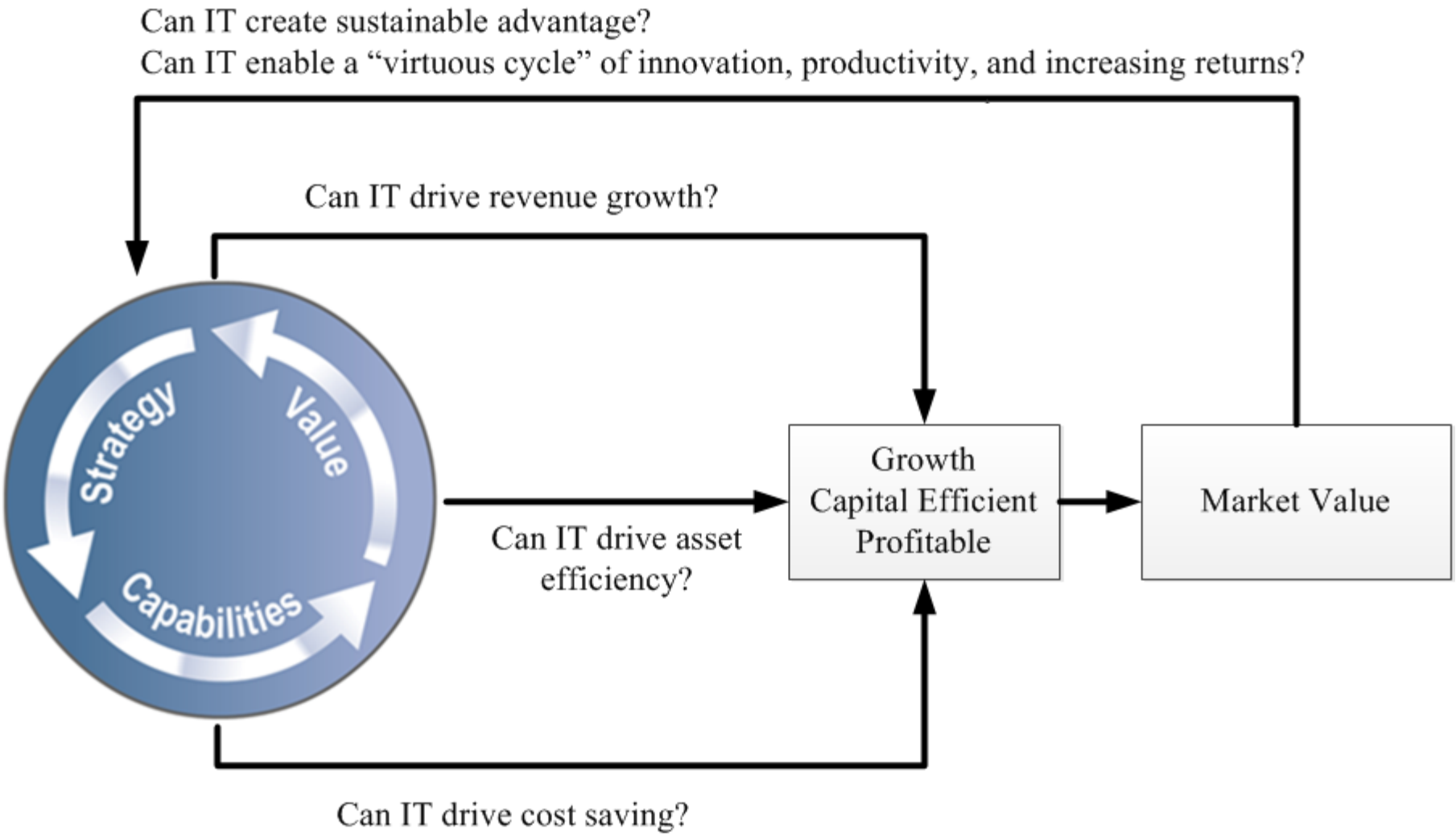
Communication	*Competency and Value measurement*	*Governance*	*Partnerships*	*Technology*	*Human resource*
Understanding of business by IT	IT metrics	Formal Business strategy planning	Business perception of IT	Primary systems	Innovative, entrepreneurial environment
Understanding of IT by business	Business metrics	Formal IT strategy planning	IT's role in strategic bus. Planning	Standards	Key IT HR decisions made by
Organizational learning	Link between IT & business metrics	Organizational structure	Shared risks and rewards	Architectural integration	Change readiness
Style and ease of access	Service level agreements	Reporting relationships	Managing IT-business rel.	How IT Infra. is perceived	Career crossover opportunities
Leveraging intellectual assets	Benchmarking	How IT is budgeted	Relationship/ trust style		Cross-functional training/job rotation
IT-business liaison staff	Formally assess IT investments	Rationale for IT spending	Bus. sponsors/ champions		Social interaction
	Continuous Impr. Practices	Senior level IT steering committee			Attract and retain top talent
		How projects are prioritized			

■Source: https://www.gamingworks.nl/improving-business-and-it-alignment-capabilities/

Sustaining Strategic Information Systems

- Major problem: how to sustain their competitive advantage?
- Increasingly difficult to sustain an advantage for an extended period due to institutional isomorphism
- Information systems, by themselves, can rarely provide a sustainable competitive advantage.
- One popular approach is to use inward systems that are not visible to competitors. These proprietary systems allow the company to perform the activities on their value chain differently than their competitors.
- Other approaches?

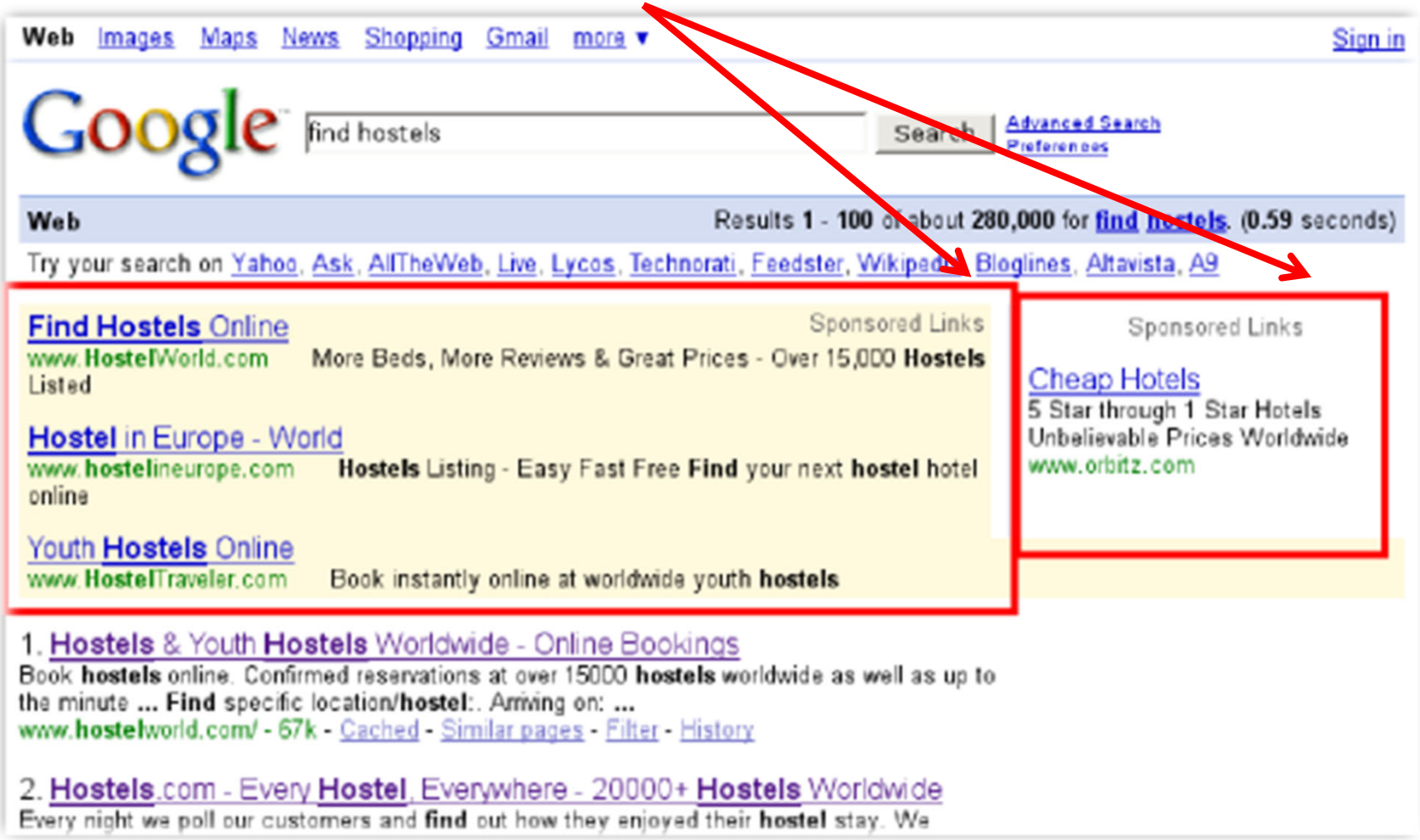
Business Model and IT Investment



Swissôtel The Stamford

- https://www.dailymotion.com/video/xchhak
- What's the business model of SWISSÔTEL?

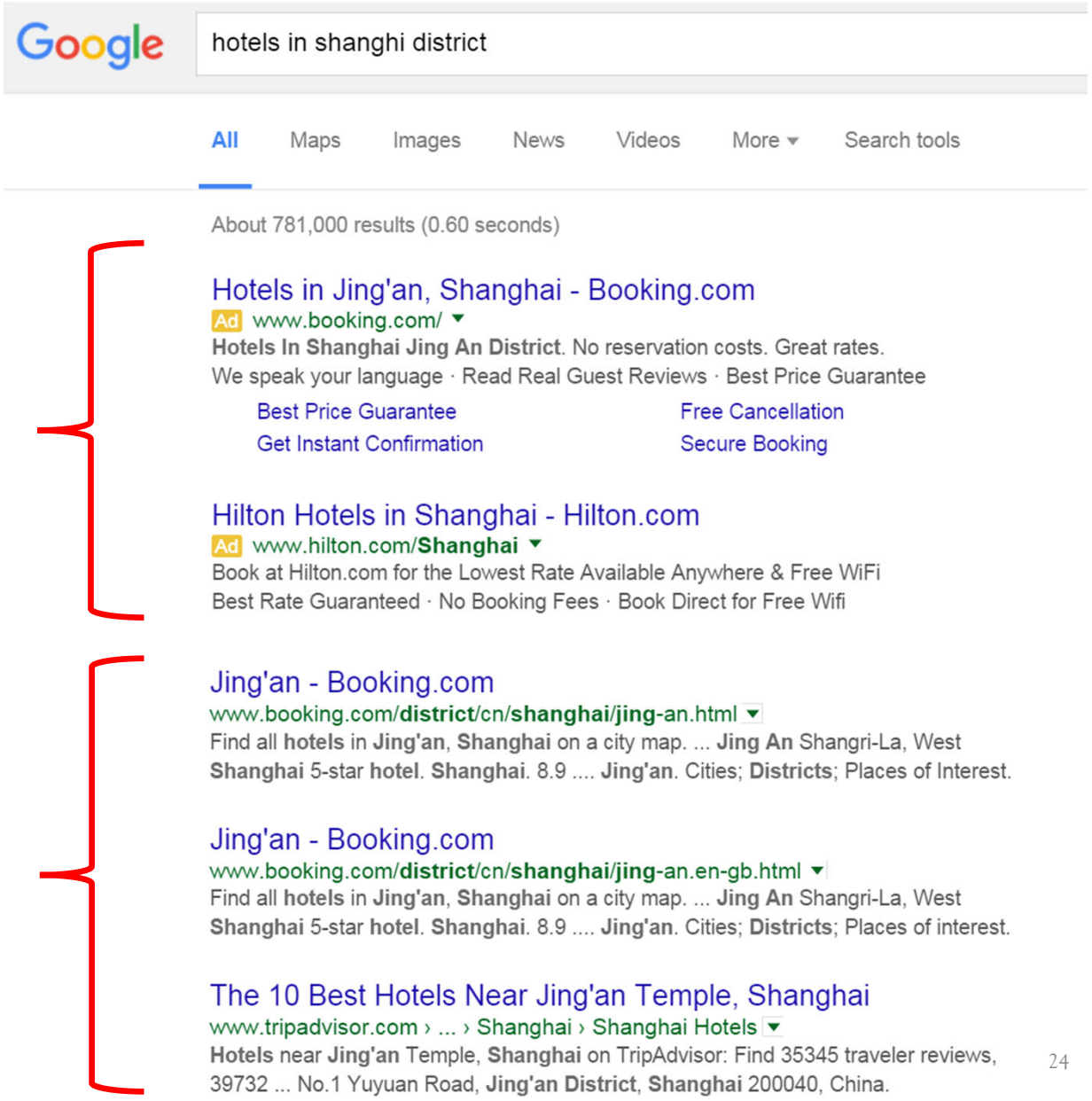
IT Investment: Google AdWords



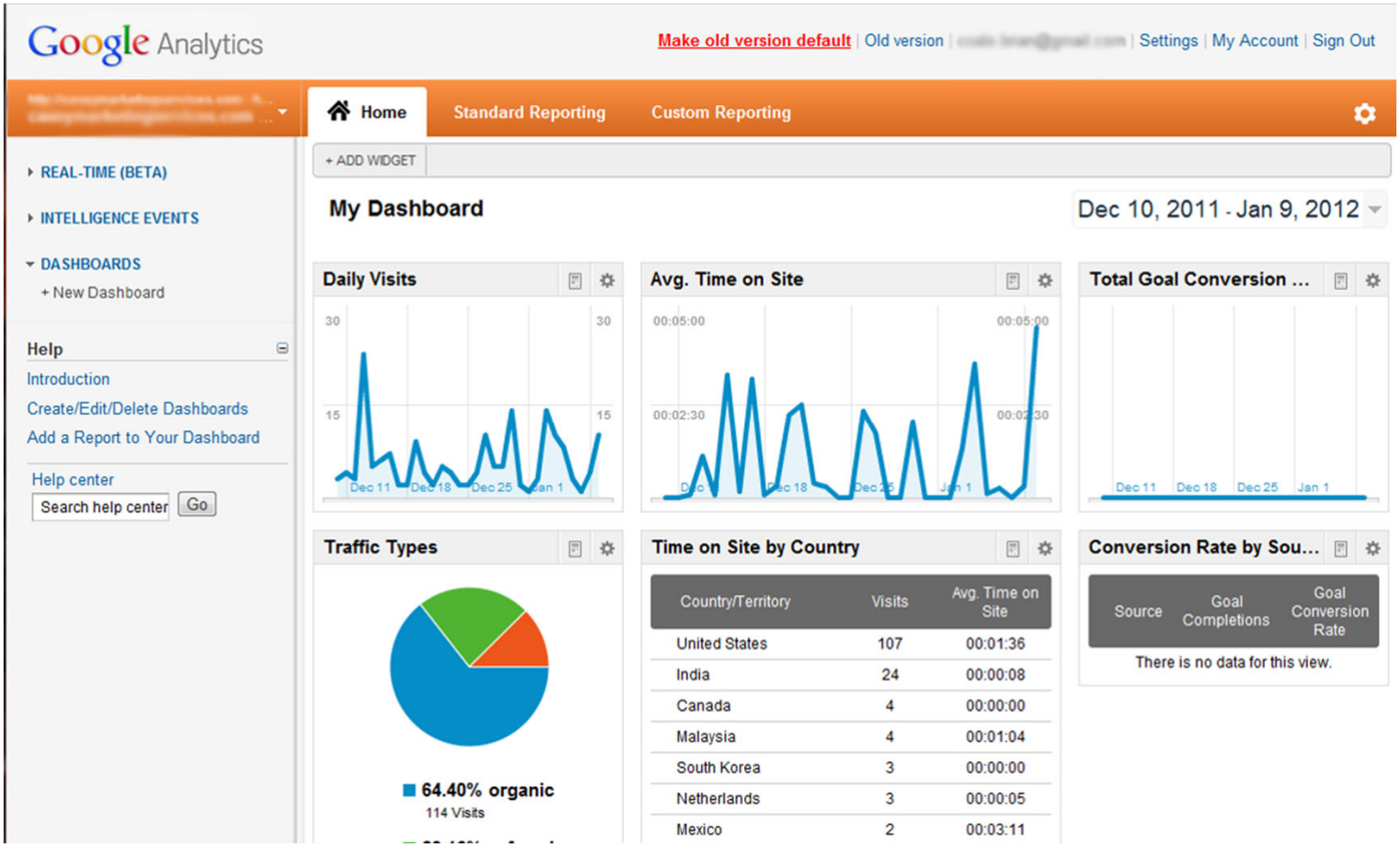
Paid Search vs. Organic Search

Paid search

Organic search



Using Google Analytics to Understand Paid and Organic Visitors



A Case of SWISSÔTEL

- A group of deluxe hotels in 26 cities
- Google AdWords campaigns in Australia and the UK
  - For one of Singapore property
  - Get prospective customers to click on our Adwords ads → make a purchase on our site
- 1st round of segmentation
  - Paid visitors from Australia and the UK (through Adwords)
  - Organic visitors from Australia and the UK
- 1st round of analysis result
  - Spending on paid visitors: UK = 2 x Australia.
  - Number of paid visitors: UK < Australia
- **What decision should the top manager make?**

A Case of SWISSÔTEL

- 2nd round of segmentation
  - Content that the paid visitors from the UK/Australia viewed
- 2nd round of analysis result
  - UK visitors: spend more time viewing rooms and restaurants
  - Australian visitors: favor the promotions and packages section
- **What decision should the top manager make?**

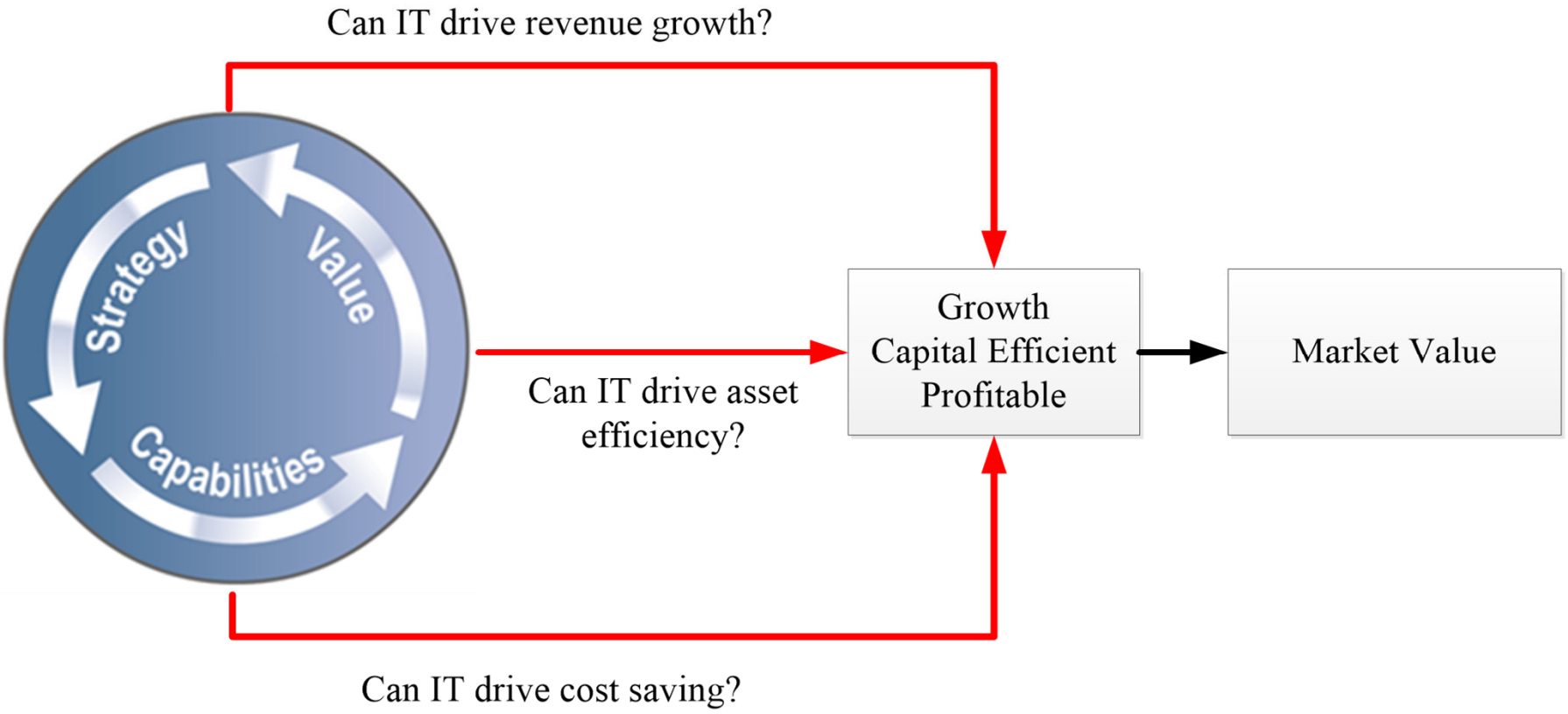
- Results
  - More than doubled number of visits and transactions from the UK campaign
  - Whole campaign
    - Almost double e-commence conversion rate
    - Improve per-visit value metric significantly

IKEA

- What's the business model of IKEA?

- Can IT affect its business model? How?
  - Augmented Reality https://www.youtube.com/watch?v=tnRJaHZH9lo
  - IKEA and Augmented Reality https://www.youtube.com/watch?v=vDNzTasuYEw

Business Model and IT Investment



Can IT be used to drive cost savings?

- Streamline and integrate nonrevenue-generating processes
  - Payroll, HR
  - Enterprise resource planning
  - Accounting and finance, etc.

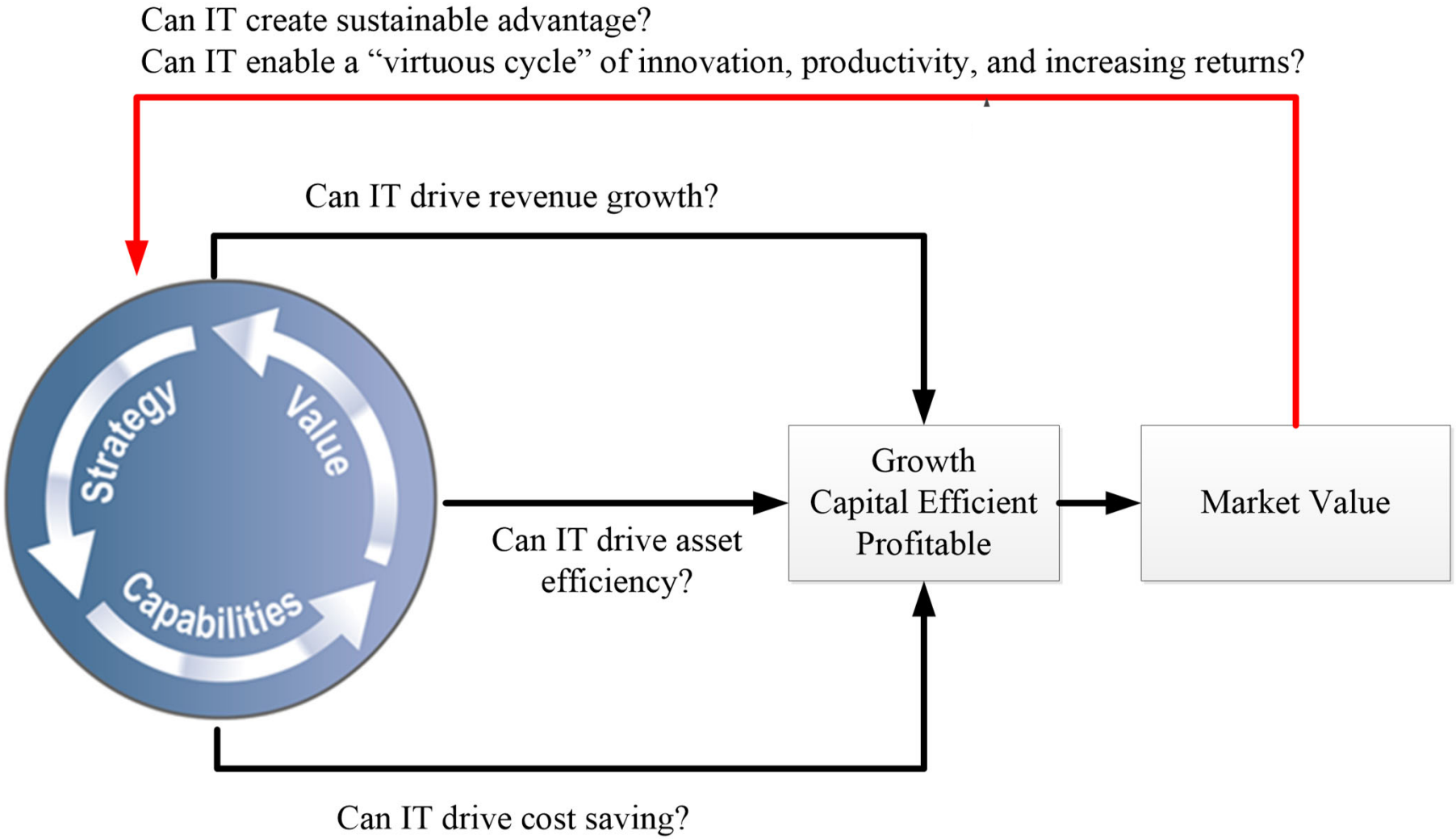
Can IT be used to drive revenue growth?

- Enhance revenue-generating capabilities
  - Streamline and improve revenue-generating processes:
    - Sales, marketing, customer service, etc.
    - E.g., SWISSÔTEL used google analytics
- Launch new products, services or solutions
  - Embed IT into existing physical products
    - E.g., IT is embedded into LG's refrigerators
    - https://www.youtube.com/watch?v=pKvkcH7g-dM ; https://www.cnet.com/videos/lgs-see-through-smart-fridge-takes-the-ces-stage-ces-2017/
  - Launch new IT products/services
    - E.g., Apple launches new iPhones

Can IT be used to drive asset efficiency?

- IT Asset efficiency = Revenue / IT Assets
- IT assets
  - IT operating infrastructure: physical data centers, network centers, call centers, middleware and the people
  - Enterprise solutions: ERP, CRM, payroll and HR, collaboration tools and the people
  - Specialized business solutions: systems that support a specific business activity or team and the people
  - Executive leadership and governance systems
- How to increase IT asset efficiency?
  - Reduce inefficient asset – outsourcing, use of Cloud services

Business Model and IT Investment



Can IT be used to Derive Sustainable Advantage?

- Sustainable advantage occurs when barriers exist that make it difficult for competitors to imitate your actions or for customers to switch
- The ability to innovate and evolve the business model over time

In-class Exercise

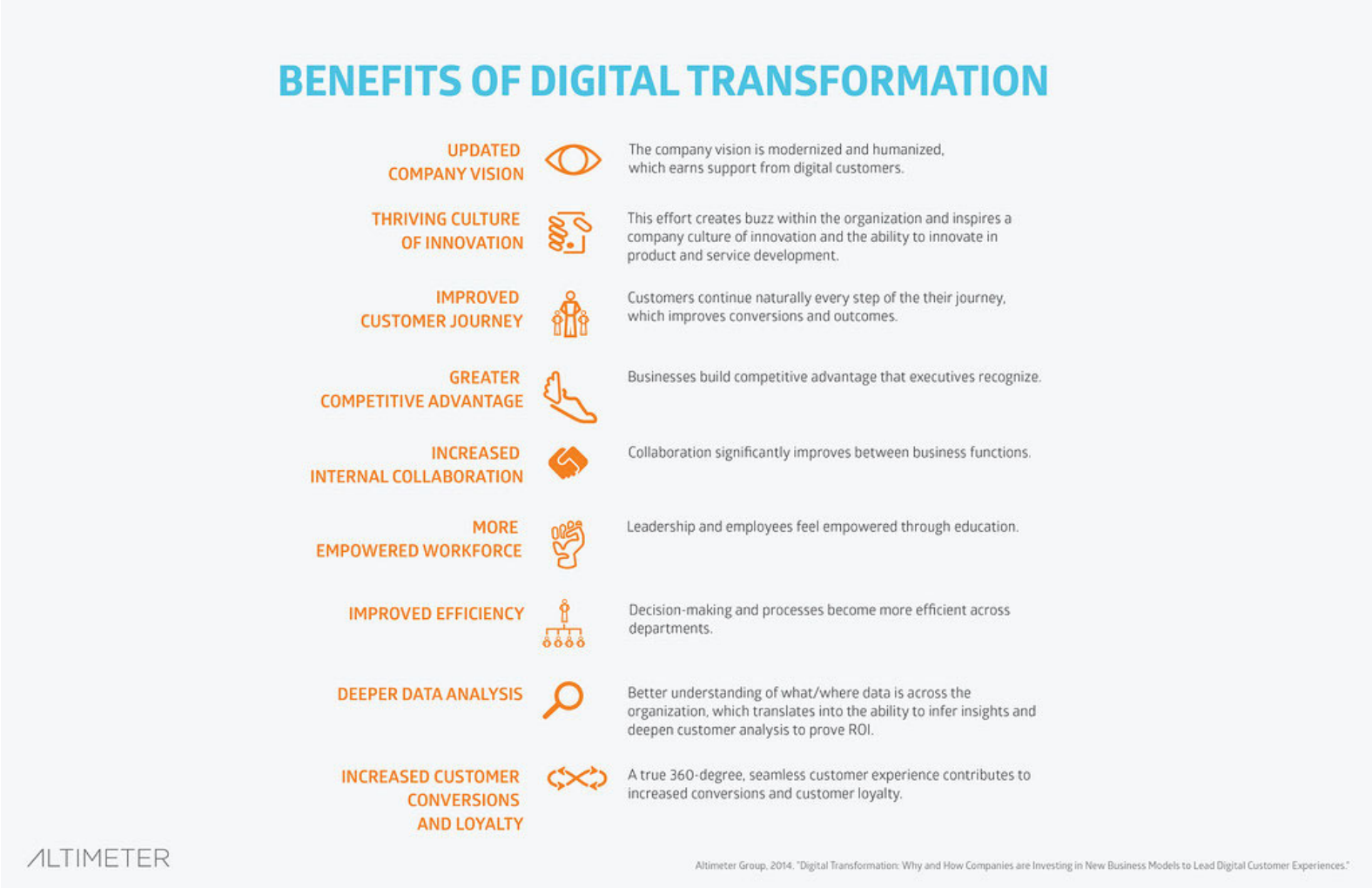
- Complete this as a team
- Select an airline of your choice.
- The airline developed a mobile app which allows its users to do check-in, see seat maps, check flight status.
- **Please describe how this mobile app affects the business model of the airline.**

Digital Transformation

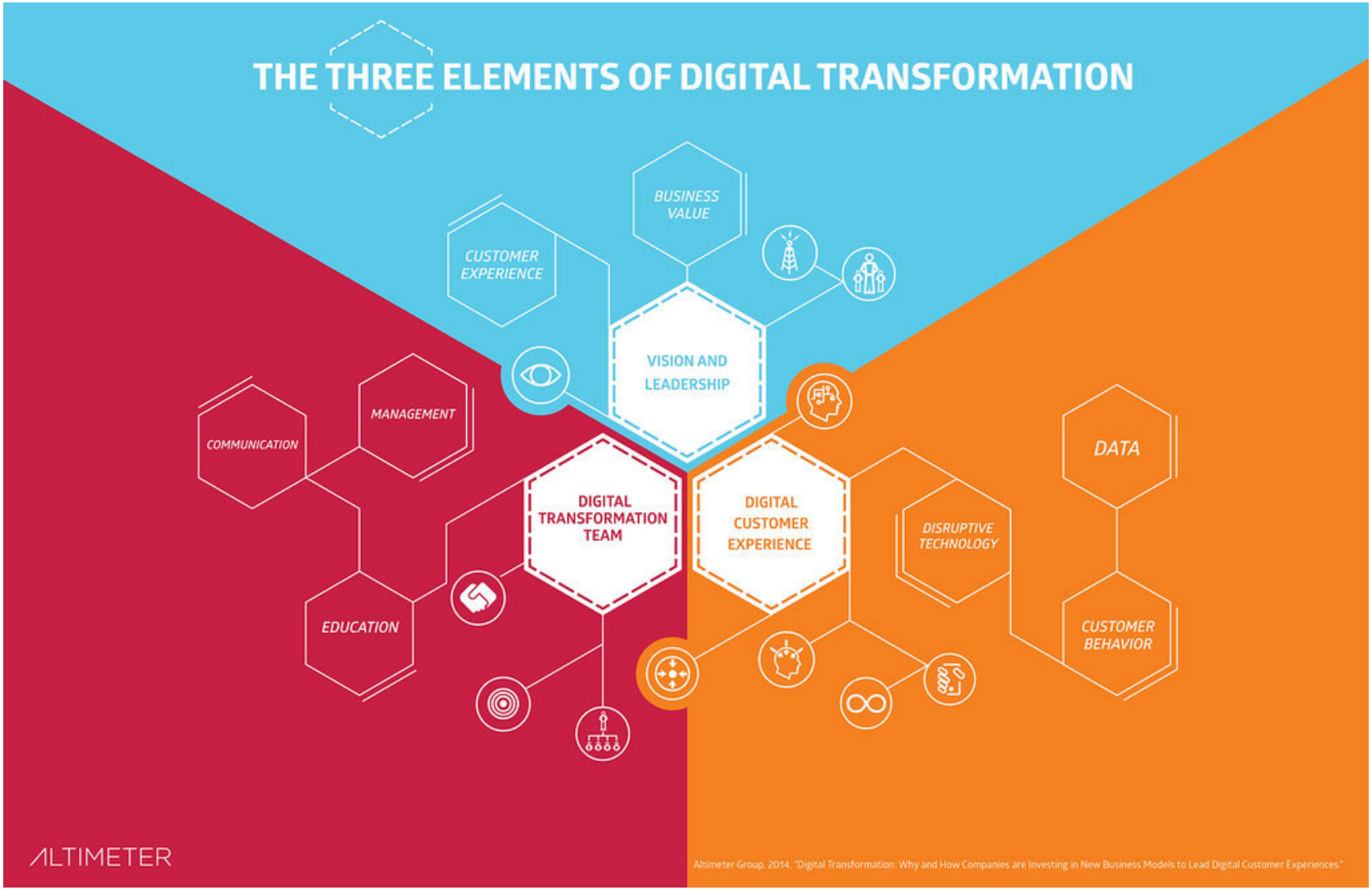
- **Digital transformation is the integration of digital technology into all areas of a business, fundamentally changing how you operate and deliver value to customers. It's also a cultural change that requires organizations to continually challenge the status quo, experiment, and get comfortable with failure.**

Source Reference: The Enterprisers Project (https://enterprisersproject.com/what-is-digital-transformation#q1)

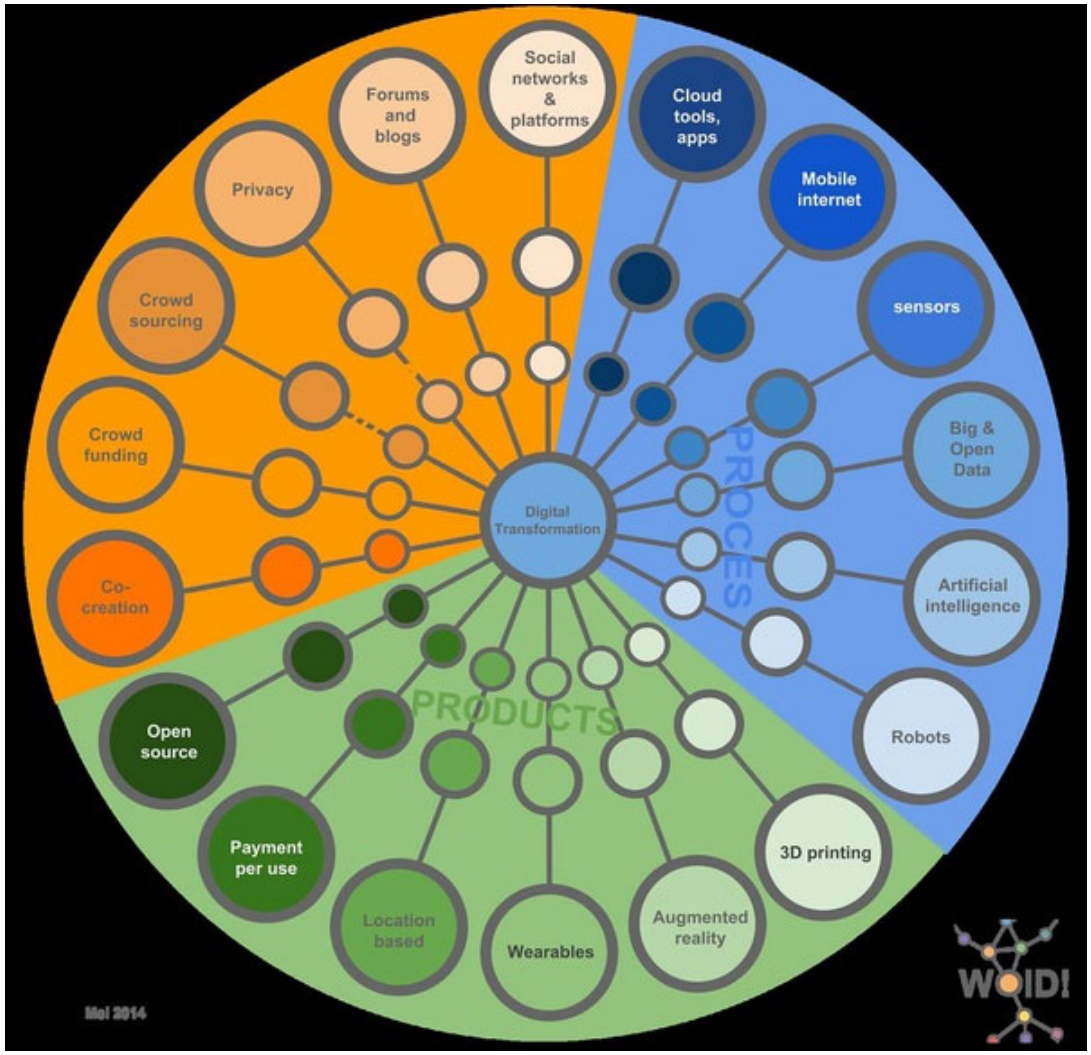
Digital Transformation Benefits



Digital Transformation – Three Elements

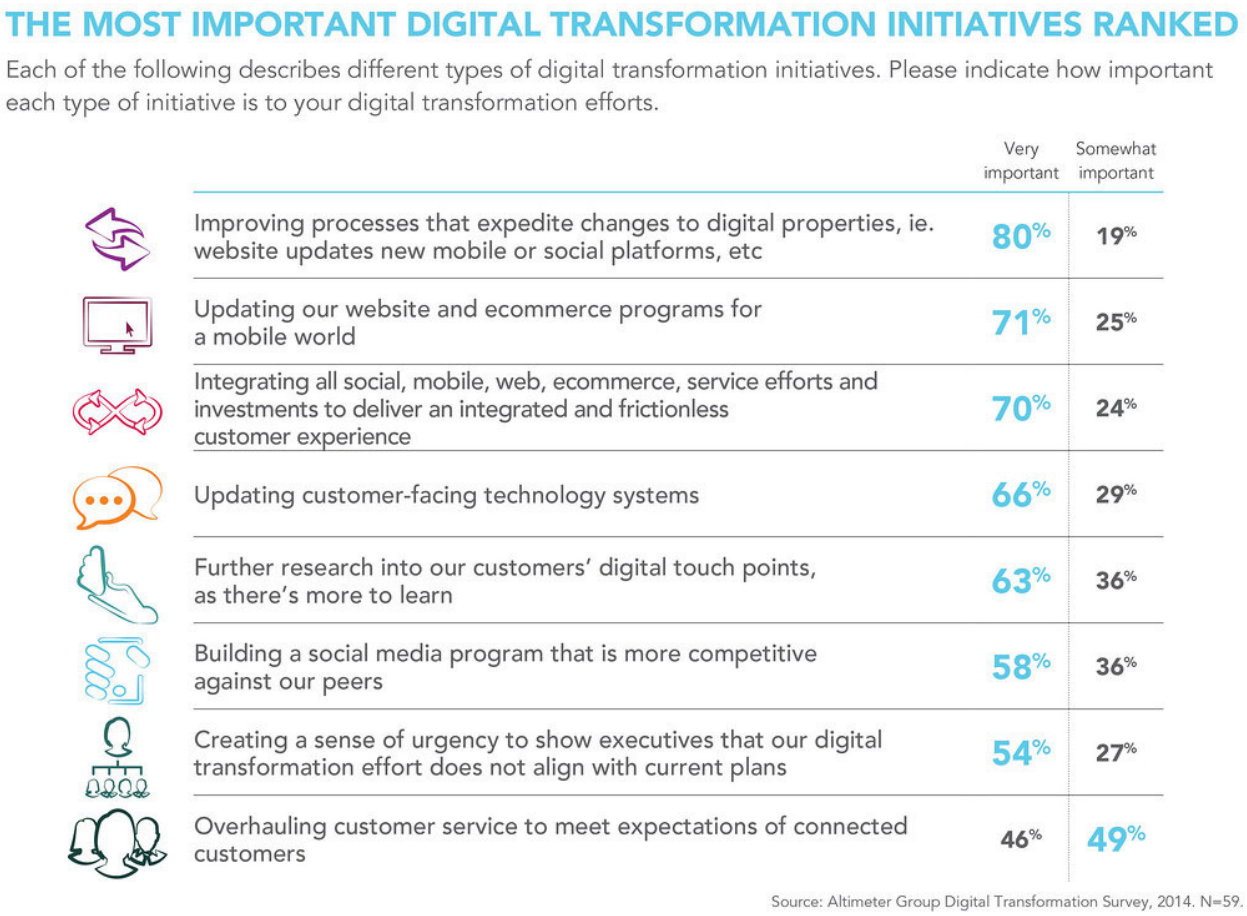


Digital Transformation – Emerging Technologies



- Reference: "Digital Transformation" by Detlef La Grand is licensed under CC BY 2.0

Digital Transformation – Top Initiatives

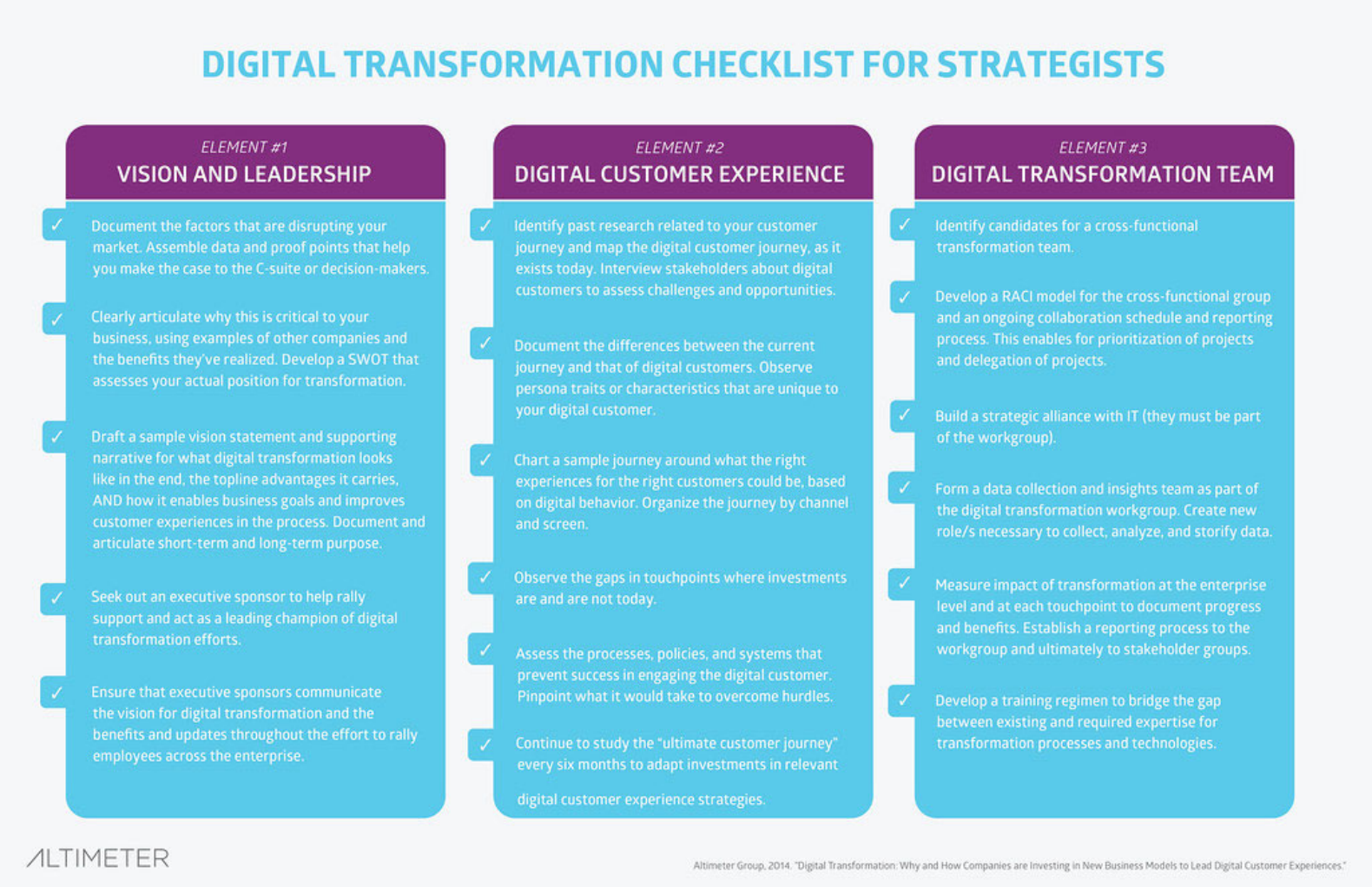


Digital Transformation – Key Lessons

- **Lesson 1: Figure out your business strategy before you invest in anything.**
- **Lesson 2: Leverage insiders.**
  - ➢ staff who have intimate knowledge about what works and what doesn't in their daily operations.
- **Lesson 3: Design customer experience from the outside in**.
- **Lesson 4: Recognize employees' fear of being replaced.**
- **Lesson 5: Bring Silicon Valley start-up culture inside.**
  - ➢**Agile decision making, rapid prototyping, flat structures**

Source Reference: by Behnam Tabrizi, Ed Lam, Kirk Girard, and Vernon Irvin
https://hbr.org/2019/03/digital-transformation-is-not-about-technology

Digital Transformation Checklist for Strategists



Digital Transformation: Top Challenges

Artificial Intelligence (AI)

- AI is the simulation of human intelligence processes by machines, especially computer systems.
- Example applications include expert systems, natural language processing (e.g. generative AI like ChatGPT of OpenAI, DeepSeek, chatbots, etc), speech recognition, machine vision, robotics, etc.
- Machine learning, has often been associated with AI. But it is typically just a component.

Source Reference: https://www.techtarget.com/searchenterpriseai/definition/AI-Artificial-Intelligence

Artificial Intelligence (AI)

- AI development typically focusses on cognitive skills including
  - Learning – acquiring data and creating rules on how to turn it into actionable information. The rules, called algorithms, provide computing devices with a step-by-step instructions on how to carry out a specific task
  - Reasoning – focusses on choosing the right algorithm to reach a desired outcome
  - Self-correction – system designed to continually fine-tune algorithms and ensure they provide the most accurate results possible
  - Creativity – uses neural networks, rules-based systems, statistical methods and other AI techniques to generate new images, new text, new music and new ideas

Source Reference: https://www.techtarget.com/searchenterpriseai/definition/AI-Artificial-Intelligence

Artificial Intelligence (AI)

- AI has potential to change how we live, work and play
- It has been used in businesses to automate tasks done by humans, including customer service work, lead generation, fraud detection, quality control, etc.
- It can sometimes perform better than humans in certain situations
- It is particularly good at repetitive, detail-oriented tasks, such as analyzing large number of legal documents to ensure relevant fields are filled properly
- AI can give insights to enterprises on their operations that they might not be aware of.

Source Reference: https://www.techtarget.com/searchenterpriseai/definition/AI-Artificial-Intelligence

Artificial Intelligence (AI)

- **Advantages of AI**
  - **Good at detail-oriented jobs.** AI has proven to be just as good, if not better than doctors at diagnosing certain cancers, including breast cancer and melanoma.
  - **Reduced time for data-heavy tasks.** AI is widely used in data-heavy industries, including banking and securities, pharma and insurance, to reduce the time it takes to analyze big data sets. Financial services, for example, routinely use AI to process loan applications and detect fraud.
  - **Saves labor and increases productivity.** An example here is the use of warehouse automation, which grew during the pandemic and is expected to increase with the integration of AI and machine learning.
  - **Delivers consistent results.** The best AI translation tools deliver high levels of consistency, offering even small businesses the ability to reach customers in their native language.
  - **Can improve customer satisfaction through personalization.** AI can personalize content, messaging, ads, recommendations and websites to individual customers.
  - **AI-powered virtual agents are always available.** AI programs do not need to sleep or take breaks, providing 24/7 service.

- **Disadvantages of AI**
  - Expensive (depends on its development).
  - Requires deep technical expertise.
  - Limited supply of qualified workers to build AI tools.
  - Reflects the biases of its training data, at scale.
  - Lack of ability to generalize from one task to another.
  - Eliminates human jobs, increasing unemployment rates.

Source Reference: https://www.techtarget.com/searchenterpriseai/definition/AI-Artificial-Intelligence

Artificial Intelligence (AI) - Technologies

- **Automation.** When paired with AI technologies, automation tools can expand the volume and types of tasks performed. An example is robotic process automation (RPA), a type of software that automates repetitive, rules-based data processing tasks traditionally done by humans. When combined with machine learning and emerging AI tools, RPA can automate bigger portions of enterprise jobs, enabling RPA's tactical bots to pass along intelligence from AI and respond to process changes.
- **Machine learning.** This is the science of getting a computer to act without programming. Deep learning is a subset of machine learning that, in very simple terms, can be thought of as the automation of predictive analytics. There are three types of machine learning algorithms:
  - **Supervised learning.** Data sets are labeled so that patterns can be detected and used to label new data sets.
  - **Unsupervised learning.** Data sets aren't labeled and are sorted according to similarities or differences.
  - **Reinforcement learning.** Data sets aren't labeled but, after performing an action or several actions, the AI system is given feedback.
- **Machine vision.** This technology gives a machine the ability to see. Machine vision captures and analyzes visual information using a camera, analog-to-digital conversion and digital signal processing. It is often compared to human eyesight, but machine vision isn't bound by biology and can be programmed to see through walls, for example. It is used in a range of applications from signature identification to medical image analysis. Computer vision, which is focused on machine-based image processing, is often conflated with machine vision.
- **Natural language processing (NLP).** This is the processing of human language by a computer program. One of the older and best-known examples of NLP is spam detection, which looks at the subject line and text of an email and decides if it's junk. Current approaches to NLP are based on machine learning. NLP tasks include text translation, sentiment analysis and speech recognition.
- **Robotics.** This field of engineering focuses on the design and manufacturing of robots. Robots are often used to perform tasks that are difficult for humans to perform or perform consistently. For example, robots are used in car production assembly lines or by NASA to move large objects in space. Researchers also use machine learning to build robots that can interact in social settings.
- **Self-driving cars.** Autonomous vehicles use a combination of computer vision, image recognition and deep learning to build automated skills to pilot a vehicle while staying in a given lane and avoiding unexpected obstructions, such as pedestrians.
- **Text, image and audio generation.** Generative AI techniques, which create various types of media from text prompts, are being applied extensively across businesses to create a seemingly limitless range of content types from photorealistic art to email responses and screenplays.

Source Reference: https://www.techtarget.com/searchenterpriseai/definition/AI-Artificial-Intelligence

Artificial Intelligence (AI) - Applications

- **AI in healthcare.** The biggest bets are on improving patient outcomes and reducing costs. Companies are applying machine learning to make better and faster medical diagnoses than humans. One of the best-known healthcare technologies is IBM Watson. It understands natural language and can respond to questions asked of it. The system mines patient data and other available data sources to form a hypothesis, which it then presents with a confidence scoring schema. Other AI applications include using online virtual health assistants and chatbots to help patients and healthcare customers find medical information, schedule appointments, understand the billing process and complete other administrative processes. An array of AI technologies is also being used to predict, fight and understand pandemics such as COVID-19.
- **AI in business.** Machine learning algorithms are being integrated into analytics and customer relationship management (CRM) platforms to uncover information on how to better serve customers. Chatbots have been incorporated into websites to provide immediate service to customers. The rapid advancement of generative AI technology such as DeepSeek, ChatGPT is expected to have far-reaching consequences: eliminating jobs, revolutionizing product design and disrupting business models.
- **AI in education.** AI can automate grading, giving educators more time for other tasks. It can assess students and adapt to their needs, helping them work at their own pace. AI tutors can provide additional support to students, ensuring they stay on track. The technology could also change where and how students learn, perhaps even replacing some teachers. As demonstrated by ChatGPT, Google Gemini and other large language models, generative AI can help educators craft course work and other teaching materials and engage students in new ways. The advent of these tools also forces educators to rethink student homework and testing and revise policies on plagiarism.

Source Reference: https://www.techtarget.com/searchenterpriseai/definition/AI-Artificial-Intelligence

Artificial Intelligence (AI) - Applications

- **AI in finance.** AI in personal finance applications, such as Intuit Mint or TurboTax, is disrupting financial institutions. Applications such as these collect personal data and provide financial advice. Other programs, such as IBM Watson, have been applied to the process of buying a home. Today, artificial intelligence software performs much of the trading on Wall Street.
- **AI in law.** The discovery process -- sifting through documents -- in law is often overwhelming for humans. Using AI to help automate the legal industry's labor-intensive processes is saving time and improving client service. Law firms use machine learning to describe data and predict outcomes, computer vision to classify and extract information from documents, and NLP to interpret requests for information.
- **AI in entertainment and media.** The entertainment business uses AI techniques for targeted advertising, recommending content, distribution, detecting fraud, creating scripts and making movies. Automated journalism helps newsrooms streamline media workflows reducing time, costs and complexity. Newsrooms use AI to automate routine tasks, such as data entry and proofreading; and to research topics and assist with headlines. How journalism can reliably use ChatGPT and other generative AI to generate content is open to question.

Source Reference: https://www.techtarget.com/searchenterpriseai/definition/AI-Artificial-Intelligence

Artificial Intelligence (AI) - Applications

- **AI in software coding and IT processes.** New generative AI tools can be used to produce application code based on natural language prompts, but it is early days for these tools and unlikely they will replace software engineers soon. AI is also being used to automate many IT processes, including data entry, fraud detection, customer service, and predictive maintenance and security.
- **Security.** AI and machine learning are at the top of the buzzword list security vendors use to market their products, so buyers should approach with caution. Still, AI techniques are being successfully applied to multiple aspects of cybersecurity, including anomaly detection, solving the false-positive problem and conducting behavioral threat analytics. Organizations use machine learning in security information and event management (SIEM) software and related areas to detect anomalies and identify suspicious activities that indicate threats. By analyzing data and using logic to identify similarities to known malicious code, AI can provide alerts to new and emerging attacks much sooner than human employees and previous technology iterations.
- **AI in manufacturing.** Manufacturing has been at the forefront of incorporating robots into the workflow. For example, the industrial robots that were at one time programmed to perform single tasks and separated from human workers, increasingly function as cobots: Smaller, multitasking robots that collaborate with humans and take on responsibility for more parts of the job in warehouses, factory floors and other workspaces.

Source Reference: https://www.techtarget.com/searchenterpriseai/definition/AI-Artificial-Intelligence

Artificial Intelligence (AI) - Applications

- **AI in banking.** Banks are successfully employing chatbots to make their customers aware of services and offerings and to handle transactions that don't require human intervention. AI virtual assistants are used to improve and cut the costs of compliance with banking regulations. Banking organizations use AI to improve their decision-making for loans, set credit limits and identify investment opportunities.
- **AI in transportation.** In addition to AI's fundamental role in operating autonomous vehicles, AI technologies are used in transportation to manage traffic, predict flight delays, and make ocean shipping safer and more efficient. In supply chains, AI is replacing traditional methods of forecasting demand and predicting disruptions, a trend accelerated by COVID-19 when many companies were caught off guard by the effects of a global pandemic on the supply and demand of goods.

Source Reference: https://www.techtarget.com/searchenterpriseai/definition/AI-Artificial-Intelligence

Artificial Intelligence (AI) – Building a Winning AI Strategy for Business

- **Start by Experimenting**
- **Deploy for productivity**
- **Transform Experiences**
  - As an example, PwC is using Azure OpenAI Service to expand and scale its own AI offerings while also helping clients in industries like insurance or healthcare reimagine their businesses by leveraging the power of generative AI. CarMax is using it to analyze hundreds of thousands of customer reviews and surface key takeaways for buyers about every make, model, and year of vehicle in its inventory.
- **Build New Things**
  - What can you do that's different? How can you delight customers and create new lines of business to generate new revenue?
  - Such as using generative AI to get ideas or to conduct research
- ***Throughout: Prioritize Security & Responsible AI***

Source Reference: https://hbr.org/2023/07/build-a-winning-ai-strategy-for-your-business

Artificial Intelligence (AI) – 5 Ways to Implement AI in the Business Strategy

- **Intelligent Document Processing**
  - Intelligent document processing (IDP) is the automation of document-based workflows using AI technologies. We see a lot of our clients use these tools for things like invoice processing, data entry and contract management, which allows them to save time and resources.
  - Businesses can also use IDP to gain insights from large volumes of documents. With natural language processing (NLP), companies can analyze the content of documents to identify patterns, trends and anomalies, which can help with making better data-driven decisions.
- **Customer Service Chatbots**
  - Customer service chatbots—AI-powered tools that can help businesses improve their customer service experience—interact with customers using natural language, answering their questions and resolving their issues in real time.
  - One of the benefits of chatbots is that they can provide 24/7 customer support, which can help businesses improve their customer service experience and reduce response times. By automating repetitive tasks such as answering FAQs, chatbots can also help businesses reduce the workload on their customer service teams by freeing up agents to focus on more complex tasks.

Source Reference: https://www.forbes.com/sites/forbesbusinessdevelopmentcouncil/2023/04/26/5-ways-to-implement-ai-in-your-business-strategy/?sh=2d464f732daf – Credit to Mr Gilbert Marcano Forbes Council Member

Artificial Intelligence (AI) – 5 Ways to Implement AI in the Business Strategy

- **Predictive Analytics**
  - Predictive analytics use AI-powered tools to analyze data and predict future events. As a result, businesses can make more informed decisions based on data-driven insights. This can help businesses identify potential risks and opportunities—for example, identifying customers who are likely to churn, which allows companies to take proactive measures to retain these customers.
  - Predictive analytics can also help businesses optimize their operations. By analyzing data from various sources, companies can identify trends and patterns that can help them improve their processes and workflows.
- **Sales Forecasting**
  - Sales forecasting uses AI tools to help predict future sales trends. This can help businesses better plan their operations and allocate resources more effectively.
  - One of the benefits of sales forecasting is that it can help businesses to identify potential sales opportunities. Companies can identify areas to increase sales and improve revenue by analyzing sales data and market trends. Sales forecasting can also help businesses optimize their inventory management. By predicting future sales trends, companies can ensure they have the right products in stock to meet demand.

Source Reference: https://www.forbes.com/sites/forbesbusinessdevelopmentcouncil/2023/04/26/5-ways-to-implement-ai-in-your-business-strategy/?sh=2d464f732daf – Credit to Mr Gilbert Marcano Forbes Council Member

Artificial Intelligence (AI) – 5 Ways to Implement AI in the Business Strategy

- **Fraud Detection**
  - Fraud detection uses AI to help identify fraudulent activities. This can help businesses identify potential fraud in real time and protect themselves from financial losses and reputational damage.
  - Monitoring thousands of transactions simultaneously can become problematic if you don't have the proper structure. These models of AI are customizable to a business as long as you find the right product or service company in the market.

Source Reference: https://www.forbes.com/sites/forbesbusinessdevelopmentcouncil/2023/04/26/5-ways-to-implement-ai-in-your-business-strategy/?sh=2d464f732daf – Credit to Mr Gilbert Marcano Forbes Council Member

Artificial Intelligence (AI) – Application Example

- **Case of Epson America**
  - Use AI to quickly capitalize on new sales opportunity
  - Sales teams mainly focused on named customers and not the leads that the marketing team was sending
  - Using a smart virtual assistant to track leads (using Conversica) generated by marketing
  - With 60,000 business leads, the lead follow-up is passed to the seller to achieve more consistent follow-up availability
  - Epson leads are now monitored regularly until the AI assistant receives a response. After passing to an Epson partner, the AI assistant takes care of customer satisfaction, allowing Epson to take advantage of the new pre-competitive sales.
  - This increased response rate by 240%.

Source Reference: https://www.urolime.com/blogs/how-ai-enhances-organizational-performance/

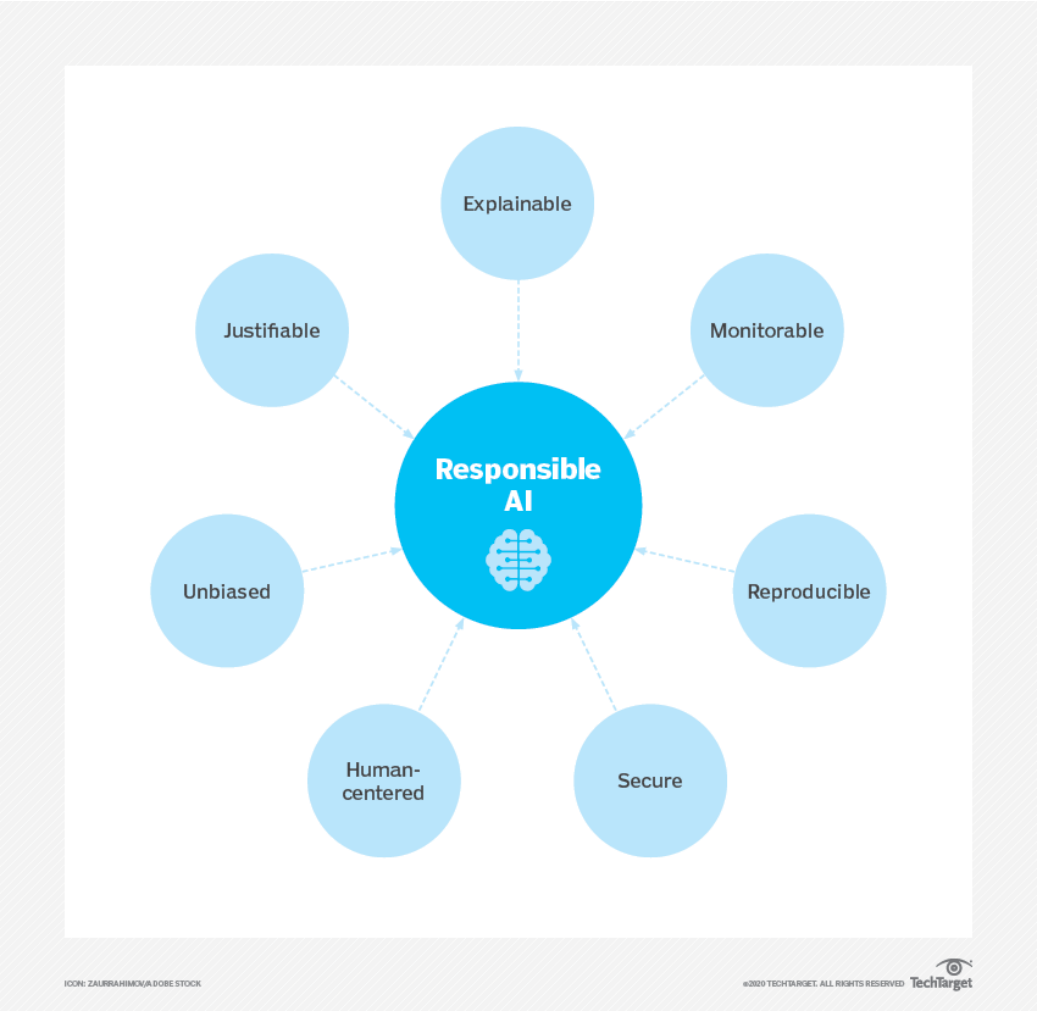
Artificial Intelligence (AI) – Ethical Challenges & Governance

- Bias due to improperly trained algorithms and human bias.
- Misuse due to deepfakes and phishing.
- Legal concerns, including AI libel and copyright issues.
- Elimination of jobs due to the growing capabilities of AI.
- Data privacy concerns, particularly in the banking, healthcare and legal fields.

There could be need for responsible AI use, and regulations governing the use of AI tools.

Source Reference: https://www.techtarget.com/searchenterpriseai/definition/AI-Artificial-Intelligence

Artificial Intelligence (AI) – Responsible AI Use



Source Reference: https://www.techtarget.com/searchenterpriseai/definition/AI-Artificial-Intelligence