BUSINESS INFORMATION SYSTEMS (INFS1001)

SEMINAR - WEEK 11

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WEEK 11 AGENDA

- Course Review (Part 1)
- Tres Fortunas
- Week 11 wrap-up

REVIEW

- What do we mean by utilitarianism?
- Give an example of a technology that is ethical when applying this philosophy.
- What do we mean by egoism? Apply egoism to a disruptive technology like Napster.
- Describe Simon's decision-making model.

THE BUSINESS INFORMATION SYSTEMS ECOSYSTEM

In this course we examine how business information systems impact the inner workings of a business and the connections to a broader ecosystem.

Markets

Customers

Suppliers

Organisational Change

Decision Making

Systems Modelling

Technologies

Systems Development

Strategy Development Methods

Data Management

Cyber Security

Ethics

Government

Disruptive Tech

Competitors

COURSE OVERVIEW
What have we studied? (1 of 2)

Strategy Development Methods	• Business Model Canvas • Digital Strategy Diamond • IT Strategy • SWOT • Social Media Strategies
Systems Modelling	• General Systems Model • Rich Picture • Enterprise Architecture: TOGAF (organization) • e-Commerce models
Systems Development	• Agile • Waterfall • Design Thinking • System Selection
Organisational Change	• Leadership Style (Transformational, Transactional, etc.) • Lewin's model and force field analysis • IT Organisation and Role of the CIO • The Value of IT • Tuckman

COURSE OVERVIEW
What have we studied? (2 of 2)

Technologies	• Enterprise Resource Planning (ERP) • Cloud • Emerging and Disruptive • Artificial Intelligence • VR and AR, Metaverse, Quantum, IoE
Decision Making	• Simon's model • Heuristics • Structured, Semi structured, Unstructured
Data Management	• Data Management Strategy • Information Architecture • MIS/Balanced Scorecard • Data Hierarchy
Cyber Security	• Threat Types • Ethical Hacking • Data Breaches • Risk Management Strategy
Ethics	• Egoism • Utilitarianism • Natural Law • Respect for Persons

NFT copyrighted by
Seth Green and others

THE SAD STORY OF FRED SIMIAN
THE STOLEN BORED APE

- So what happens when you steal a digital asset like an NFT?
- Fred was created by the Bored Ape Yacht Club and purchased by Seth Green who intended to use Fred as a star in an upcoming series.
- Sadly, as a result of a phishing attack, Fred was stolen from Green's crypto wallet and then sold to a good faith buyer for $268,000 USD.
- Who owns Fred?
- The sale came under the jurisdiction of New York and if Fred was a recognised asset the thief and subsequently the good faith buyer had no claim to ownership.
- Luckily (sort of) Green was able to repurchase and reclaim Fred and assert his ownership rights.
- So, what's the implication for the Metaverse?

Minn, J. (2022). What Happens When NFTs are Stollen? *Columbia Journal of Law and Arts*.

WELCOME TO TRES FORTUNAS

- Over the next few weeks, we will be using the case of Tres Fortunas to review and apply the concepts, techniques and frameworks you have learned during the course. The intent is to reinforce learning and give you the opportunity to practice with support during class.
- These exercises will also help you prepare for the end of semester exam.
- Our goal is to ensure we understand the business and build technology strategies that will position it for future success.

Activities for this week.

1. The CEO has decided to leverage social media but also pursue a digital strategy that enables Tres Fortunas to develop stronger links with its suppliers, customers, regulators and community. The CEO also believes that a greater digital presence could lead to the opportunity to franchise the business into other cities.
2. The CEO wants to leverage your BMC and knowledge to develop a strategy using the Digital Diamond. Your task for this week is to develop a Digital Diamond for Tres Fortunas and ensure that you are reflecting the business objectives.

TRES FORTUNAS
BUSINESS MODEL CANVAS

Key Partners
- Suppliers
- Delivery Services (Uber, etc)
- Wholesalers
- Supermarkets
- Banks
- Payment Processors
- Merchandisers

Key Activities
- Providing quality food
- Ordering supplies
- Marketing
- Human Resources and WHS

Key Resources
- Trucks
- Merchandising
- Employees
- Finances
- Equipment

Value Propositions
- Good food
- Authenticity
- Convenience
- Value for money
- Culture
- Part of a community
- Interesting menu

Customer Relationships
- Timely and useful information
- Valued rewards
- Community values
- Value for money
- Authentic

Channels
- Loyalty program
- Social media
- Website
- Online newsletter

Customer Segments
- Individuals
- Families
- Couples
- Students
- Groups
- Event planners

Cost Structure
- Salaries
- Supply chain
- Rent and utilities
- Marketing and Advertising

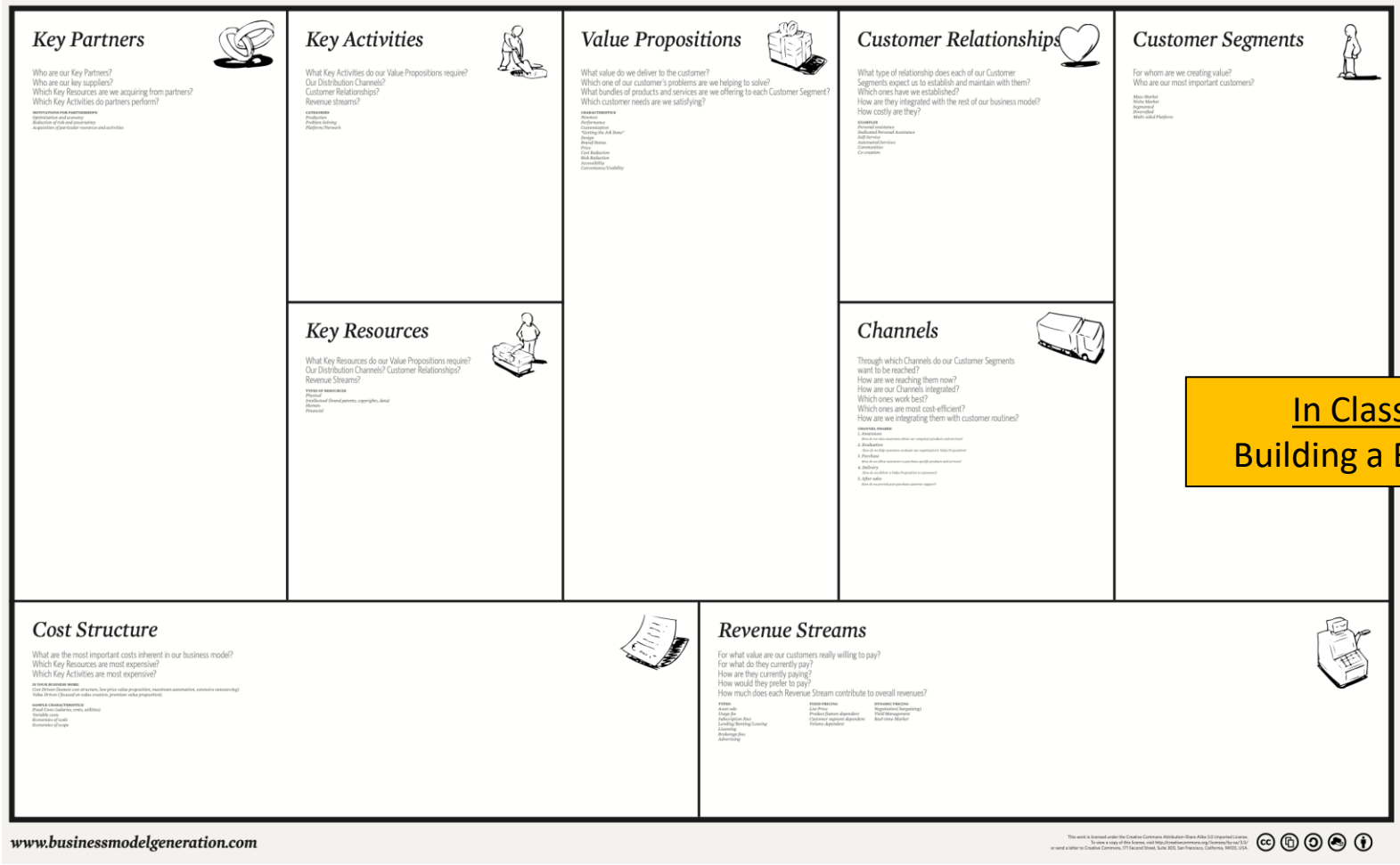
Revenue Stream
- Food Trucks
- Wholesale
- Supermarkets
- Delivery sales

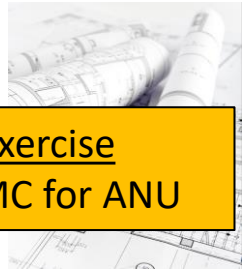
Business Strategy

- Developing and implementing a business strategy is key to deriving value from technology.
- Without customers, revenue, profit and value – you don't have a business!!
- Understanding the intent of the business strategy helps us identify areas where technology contributes the most.
- There are many tools and frameworks that help senior management develop and communicate their business strategy.

The Business Model Canvas

- The Business Model Canvas (BMC) is a strategy development tool that is used to describe an organisations current state, future state and its desired strategy. The BMC provides a structured approach to understanding how a business operates and providing insights into its future.
- The BMC can represent either the current or future state of the business. It is then be used to highlight current deficiencies in technology support or highlight future technology needs required to implement a desired strategy.





In Class Exercise
Building a BMC for ANU

- The objective of the IS Strategy is to articulate the current state of technology, describe the future state and lay out the plan to move from current to future.
- The IT Strategy must:
  - Improve management's understanding of IS opportunities and limitations
  - Assess current performance
  - Identify capacity and human resource requirements
  - Clarify the level of investment required
- The articulation of how technology will support the organisation is based on long, medium and tactical plans.
- Given the nature of technology and industries the long-term plan may only be 2 – 3 years in duration (or shorter).

Traditionally there's been a unilateral connection between Business and IS strategies

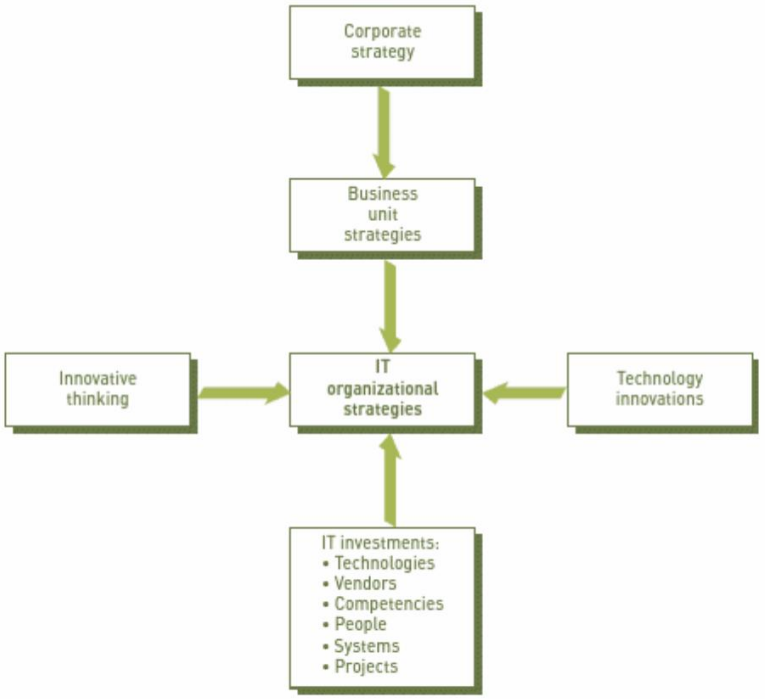


FIGURE 11.4
Drivers that set IS organizational strategy and determine information system investments
Planners must consider many factors in setting IS organizational strategy.

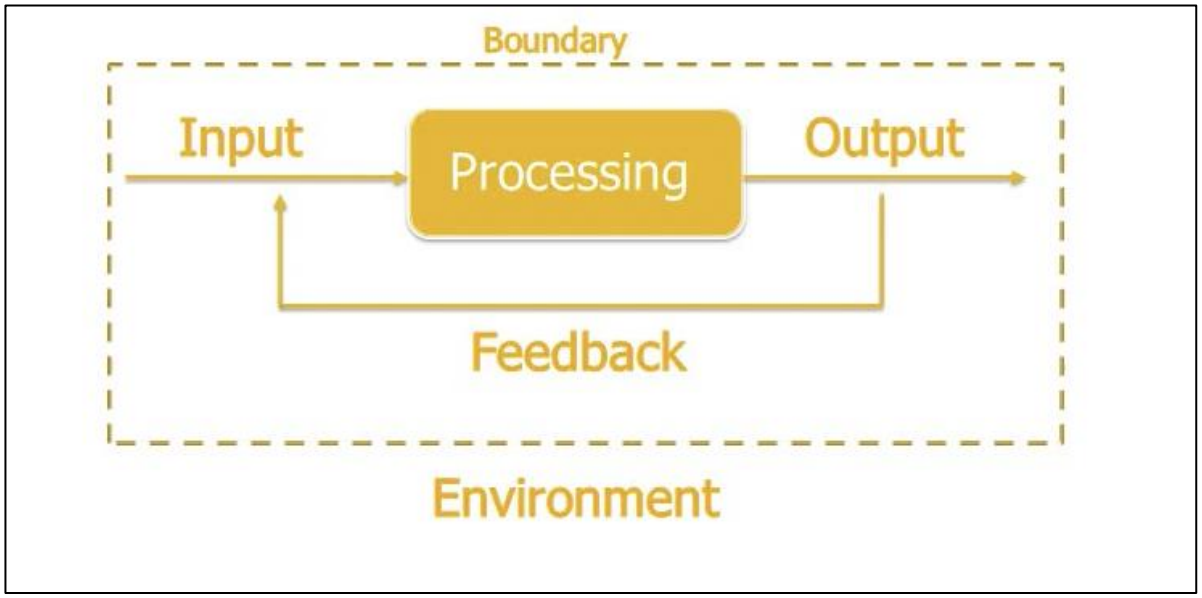
Stair and Reynolds Figure 11.4

Given the current nature of Information Systems – does this unilateral connection still make sense? Why?

So how do organisations make sure they are getting the most out of their technology?

Systems modelling can help…

The general systems model is simple but a powerful foundation



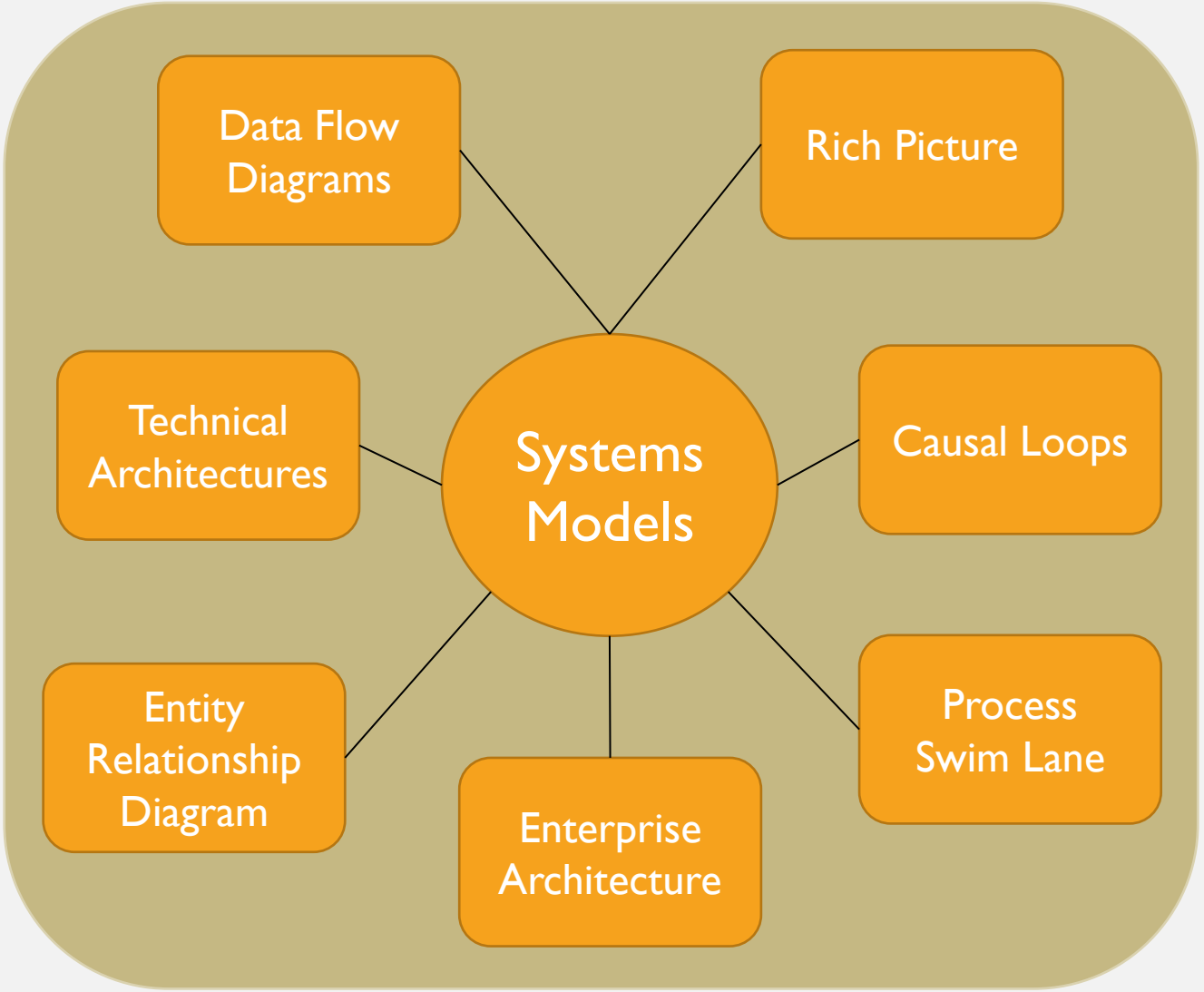
For example: Apply the general systems model to the completion of an INFS1001 assignment.

1. What are the inputs?
2. What is the output?
3. How can we use the feedback loop?
4. What are the critical success factors that influence this system model?

- In this course we're exploring how system models describe business and personal experiences.
- Our goal is to understand how systems work and communicate its intent/operation to others.
- The general systems model describes a simple system where we process an input to create an output with the ability to learn and take further actions based on a feedback loop.
- Systems operate within some form of context so we recognise that our entire system is encased in an environment with its own set of conditions and expectations.

SYSTEMS MODELLING
LOTS OF MODELS TO CHOOSE FROM

- There are many models that we can use to describe a system.
- The models focus at various levels of detail ranging from a macro level to low level technical details.
- The models can be used to communicate with executive management
- Also useful for the basis of detailed, technical conversations.



Even if you're not an IT person, understanding how to use some of these models enables you to have informed conversations with your IT colleagues.

SYSTEMS MODELLING

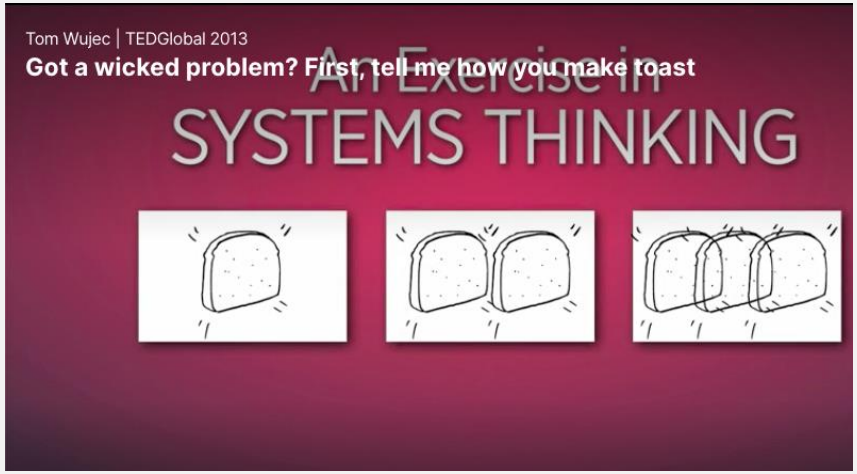
SOLVING BUSINESS PROBLEMS IS OFTEN A KEY CHALLENGE REQUIRING IT DEPARTMENT PARTICIPATION

In collaboration with the business areas, the IT organisation is often called upon to participate in finding solutions for complex business problems.

Collaborative problem solving requires participants to have a consistent and common understanding of the problem and potential solutions.

If this isn't the case, then it's likely that the divide between business and IT is significant and the Business/IT partnership isn't what it needs to be.

Establishing an environment where this is true can often be done by applying a Systems Thinking approach where a familiar task is explored and documented.



How do you make toast

This exercise takes the familiar task of making toast to establish a team environment where everyone understands what has to be done but then learns how to work with others to describe a task and, ultimately, solve a common problem.

How have you worked with people to get them on the "same page"?

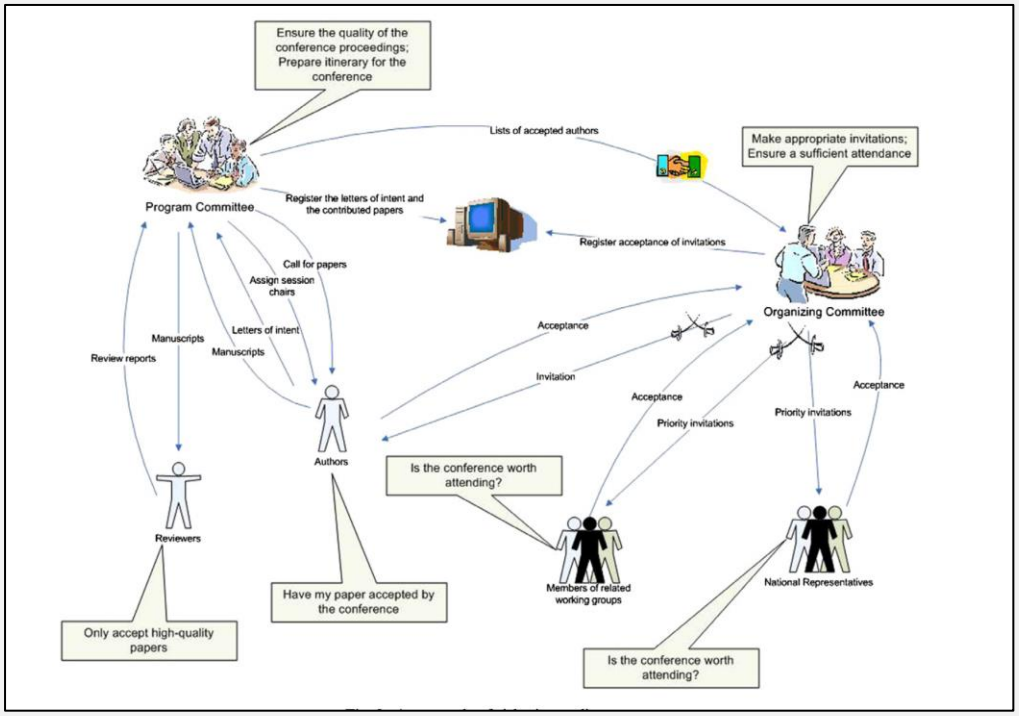
SYSTEMS MODELLING *(RICH PICTURE)*

To develop a Rich Picture

- What is the system that you are trying to model?
- Who are the actors involved in this narrative?
- What types of technology are they using?
- What's the connection between the actors and the technology?
- How does information flow across the system?

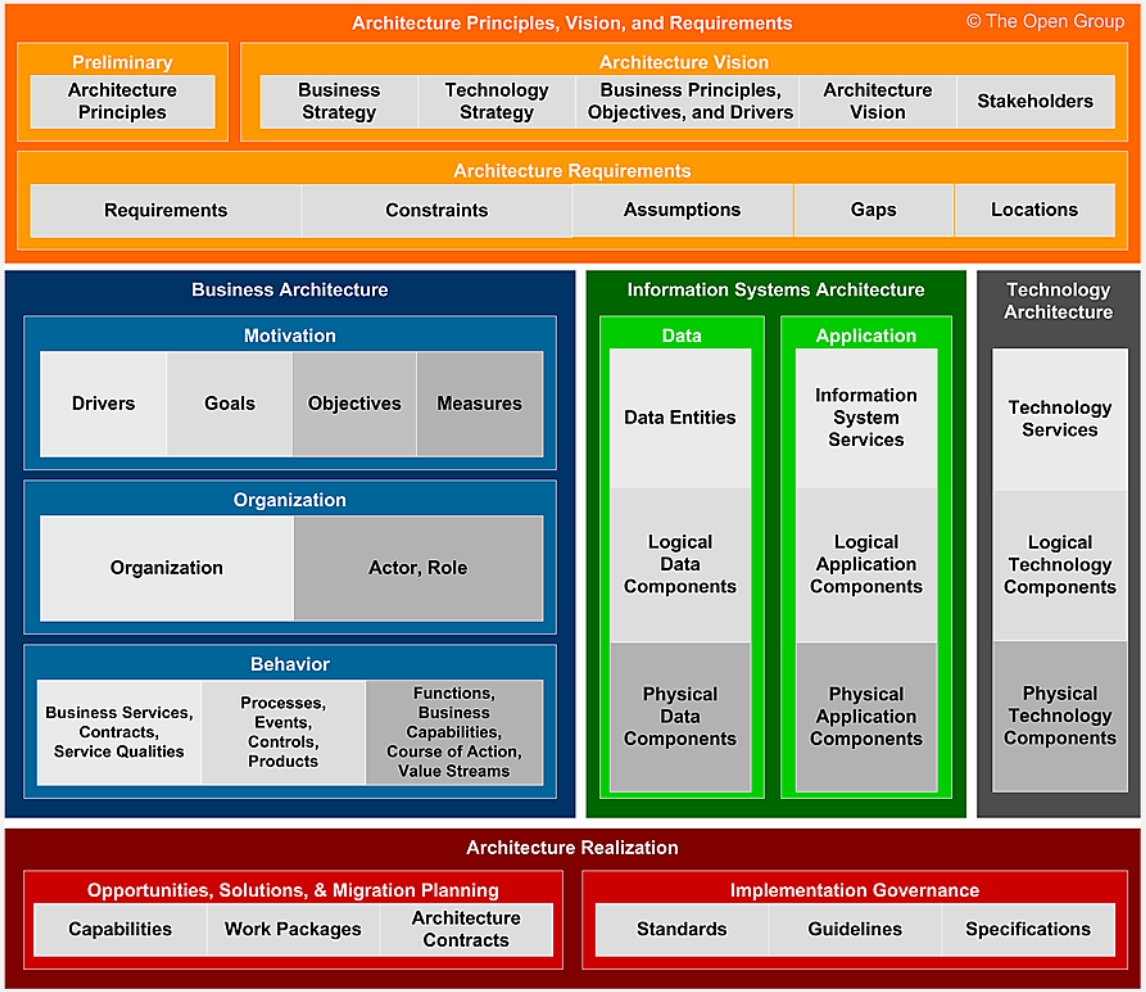
FYI - The Rich Picture is a good way of communicating to an executive how proposed technology will work within their environment

- The Rich picture is a pictorial model and provides a Multiview description of the system.
- The Rich Picture describes the elements of a system at varying levels of detail depending on the intended use and audience.
- In the example below, this Rich Picture describes the system supporting the planning of an academic conference.
- Note that from this model we identify the major actors, their objectives, technology and the information flow across the system.



Siau, K., & Wang, Y. (2007). Cognitive Evaluation of Information Modeling Methods. *Information and Software Technology*, *49*(5), 455–474.

INTRODUCING THE ENTERPRISE ARCHITECTURE



- TOGAF comes from The Open Group
- It was developed in the 1990s when competing software vendors realised that inconsistent changes in technical standards on which their products were built was reducing their competitiveness.
- This was a real concern in the 1990s because Microsoft began to expand beyond the PC market.
- Now, the Open Group is a consortium of over 800 organisations including technology vendors, industry groups and government organisations.
- TOGAF consists of 5 interconnected domains.

The Open Group, https://pubs.opengroup.org/architecture/togaf92-doc/arch/

THE BENEFITS OF ENTERPRISE ARCHITECTURE

The successful design, implementation and ongoing management of an EA can create strategic and operational benefits.

Adapted from Shanks, G. et al (2018). Achieving benefits with enterprise architecture. *Journal of Strategic Information Systems* , 27.

THE MYTHS OF ENTERPRISE ARCHITECTURE
(IT'S NOT A SILVER BULLET)

We understand the structure of an EA framework and potential for value but realising the benefits requires us to dispel some myths:

- Myth 1: EA creates value
  - The EA is a collection of artefacts that **delivers no value without action being taken**.
  - **Management needs to be committed** to implementing and following the EA principles .
- Myth 2: EA reduces complexity
  - Using an EA is actually a way of dealing with a complex environment that is likely to stay that way.
  - The **complexity of the EA** is a reflection of the complexity of the environment it describes
- Myth 3: EA evaluates all aspects of an enterprise
  - In theory, an **EA should describe all of the business and technology** components of an organisations strategy and operations.
  - However, given the changing nature of organisations this **isn't practical nor feasible.**
  - The level of effort required to describe the minutiae of the EA domains undercuts the value of EA implementation
- Myth 4: EA should only capture the situation envisioned
  - While the EA is a strategic framework it **must have an "as-is" and "to-be".**
  - Enables decision makers to take action on current technology and plan for the implementation or removal of other domain artefacts over time.
- Myth 5: EA is a one-time effort
  - **Business conditions and technology are constantly changing** and consequently the EA must be updated in order to stay current and provide an accurate depiction of the architecture(s)

Adapted from Gong, & Janssen. (2019). The value of and myths about enterprise architecture. *International Journal of Information Management*. 46

THE BUSINESS ARCHITECTURE
DEFINING AND UNDERSTANDING TECHNOLOGY REQUIREMENTS

Functional Requirements

- End User Transactions
- Business Rules
- Administrative functions
- Authentication
- Authorization levels
- Audit Tracking
- External Interfaces
- Certification Requirements
- Reporting Requirements
- Historical Data
- Legal or Regulatory Requirements

Non Functional Requirements

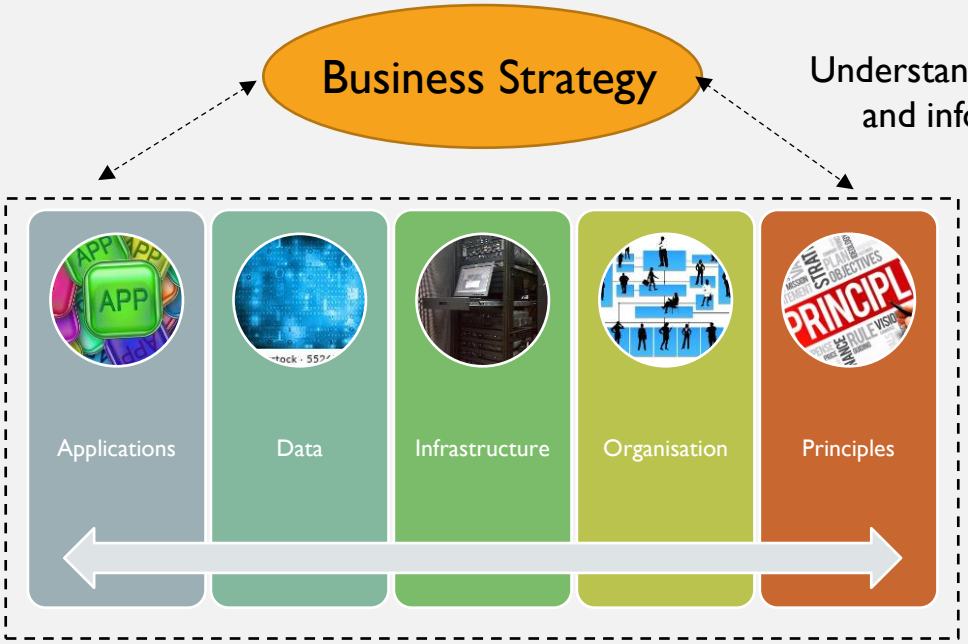
- Performance (e.g. Response Time, Throughput, etc)
- Scalability
- Capacity
- Availability
- Reliability
- Recoverability
- Maintainability
- Serviceability
- Security
- Regulatory
- Manageability
- Environmental
- Data Integrity
- Usability
- Interoperability

- Understanding requirement types and making sure they are all considered is important!
- This is a good subject for the conversation with your IT person.

From reqtest.com

BUILDING THE INFORMATION SYSTEMS STRATEGY

Information Systems Strategy



Document current state, analyse and describe/plan for the future

Question – what challenges or decisions do you think might occur in these domains?

Task Name	Duration	Start	Finish
Information Systems Project Portfolio	**210 days**	**Wed 10/07/**	**Tue 29**
Complete AI Study	**45 days**	**Wed 10/07/**	**Tue 10**
Identify AI products/ vendors	20 days	Wed 10/07/	Tue 6/
Complete viability assessment	25 days	Wed 7/08/24	Tue 10
Develop implementation plan	25 days		
ERP Implementation	**210 days**	**Wed 10/07/**	**Tue 29**
Complete selection	80 days	Wed 10/07/	Tue 29
Implementation	120 days	Mon 14/10/2	Fri 28/
Remediation	90 days	Wed 25/12/	Tue 29
Business Intelligence	**203 days**	**Wed 10/07/**	**Fri 18/**
Develop Warehouse	80 days		
Develop Dashboards	100 days	Wed 10/07/	Tue 26
Implementation	100 days	Mon 2/12/24	Fri 18/

Describe the future state implementation approach and detailed plan

The IS Strategy – what makes a good one?

- Alignment – clearly aligns with business strategy, key performance indicators and technology governance principles.
- Realistic –provides a realistic assessment of current capabilities and the ability of the organisation to absorb new technologies.
- Clarity – clearly explains the strategy in technical and non technical terms.
- Organisational change – describes how organisational change will be managed by senior management and programs/projects.
- Time based – provides description of initiatives on a timeline throughout the planning horizon. Recognises that there are dependencies within the plan.
- Financially sound – provides realistic capital and operating budget estimates. Demonstrates business value and ROI.
- Innovation – incorporates appropriate innovation that clearly drives business transformation.
- Buy In - Likely to receive executive and senior management support in an environment where everyone is competing for capital.

SOCIAL MEDIA STRATEGIES – WHO DO YOU WANT TO BE?

An organisations social media strategy can't be static and changes based on business needs, market conditions and many other factors.

We can identify four social media strategies that provide an organisation with both a starting point and direction.

Class Discussion -

- Match the Social Media Strategy to the most appropriate Case

The Creative Experimenter – uses **small scale tests** to gather information and fine tune aspects of their business.

The Predictive Practitioner – focuses on a **specific area** of their business, and, maybe stakeholders, with the intent of minimising risk and enabling **close monitoring** of results.

The Social Media Champion – large scale social media initiatives launched to hopefully achieve **positive and predicted** results

The Social Media Transformer – uses large scale interaction, to enable contribution and collaboration from across the company and **allows the unexpected** to improve aspects of their business

Clorox – created a website that poses questions to customers and suppliers with the intent of gathering feedback and suggestions.

Ford – lends 100 cars to social media influencers and others and requires them to post regular content on themed, planned missions

Cisco – launches a workforce experience that operates like a Facebook wall. Real time news feed, communities, video, collaboration tools, etc.

EMC – launched a platform to see whether their employees could help reduce reliance on contractors. Conducted behind their firewall and made it clear that they'd run for 2 months and then try something else.

Wilson, H. J. (2011). What's Your Social Media Strategy? *Harvard Business Review*.

SOCIAL MEDIA STRATEGIES – EVOLUTION AND GROWTH

The Creative Experimenter – uses small scale tests to gather information and fine tune aspects of their business.

The Social Media Champion – large scale social media initiatives launched to hopefully achieve positive and predicted results

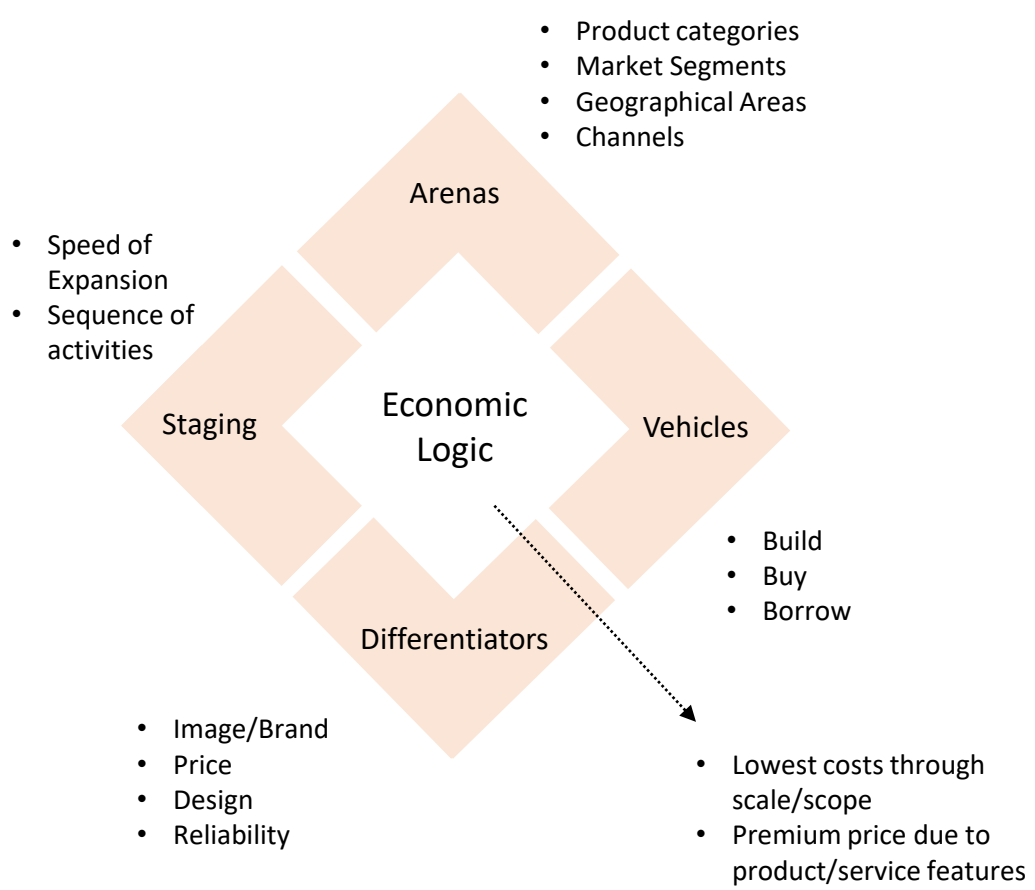
The Predictive Practitioner – focuses on a specific area of their business, and, maybe stakeholders, with the intent of minimising risk and enabling close monitoring of results.

The Social Media Transformer – uses large scale interaction, to enable contribution and collaboration from across the company and allows the unexpected to improve aspects of their business

Class Discussion

- If were the VC of ANU and wanted to establish/expand your social media presence.
- Where should you start with social media? Which strategy works best? What do you see as the progression as the business grows, potentially exponentially?

Developing the Digital Transformation Strategy, *The Strategy Diamond*



Arenas	Where will we be active
Vehicles	How will we get there
Differentiators	How will we win in the marketplace
Staging	What will be our speed and sequence of moves
Economic Logic	How will we obtain our returns

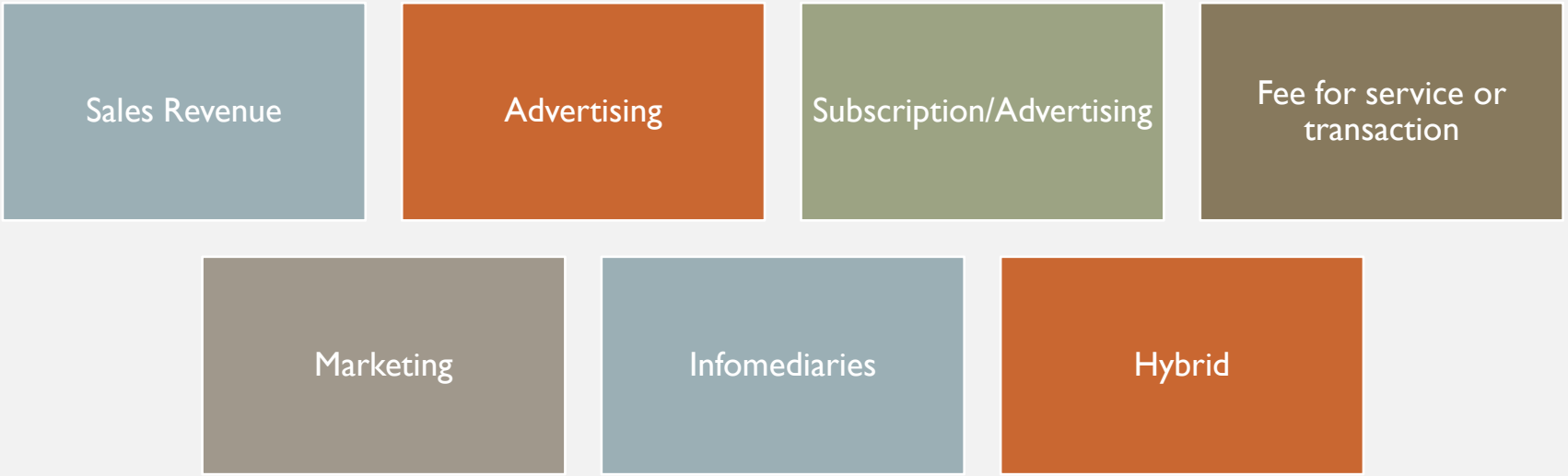
Source: Donald C. Hambrick and James W. Fredrickson: Are you sure you have a strategy? Academy of Management Executive, 19(4), 2005.

E-COMMERCE CLASSIFICATIONS

- We can classify e-Commerce by thinking about bi-directional transactions between two or more actors.
- Transactions may be one off or recurring.
- They may be single or multiple transactions.

1. Business to Consumer (B2C)
   - Online retail, banking, etc.
   - Enables disintermediation
2. Business to Business (B2B)
   - Connects business organisations.
   - Procurement, supply chain management, financial transactions, etc.
3. Consumer to Consumer (C2C)
   - Enables individual consumers to exchange goods and services directly.
   - Online marketplaces, financial transactions, etc.
4. Government to Citizen (G2C)
   - Improve government relationships with citizens
   - Taxes, healthcare, support services, etc.

IDENTIFYING THE RIGHT E-COMMERCE BUSINESS MODELS FOR OUR BUSINESS



Model Objectives

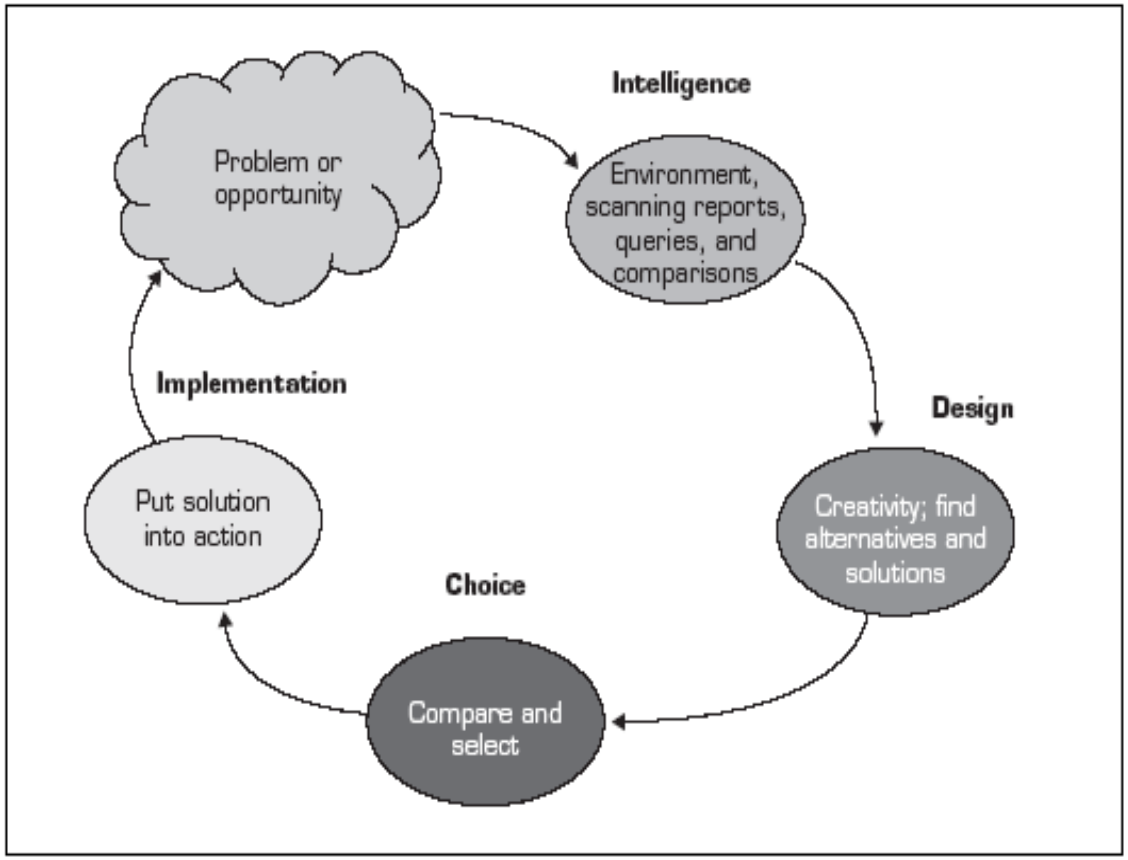
- Improve or destroy markets
- Create new markets
- Increase revenue and/or decrease costs
- Improve organisational capacity and agility

THE CHALLENGES OF ECOMMERCE

In Class Challenge: pick one of the challenges and describe how you will respond.

- Defining an effective and achievable ecommerce strategy
- Data privacy and security
- Lack of consumer trust
- Evolving legislative frameworks and regulations
- Culture and language issues
- Reliable infrastructure
- Payment systems and exchange rates
- Governance of ecommerce systems

Stages of Decision Making



Degree of structuredness – Herbert Simon's four-phase decision making process from *The New Science of Management Decision* (1977)

1. **Intelligence**
2. **Design**
3. **Choice**
4. **Implementation**

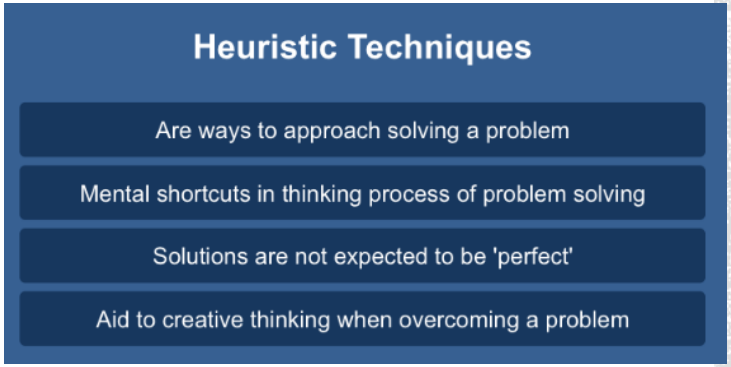
Types of control in all managerial activities

- Strategic planning
- Tactical control
- Operational control

Sharda et al 2014

Can you suggest a fifth phase?

What are Heuristics ?

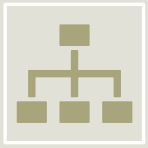


http://www.free-management-ebooks.com/news/heuristic-techniques-for-problem-solving/

- A heuristic is a *prototypical* model of a decision event.
- It allows us to make decisions based on having made a similar decision in the past.
- An informal, intuitive, rules-of-thumb, judgmental knowledge of an application area
  - *Availability*: based on how readily one can remember similar events
  - *Representativeness*: based on adherence to a prototype model or class
  - *Anchoring*: based on adjusting from an initial anchoring point

Do you think having subject matter experts improve or decrease the likelihood making a good heuristic decision?

DECISION-MAKING – STRUCTURED (PROGRAMMED) AND UNSTRUCTURED



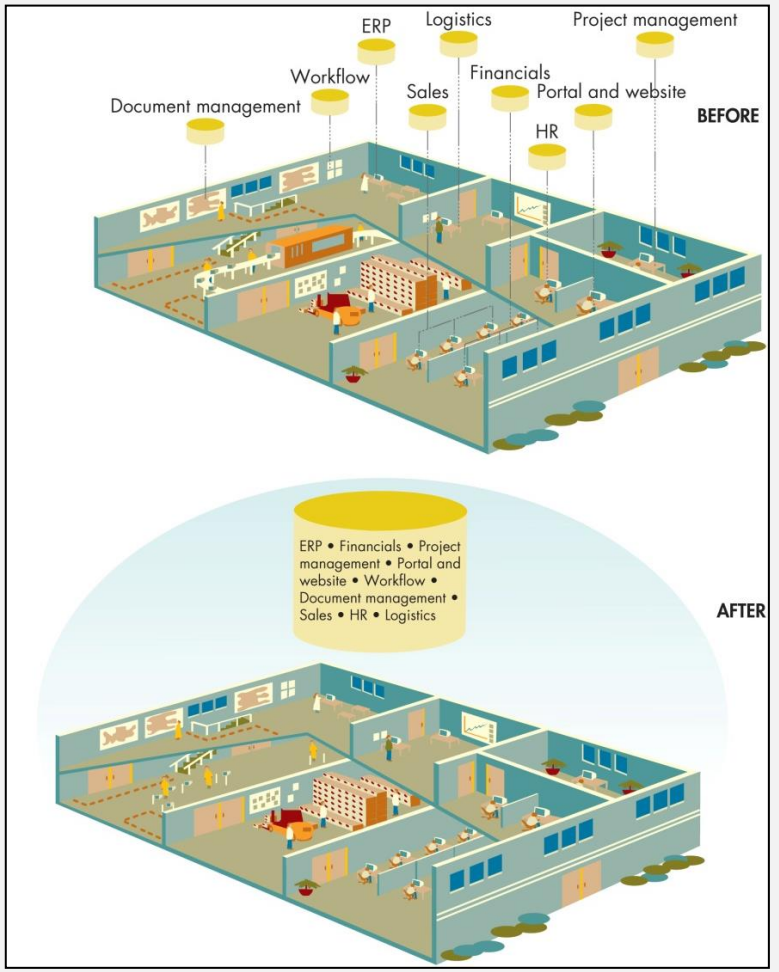
Structured decisions (programmed)
occur in situations where established processes offer potential solutions, generally computed.

Semistructured decisions
occur in situations in which
a few established processes help to evaluate potential solutions, but not enough to lead to a definite recommended decision.

Unstructured decisions occur in situations in which no procedures or rules exist to guide decision makers towards the correct choice, requires intuition, experience and judgement.

SIMPLIFYING MANAGEMENT OF OPERATIONAL INFORMATION SYSTEMS

- Suppose you are the CIO of a large hospital.
- What's more important to your organisation:
  - Having an accounting system so you can bill a patient OR
  - Giving clinicians online access to a patients entire health history for diagnoses, medications, operations, etc.
  - Which of these systems do you think is more strategic?
- There are a number of information systems that work across the enterprise and provide common functionality e.g. accounting, inventory, supply chain, payroll, etc.
- Over the last 20 years organisations have moved away from building and managing their own systems in favour of buying an information system from a vendor.
- These systems are typically referred to as Enterprise Resource Planning (ERP) systems.
- Because an ERP vendor is now employed to keep these information systems up to date, organisations can dedicate more resources to work on initiative that support our technology strategies.

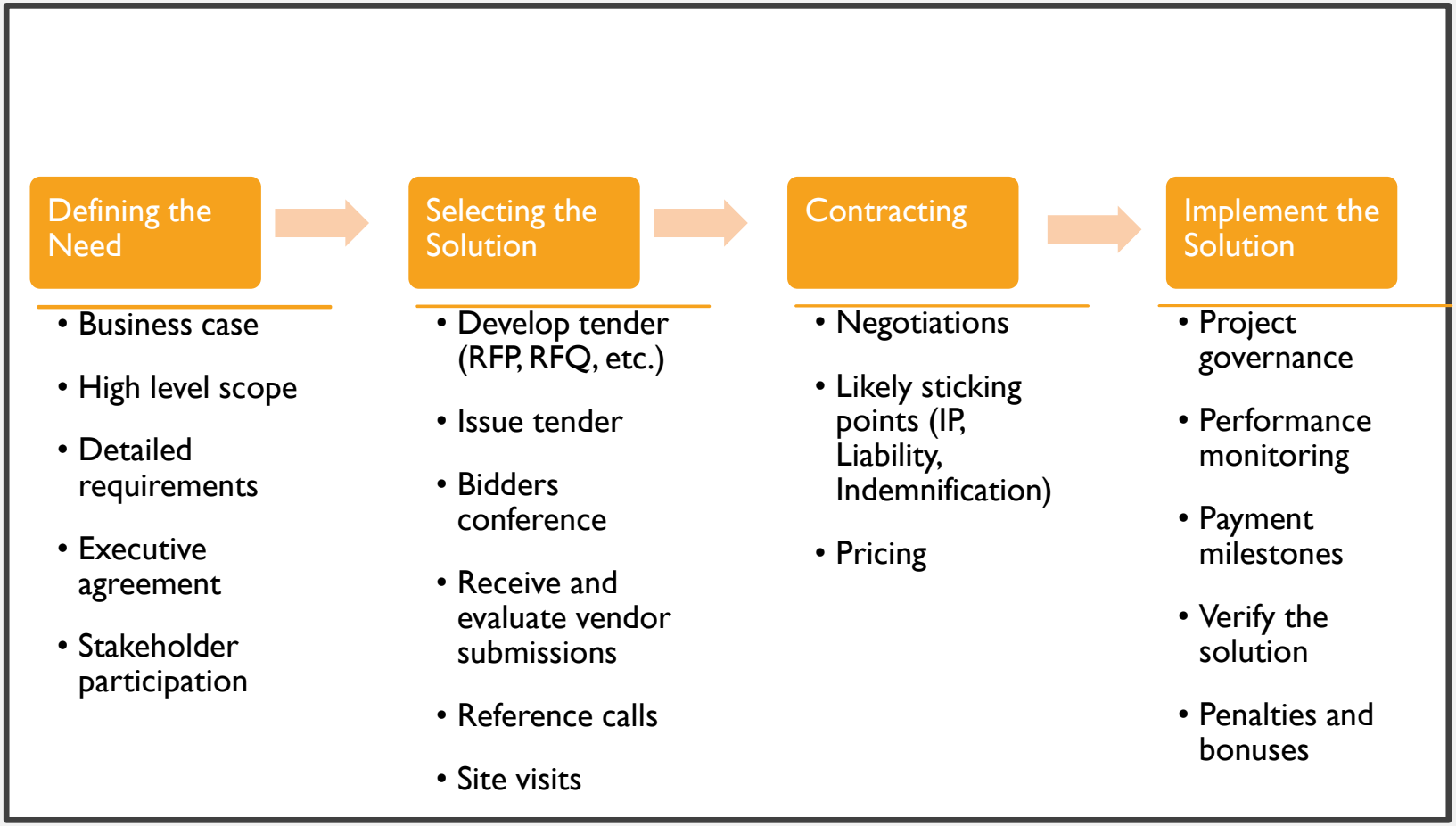


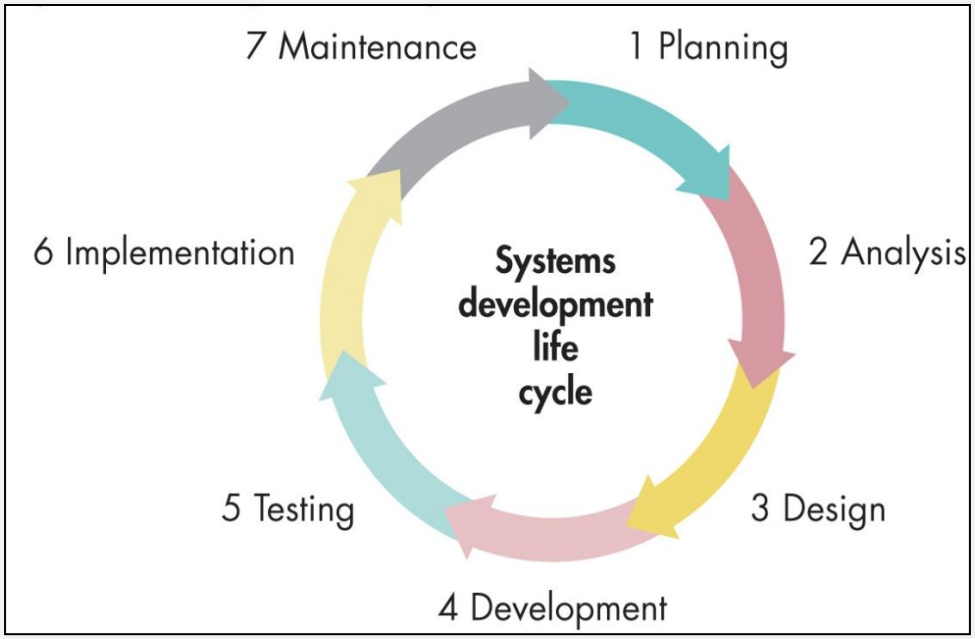
CHALLENGES OF IMPLEMENTING ERP

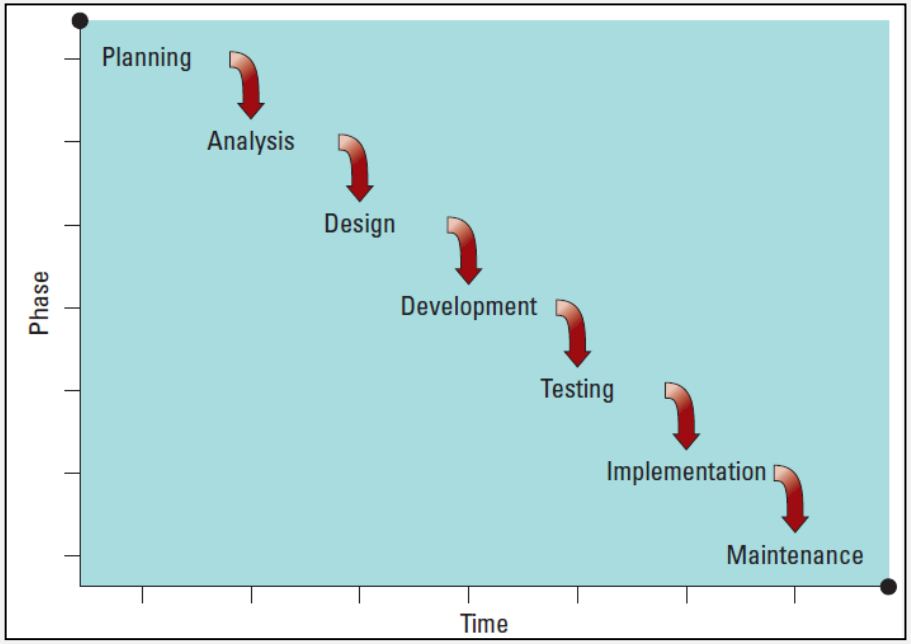
- Overall implementation costs can be very high
- Inadequate executive support and project governance
- End user resistance to changes in business processes
- Insufficient attention to organisational change management
- ERP tech support requires different IT skill sets
- Reluctance to give up customised technology
- Misaligned user expectations (functionality isn't as promised)
- Poor implementation planning (low estimates)

Integration of disparate IT applications is key to managing the integrated enterprise

OVERVIEW OF SELECTION, CONTRACTING AND IMPLEMENTATION PROCESS







THE WATERFALL APPROACH TO THE SDLC

- Waterfall methodology is an activity-based process in which each phase in the SDLC is performed sequentially and relies on achieving each milestone with an obvious lack of timely feedback.
- A very traditional development methodology that can be predictable but slow to provide insights into how the system will actually work.

DEVELOPING THE BUSINESS ARCHITECTURE
PRINCIPLES OF DESIGN THINKING (DT)

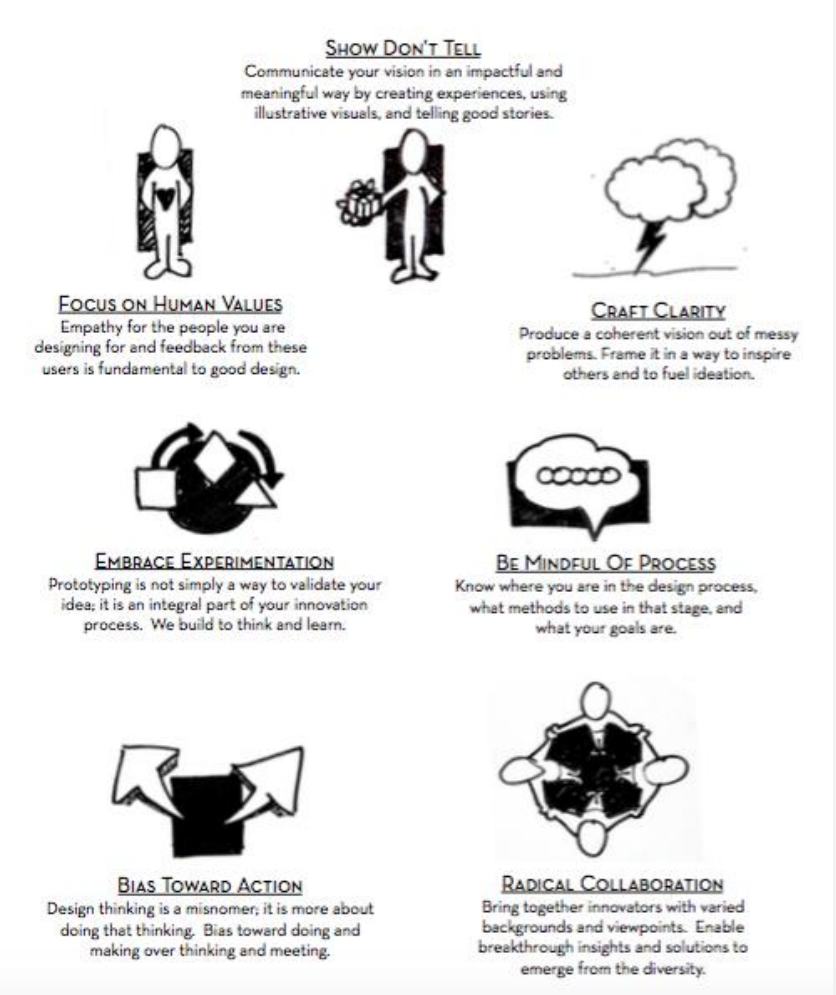
Developing systems from requirements can be done in multiple ways.

Delivering value from technology in a business or social setting requires us to understand the requirements and the problem that we are trying to solve.

Historically, this is not something that IT professionals have done well.

Design Thinking provides a process that enables Business and IT to work together to solve some relevant, interesting problems.

Sometimes, you just have to ask the right question!!



d.school Bootcamp Bootleg. (2010). *Hasso Platner, Institute of Design at Stanford*.

[What is Design Thinking?]

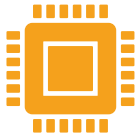
Many organisations claim to do Agile but few do it well

THE 12 PRINCIPLES OF AGILE

1. Our highest priority is to **satisfy the customer** through early and continuous delivery of valuable software.
2. **Welcome changing requirements**, even late in development. Agile processes harness change for the customer's competitive advantage.
3. Deliver working software frequently, from a couple of weeks to a couple of months, with a **preference to the shorter timescale**.
4. Business people and developers must **work together daily** throughout the project.
5. Build projects around **motivated individuals**. Give them the environment and support they need and **trust them to get the job done**.
6. The most efficient and effective method of conveying information to and within a development team is **face-to-face conversation**.
7. **Working software** is the primary measure of progress.
8. Agile processes promote sustainable development. The sponsors, developers, and users should be able to **maintain a constant pace indefinitely**.
9. Continuous attention to technical excellence and good design enhances agility.
10. **Simplicity--**the art of maximizing the amount of work not done--**is essential**.
11. The best architectures, requirements, and designs emerge from **self-organizing teams**.
12. At regular intervals, **the team reflects on how to become more effective**, then tunes and adjusts its behavior accordingly.

THE ETHICAL IMPACT OF INFORMATION TECHNOLOGY

New technology often introduces ethical challenges that are often recognised but rarely resolved (at least initially)

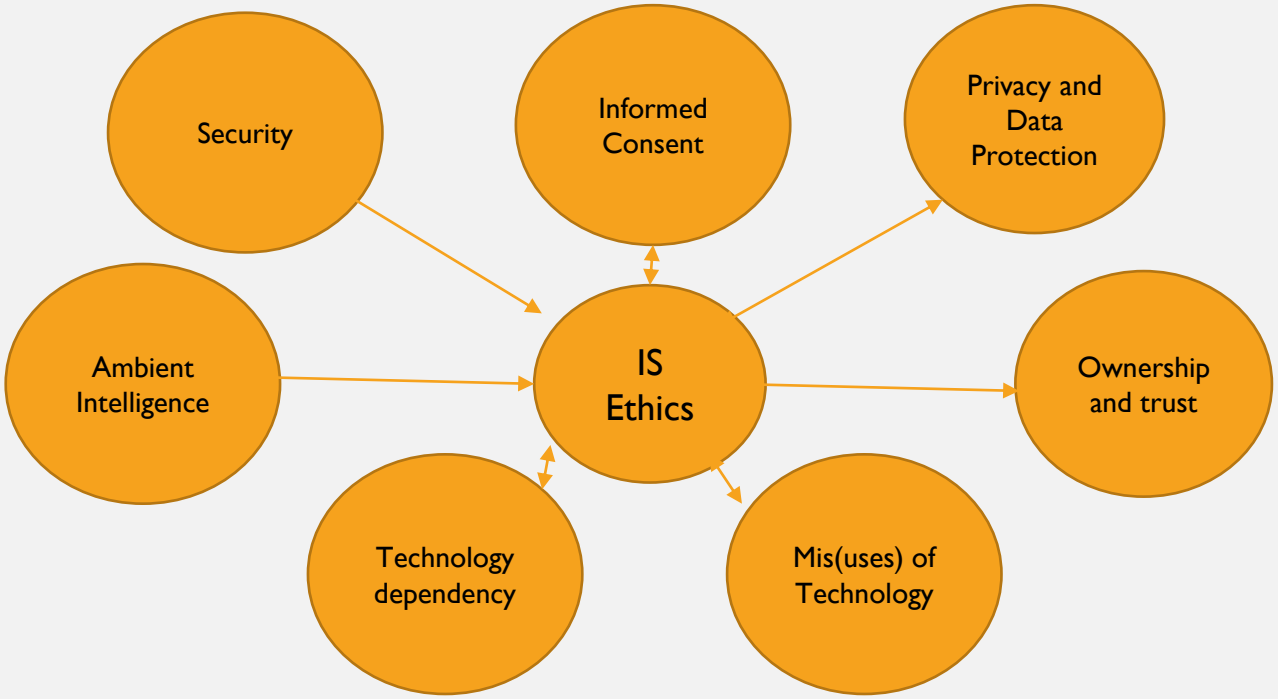


Legislative and legal systems are typically reactive and often lag the evolution of technology e.g. online privacy, data security, consumer rights, etc.

So how should we deal with these ethical challenges particularly with disruptive technologies such as smartphones, facial recognition, social media, etc.?

ETHICAL CONCERNS IN INFORMATION SYSTEMS

"the emergence of a wide variety of new technologies should give us a sense of urgency in thinking about the ethical (including social) implications of new technologies"



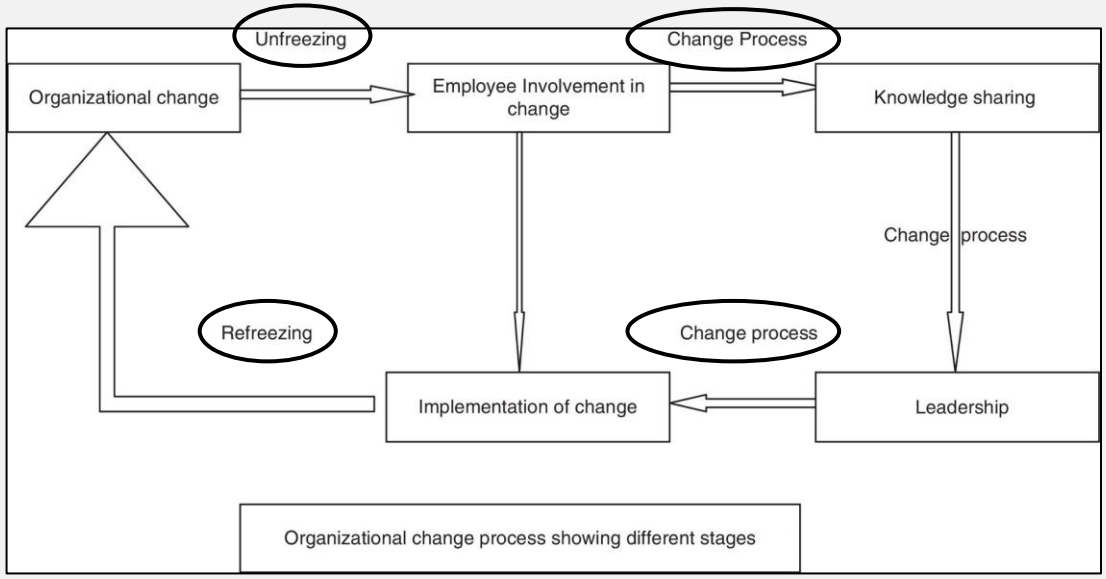
Wakunuma, K. J., & Stahl, B. C. (2014). Tomorrow's ethics and today's response: An investigation into the ways information systems professionals perceive and address emerging ethical issues. *Information Systems Frontiers*

DRIVING ORGANISATIONAL CHANGE

To successfully implement change organisations create a sense of need and urgency that can only be solved through change.

The change model developed by Kurt Lewin talks about creating this need and urgency through three steps:

1. Unfreezing
2. Change or Transformation
3. Freezing



Syed Talib Hussain, Shen Lei, Tayyaba Akram, Muhammad Jamal Haider, Syed Hadi Hussain, Muhammad Ali, Kurt Lewin's change model: A critical review of the role of leadership and employee involvement in organizational change, Journal of Innovation & Knowledge, Volume 3, Issue 3, 2018,

WELCOME TO TRES FORTUNAS

- Over the next few weeks, we will be using the case of Tres Fortunas to review and apply the concepts, techniques and frameworks you have learned during the course. The intent is to reinforce learning and give you the opportunity to practice with support during class.
- These exercises will also help you prepare for the end of semester exam.
- Our goal is to ensure we understand the business and build technology strategies that will position it for future success.

Activities for this week.

1. The CEO of Tres Fortunas, Rafael Castillo, is very aware of the importance of data. He knows that it can be a valuable enterprise asset but also a tremendous liability if there is a data breach. His customers, suppliers and employees will not be happy if their information appears on the dark web for purchase. What advice will you give Rafael?
2. The CEO of Tres Fortunas, Rafael Castillo, is struggling to make decide how to implement more technology because no one really knows what technology they have and how it has been integrated over many years. In addition, there's disagreement among the staff about what new technology should be purchased. But Rafael knows that action needs to be taken now!!

What advice will you give Rafael?

- No need to email me slides

FINAL EXAM

- The final exam is two hours in duration plus a 15-minute reading time.
- Make sure you read the questions carefully !!
- The exam will be graded out of a maximum of 100 marks and consists of:
  - 4 short answer questions each worth 10 marks. For each answer write 100 – 150 words.
  - 2 mini case questions each worth 30 marks. For each answer write 350 – 400 words.
- Make sure your answers are written clearly and legibly.
- Start each answer on a new page. Identify the question by putting the number at the top of the page in your Exam booklet.
- Do not use bullet point or numbered lists in your answers.
- The scope of the exam includes all materials from seminars, tutorials, challenge tasks and readings. You will not have access to any course materials during the exam.
- Where appropriate you should identify any literature used in your answers, but you are not expected to provide formatted citations or references.
- If you include a graphic in an answer, please make it clear and understandable.
- Please check the published exam timetable to make sure you have the correct date, time and location. Make sure you put your student ID on the front of the booklet.
- No materials permitted including dictionaries. The exam is written clearly and any technical terms come from course content.
- There are no extensions possible for this assessment.

WEEK 11 – WRAP UP

- In Week 11, we covered the following:
  - ✓ Course Review (Part 1)
  - ✓ Tres Fortunas
- See you next week !!