INFORMATION SYSTEMS STRATEGY & MANAGEMENT MIS 6140

General Introductions

Instructor

- Joshua Rumo A Ndiege, PhD
- My enthusiasm on the course?
  - Relevant research interest – IT Adoption, Effective usage of IT

Office

- Faculty Offices ICT Building - Office no. 1
  - Hrs: 9:00am – 10:30am & 2:00pm – 4:30pm M-R

My suggested Learning style

- **Learning together**, not just me talking
  - So you have a role to play, a responsibility to engage with your own learning
  - The more you participate, listen, criticize, challenge… the more you will learn.
- Each class will have
  - Opportunities for **interaction**, **discussion**, as well as your own **life experiences**

Class Notes

- I'll provide some. These notes are not comprehensive, i.e. if you come to class, you will hear, see and do many things that are **not visible** in the notes.
- So please do come to class....on time, but late is better than never!
- If you have thoughts/questions on the class, it will be very nice if you can communicate them

Method of Evaluation

Assignments	10%
Project	15%
Participation and Attendance	5%
Quizzes	20%
Mid-semester	20%
Final semester exams	30%
Total	**100%**

Class Schedule

Rationale for the course

Why understand IT Strategy?

- The pervasive nature of technology
- Consequences of good and bad strategy
- Framework to guide the organization

Why understand IT management

- Continued relevance of the adopted IT

Developing and Delivering on the IT Value Proposition

What Is IT Value?

- IT Value is the worth or desirability of a thing.
  (Cronk and Fitzgerald, 1999)
- IT Value is a subjective assessment.
- IT Value is based on how a business chooses to view it.
- IT Value is tied to the business model.
- IT Value can be defined by ROI or KPI's.

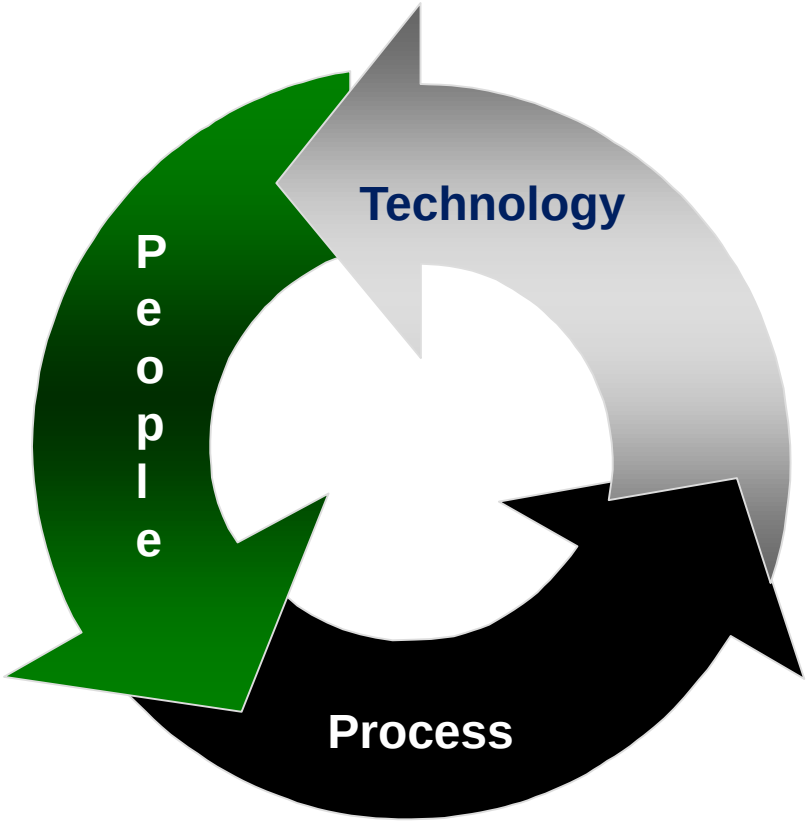
Value is subjective

Where Is IT Value?

- Decisions about IT Value may be made to **optimize value** to the firm even if they cause difficulty for a business unit or individual.
- IT Value needs to be **leveraged** for the benefit of the firm.

Who Delivers IT Value?

- IT Value is a function of people, process, and technology.
- IT Value is also a function of organizational value.



When Is IT Value Realized?

- IT Value has a temporal dimension.
- Initially, companies spend a considerable amount to deploy new technology with no benefit.
- Some value is then achieved by solving initial inefficiencies.
- As use increases, complexity grows and costs increase.
- Finally, the business is made simpler and efficiencies are achieved.

Best Practices in Understanding IT Value

- Link IT Value directly to the business model.
- Recognize that value is subjective, and manage perceptions accordingly.
- Aim for a value "Win-Win" across processes, work units, and individuals.
- Seek business commitment to all IT projects.
- Manage value over time.

Identification of Potential Value

- Joint IT-Business mechanisms should be established to identify business and technical opportunities where IT can add value.
- Establish a formal process for project prioritization.

Best Practices in Identifying Potential Value

- Recognize and evaluate opportunities through a joint business-IT structure.
- Develop a means to compare value across projects.
- Utilize a portfolio approach to project selection.
- Establish a funding mechanism for infrastructure.

Effective Conversion

Conversion → From idea to reality

- Conversion is the transformation of ideas and opportunities into IT value propositions.
- Excellent project management, effective execution, and reliable IT operations are critical to IT value creation.

Conversion Issues

- More projects than resources
- Insufficient time to complete all projects
- Training limitations
- Inadequate technical or business resources
- Implementation of IT may require significant business process redesign.

Best Practices in Conversion

- Availability of adequate and qualified IT and business resources
- Training in business goals and processes
- Multifunctional change management
- Emphasis on higher-level learning and knowledge management

Realizing Value

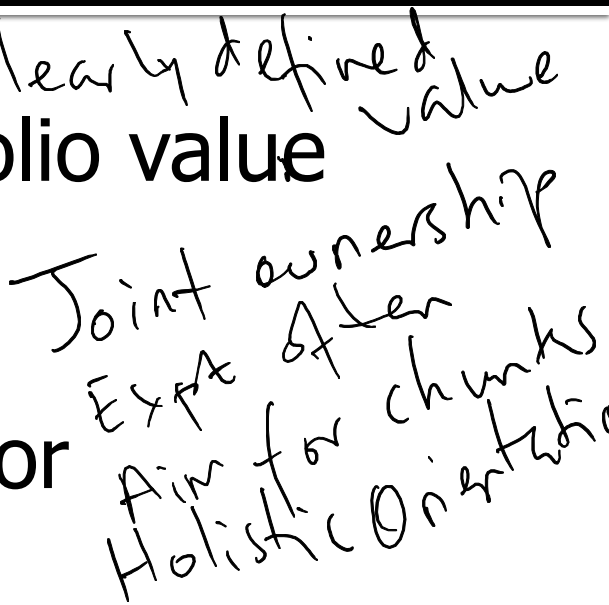
- IT Value realization is a long-term process.
- To deliver Value – technology must be used extensively.
- Measurement is a key component. [*Does* Expected Value = Actual Value?]

Best Practices in Realizing Value

- Plan a value-realization phase for all IT projects.
- Measure outcomes against expected results.
- Look for and eliminate root causes of problems.
- Assess value realization at all levels in the organization.
- Have provision for acting on new opportunities to leverage value.

Five Principles for Delivering Value

1. Have a clearly defined portfolio value management process.
2. Aim for chunks of Value.
3. Adopt a holistic orientation for technology value.
4. Aim for joint ownership of technology initiatives.
5. Experiment more often.



Principle 1 – Have a Clearly Defined Portfolio Value Management Process

- Track projects as they are developed.
- Revisit portfolio decisions to determine if projects should be changed.
- Invest in strategic and infrastructure projects.
- Develop an ongoing means to ensure value is realized.

Principle 2 – Aim for Chunks of Value

- Focus on key areas.
- Deliver Value through a series of small focused projects.
- Balance short-term and long-term strategic goals.

Principle 3 – Adopt a Holistic Orientation to Technology Value

- Manage and use people, process, and technology.
- Anticipate the impact of technology.
- Incorporate technology changes into business changes.

Principle 4 – Aim for Joint Ownership of Technology Initiatives

- Ensure executive sponsorship for all IT projects.
- Develop a culture of joint responsibility and mutual trust between IT and the business.

Principle 5 – Experiment More Often

- Experiment with new technologies on a small scale to minimize risk.
- Experimentation enables technology investments to be made in smaller chunks.
- Experimentation enables IT Value to be realized sooner.

Conclusion

- This section explored the concepts and activities involved in developing and delivering IT value to an organization.
- IT value cannot be viewed in isolation.
- The entire IT process must be managed from conception to cash.

IT Supporting organizational performance

Clip - IT Supporting Organizational Performance

IT Supporting organizational performance

- Important features of organizations that managers need to know about in order to build and use information systems successfully
  - **Structure**
  - **Business processes**
  - **Politics**
  - **Culture**
  - **Environment**
  - **Management decisions**

Business Performance Management

- Step 1: Decide on desired performance levels (Where do we want to go? Mission, goals and metrics)
- Step 2: Determine how to attain the performance levels (How do we get there? Strategy and plans)
- Step 3: How well are we doing? Monitoring performance
- Step 4: Adjust performance/goals (How can we improve?
- How do we close the gap? Solutions and responses)
- *IT can support all these steps*

Different types of IS

- Different managerial needs means different IS to support these needs
- Different functional areas means different IS to support various functional units

Returns on IT Investment

- Investing in information technology does not guarantee good returns.
- There is considerable variation in the returns firms receive from systems investments.
- Factors:
  - Adopting the right business model
  - Investing in complementary assets

Returns on IT Investment

- Complementary assets:
  - Assets required to derive value from a primary investment
  - Firms supporting technology investments with investment in complementary assets receive superior returns
  - Example: Invest in technology and the people to make it work properly

Returns on IT Investment

- Complementary assets include:
  - Organizational assets, for example:
    - Appropriate business model
    - Efficient business processes
  - Managerial assets, for example:
    - Incentives for management innovation
    - Teamwork and collaborative work environments
  - Social assets, for example:
    - The Internet and telecommunications infrastructure
    - Technology standards