06/10/15.   STRATEGIC   INFORMATION SYSTEM

PRODUCT DESIGN - MODIFY or ADAPT?

- Redundant fields in database, modify or adapt?
- Example - exams - different ways of passing => SITS doesn't allow all the options
- remove options or modify software
  - → Modify - less disruption, no change in rules, increase flexibility, fewer break on effect
    - reduce risk of user rejection
    - Total time (specs etc), Front end cost (loo per day), maintenance cost, performance risks
    - Legal and other risks (no warranty etc)

  Adopt - less expensive, lower implementation risk, standard training and documentation
    - User resistance (people will sabotage it), loss of functionality, require impact on Users/existing
    - Change management problems

Rigidity - Ryan our Example

Problems of a Single Instance
- Definition
- Designing a coding system - difficult
- numbering System - normally an intelligent numbering system behind them => BBN
- level of granularity - level of detail, how low do you go on information
- Ownership
- Security - personal information
- Flexibility - agreement required from everyone who use it
- Control - who?
- Practicality
- Response time / latency - time to send/receive info
- Localisation

07/10/15   SIS

IMPLEMENTATION PROBLEMS
- Stats getting worse on implementation
- Huge failure costs
- Not much improvement in cost overrun etc.
- Lots of implementation problems
- Seem unlikely that each component in the package is the best you can get
    → could get better from Specialist firm (buying best of breed)
- Change resistance, biggest problem - change to internal process
        → Lack of top management committment.
- Ad hoc solutions appear - i.e. preprocessing grades before entering them.

BEST PRACTICE?
- Numerous complaints on ERP software
- Something like 22000 parameters you can set → too many
- Hard to measure improvement - most companies dont have "base point" to compare to
- Satofaction level low - neutral is most common reaction

PLAYERS AND MARKET
- Two types of manufacturing: Assembly - erp started - cars, tables... finished off
        - Process - Something that flows - food, pharma etc (Recipe) not MRP problem.
- First extension - push MRP to Proces industry
- Second - non Manufacturing - banking, education etc
- Third - Smaller companies - large company market saturated
- Government
- Small number of big players
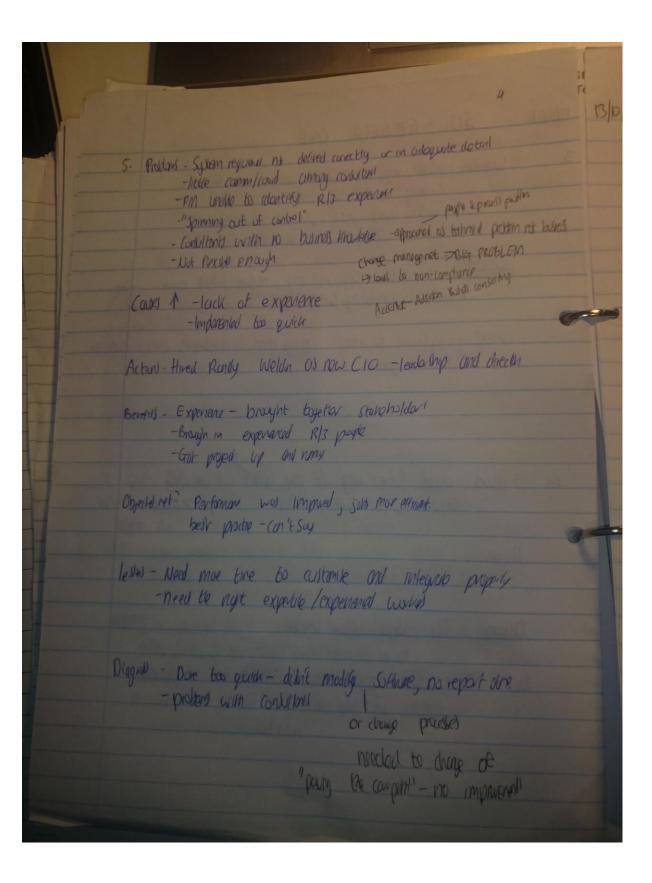
SAP
- Core of it divided into 3

13/10/15 STRATEGIC INFORMATION SYSTEMS TUTORIAL - GENAVA PHARMACEUTICAL

1. Industry and competitive environment

Challenges - Large number of other firms in exact same market
- No room for expansion to international markets - fewer regulations over there
- Low margins because of competition
- Losing customers easily and not getting them back - consumer distrust

Culture behaviour - Always looking for cheaper generic drug   Substitution
- will Switch to cheaper and more available drug - No loyalty
- Branding - they don't like branding change hard to win back
- Growth it health HMO's etc - to bulk purchase

                              Financial power
Competitive adv- Established firm- reputation, economies of scale
- One of the largest players in the market - efficiency v. inflexibility
- large batches - inflexible

IT - More operations more efficient - Save money
- Real time orders ⟹ retain customers
- less staff less cost)

(change) - System could fail, Employees lost, Competitors could follow
- More efficient, Market leader, better for brand - reliability

→ Faster the information the better
efficiency - expiry date , no re-keying data
Integration of Systems ⟹ reduced maintenance
Error reduction
Customer - order info   orders [Buy off Someone else
Forecasting customer demand   [Back order
Inventory reduction - Storage cost, temperature etc, expiry date, stealing, ties up money   Part fill

2 Aritecture - complicated, un-integrated, slow, manual, inefficient, costly
   and possibly not fit for purpose - didn't work.
   wasnt scheduling deliver of raw materials -No planned orders -couldn't simulate production

   Problems - loss in Sales, loss in stock, Stock not arriving on time
   Sales not being shipped on time, loss of production

   Sales mentioned ⊐ Disjoint, too many systems!

   Redundant - Not popular.

3. SAP R/3 IMPLEMENTATION

MRP - An IS that is a sales forecast-based system used to schedule
    raw material deliveries and quantities, given assumptions of
    machine and labour units required to fulfill a sales forecast.

MRP II - Evolved from MRP I by including the integration of additional
    data, such as employee and financial needs. System is designed to
    centralise, integrate and process information for effective decision making
    in scheduling, design engineering, inventory management and cost-
    controlling in Manufacturing

3. SIS - GENEVA CASE

Limitation - Wide array of software program - Not integrated
- Running on different platform - ad hoc
- (can't handle small orders)
- functional silos - No one view of everything

Benefits
Objective - Best practice, opp efficiency, reduce errors, reduce system
maintenance, flexibility for new system, support growth, y2k

Complexity - complicated to install, may need to customize, cost, General
failure of system, time

3 phases - avoid failure - biting off more than you can chew
- Gradual implementation, easier to manage → more controlled

Problem -

Differently - More Steps? More thorough

Metric - Two customer service metric - Fill rate and search my

5. Problems - System requirements not defined correctly or in adequate detail
    - little comm/coord among consultant
    - PM unable to identify R/3 experience
    - "Spinning out of control"
    - Consultants with no business knowledge - approached as technical problem not business   people & process) problem
    - Not flexible enough

                            change management ⇒ BIG PROBLEM
                            ↳ leads to non-compliance

Causes ↑ - lack of experience   Accenture - Advertise (build) consulting
       - Implemented too quick

Action - Hired Randy Weldon as new CIO - leadership and direction

Benefits - Experience - brought together stakeholders
    - Brought in experienced R/3 people
    - Got project up and running

Objective met? Performance was improved, sold more efficient.
         best practice - Can't say

lesson - Need more time to customize and integrate properly
    - need the right expertise / experienced workers

Diagnosis - Done too quick - didn't modify software, no report done.
    - problem with consultants
                       or change process(es)

                              needed to change of
                  "paving the cowpath" - no improvement

SIS GENEVA CASE

G. Metros - Redesign demand-side processes → marketing, order fulfillment, customer subs and services, accounts receivable,

Limitations aware - customer based forecasting priced for key cu accounts
- customer-by customer basis forecasting.
- Demand side processes suffered from lack of data integrity and real time access to demand supply side processes
- Shipping order limitation

More challenging → Non-Standard and inherently complex nature of Geneva's sales and service processes
e.g -returns - different :/

Project team - New consulting firm
Core team of 20 IS personnel, users and consultants
30 users part time - for discussion.

Actions - Found 13 important areas
- Talked to users
- Training rooms - trainers bought in
- Signs put up in company canteen etc
- telephone hotline setup
- HR conducted survey
- Company newsletters
- full time training for 3 weeks

Training- there is change in technology AND work processed is
the problem - pracs are difficult to change - changing beliefs
ingrained for decades
- On the job training as opposed to systems being

Revolution - what their exact job responsibilities were
- Departments very much functionally orientated and created higher
level of officiality - Sticky cultural pattern
- Change needed to be initialised on customer side

Improvement - long run (yes) - they will eventually adopt
and accept.
Start run-no - cultural Stickiness

7. Metric - Available to promise - fulfill a customer order by the
promised time

Manual - They had no previous SOP program - unfamiliar with it
- Previously integration did not create actual solu?

Purple - Just in time production Scheduling - linked upstream and
downstream operations - responded to customer demands

Purple - Unexpected order - unit was unable to adjust production plan
accordingly. => Lack of flexibility => unfilled order
- Manual work - possible errors from humans

/15 SIS   GENEVA CASE

SCM - Oversight of materials, info, and finances as they move in a process from supplier to manufacturer to retailer to customer. Coordinating and integrating these part.

ATP - Able to fulfill a customer order by the promised time
- Gives date of delivery

2. 60% well - problems in first phase fairly serious
- Improved in phase 2 & 3, org culture and customization still seem to be a slight problem.

VMI - Inventory replenishment arrangement whereby supplier either monitors customers inventory with own employee or receives stock info from cust. Vendor then refill stock automatically without customer initially placing order.

Good idea - Yes - will make process more efficient, save money and will ensure raw materials arrive on time
- increased reliability

Result - lack of trust with vendors, may switch vendors, may want to buy ahead at cheaper price
- vendor might not have relevant technology
- lose bargaining power.

STRONG POINTS OF MOOCS

- Cos(efficient)   -Numbers doing university   F6 time   now
                    universities -education inflation cost 3700 in TCD → 1700 students in TCD
- Helpful for people with learning Disabilities   -Shyness
- Accessibility - makes it available to a larger population
- Flexibility - learn at your own pace, Repeat a lecture
- "Best of the Best" - "The Great Courses" company - for learning not a degree
- Open - no points requirement / pre-qualification
- Scope of course - can look and discover some course you can't do in Ireland "No limit"
- Diversity /Reach

Negative of MOOC'S

- Scalability "one size fits all" - people learn differently - no feedback
- Questions?
- Business Model? revenue etc   not all are free   very expensive front end cost.
- Accreditation   exam center's?
- Access may be a problem
                                                            BBC2 played university courses
- Loss of Soft skills, etc   group work.   open university 1960s during daytime
- Labs - materials etc. tools can be done but expensive
- Networking - making friends
              can't get case studies or materials from book or video
- No student feedback

"Blended learning" half and half online offline
        MOOC's good at learning technical skills

"Gartner Hype Curve"

S|S TUTORIAL: DISRUPTING EDUCATION?

ARTICLE 1 - FOR

- Bringing people out of poverty
- Still middle-upper class people using it.
- If people have limited potential, is it useful
- Autumn Story - just one person out of how many?
- Discussion with diverse audience
- Ability to explore other course
- Can pause and replay lectures and watch when you want
- Online community?
- Credentials on issue - have a competency test before job

ARTICLE 2 AGAINST

- Rely on student feedback to progress learning - but (class) is so big you can't have interaction
- (course) Should be developed in extreme detail or such a way that any lagging student will understand - lecturer need not recall
- Community aspect of college
- Up to student to learn - not so much lecturer to teach

ARTICLE 3   FOR
- Potential to go global if good
- More concerned with what you can do → correct
- Copetency build
- Learning by doing - Suggest blended matt
- Forcing lectures to pull up their socks

ARTICLE 4
- Money important.
- Questions credentiality of online courses v. traditional course.
- Rich people still in a bossy position   college a bady investment?
- Two tier system.
- Cheaper for the State?
- "Campus experience a luxury"
-

ARTICLE 5
- Credibility?
- Certificate costs though - poor cant afford it?
- Correlation between cost and drop out rate
- MOC's help decide career path

Do lectures really teach anyway?

Outsourcing

- Give it to Somebody else to do it
- First proposed 1937 → what differentides one org from another?
- Competition has changed as a result of outsourced
- Early jobs to identify from start to finish usually outsourced -clear input/output
- Not as Straightforward in other areas but it is where more expensive people and processes are.
- TATA Steel turned to IT outsourcing → bigger then HP and IBM outsourcing
- British Airways - Outsources nearly everything -basically manages ⇒ lots of outsourcing
- So, what are the actual core activities of a business?
- Is outsourcing undermining a company? losing knowledge /competitive edge?
- Could contract out smaller aspects of a business process instead of whole process.

Core competencies? Branding, marketing

"Never outsource a problem" fix problem then outsource process