1 Introduction

- project concept should start with a clear goal defined in terms of measurable organizational value.
- MOV provides a clear understanding and purpose of project, and a foundation for writing the business case.
- In the end MOV provides a way to evaluate whether a project was a success.
- Business case documents MOV, as well as alternatives and options that are analyzed and compared.
- (alternatives may include doing nothing, build something else, or purchase from vendor).
- For each alternative, feasibility, cost, benefits, and risk sare analyzed and compared, so a recommendation can be made with confidense to choose between best alternatives.
- If one of the options is approved, project manager (and team) move onto the next phase of the project.
- Otherwise project opportunity is abandoned (the do-nothing alternative).
- organization vision drives organization strategy
- organization strategy drives project's measurable organizational value
- e.g. vision: to be the best XXX company for the consumers
- strategy: need to better align with consumer values
- project: build a system to analyze consumer data
- MOV and project objectives:
- must be measurable. or have good proxies for measure.
- provide value: time and resources should only be spent if they provide value
- be agreed upon: stakeholders need to back the project and mov estimates.
- be verifiable: if MOV acts as a measure of success, then it needs to be verified at the end of the project.
- Objectives vs MOV
- MOV defines success. objectives may be accomplished, but without MOV there's no success.

- (e.g. meet all requirements, but built a useless system).
- developing a mov:
- identify the desired area of impact: finanicial, operational, customer relations, strategic, social, etc.
- identify desired value of the project: will project help do things better, faster, cheaper, do more, etc.
- develop appropriate metric: what and how to measure. e.g. money, percentage, etc.
- if not tangible (customer satisfaction), then use surveys, or proxy measures.
- set a timeframe: when will we measure increased profits, etc.
- verify MOV, and get agreement from stakeholders: make sure it's accurate, realistic, and has the backing of management.
- summary MOV in a concise statement: this process will succeed if....
- $impact \rightarrow value \rightarrow metric \rightarrow time \rightarrow verify \rightarrow summarize$
- Business case: a document (or a set of documents) that documents the need for the project from the broader business perspective. it must include assumptions, estimates, methods, costs, benefits, etc., of doing the project, as well as alternatives such as doing nothing, or purchasing solution from vendor, etc.,
- steps to define business case:
- define measurable organizational value
- form a cross functional business case team
- credibility
- alightnment with organizational goals
- access to real costs
- ownership
- agreement
- bridge building
- define feasibility and access risk
- economic feasibility

- technical feasibility
- organizational feasibility
- identify risks: what can go wrong
- accessmsnet: what's the ijmpact of each thing going wrong
- response: how to avoid or minimize risk
- define total cost of ownership
- direct or upfront costs: hardware, software, equipment, development, installation
- ongoing costs: support, salaries, training, upgrades, maintenance
- indirect costs: initial loss of productivity, time lost when system is down, etc.
- define total benefit of ownership
- incraesing high value work: more time on doing X vs doing paperwork
- improving accuracy and efficiency: reducing errors, duplication, reduce number of steps, etc.
- improving decision making: timely and accurate information
- improving customer service: new products and services for customers.
- analize alternatives: once costs/benefits are analyzed, it's important to look at alternatives.
- financial models focus on cash in-flows (or out-flows).
- payback period = initial investment / annual-net-cash-flow e.g. 100k / 20k = 5 years.
- breakeven, similar to payback, but is measured in units of thing sold. e.g. initial invesmtnet 100k. each unit costs is sold for 30, and costs 25 to manufacture. 100k / 5-profit = 20k units. to breakeven.
- return-on-investment ROI = (total benefits - total costs) / total costs.
- net present value: time-value of money:

  $$npv = -I + sum(netcashflow/(1+r)^t)$$

  I is initial investment r is discount rate t is time period
- e.g. suppose systme is 100k, that generates 30k a year, etc.

- $$FV = PV(1 + r)^n$$

- $$PV = FV/(1 + r)^n$$

- linear scoring models: assign "importance" (normalized weights, 0..1) to each attribute of system
- then calculate score via: sum(wi * ci)
- can compare alternatives based on score.
- weights can be subjective.
- propose and support the recommendation
- once altenatives are analyzed, and estimated costs/benefits compared.
- business case:
- cover page: title, author, date
- executive summary: brief problem description, brief goal, MOV and how it ties to goals and startegy, brief altnarnatives. brief why
- that one solution is bieng recommended and why.
- inroduction: background, current situation, description of problem, measurable org value, how achieving MOV will support organization goal and strategy. objective of wriitng this business case.
- alternatives:
- description 1
- description 2
- description N, etc.
- analysis of alternatives
- methodologies how they are analzyed
- data collection methods
- metrics used
- presentation of results, metrics, sensitivilty, risks, assumptions

- proposed recommendation
- project selection: project must alighn with organization value, vision, mission, and strategy.
- must provide measurable organizational value that can be verified at the competion of project.