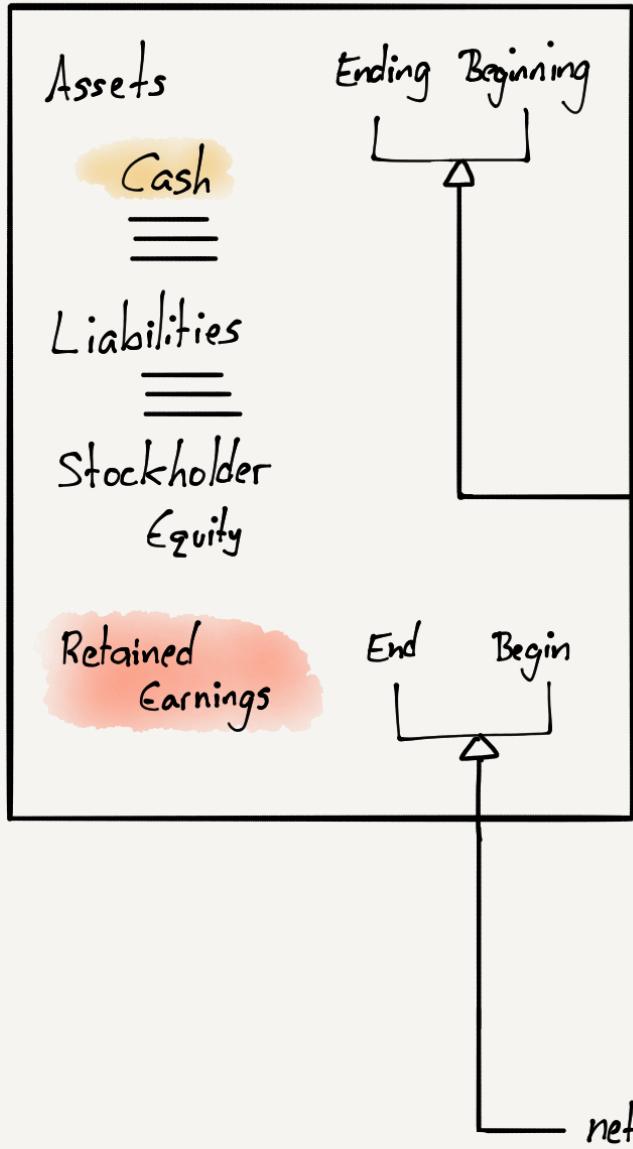


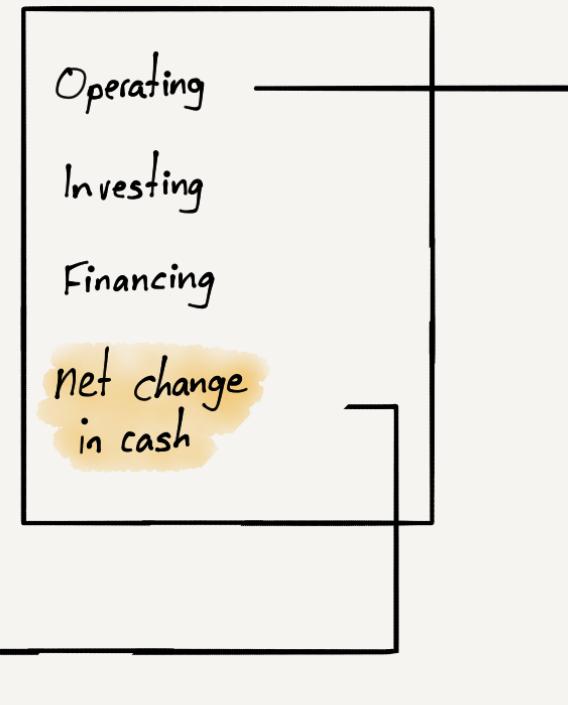
Accounting

# The Relationships between Financial Statements

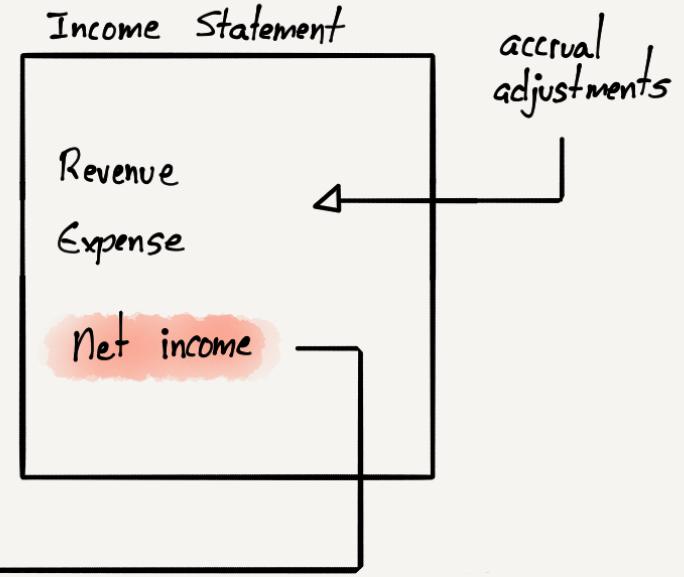
## Balance Sheet



## Statement of Cash Flows



## Income Statement



net income - dividends

# Balance Sheet



Nothing on balance sheet  
is on income statement

Nothing on income statement  
is on the balance sheet

---

## Assets

Current Assets	Cash
	Accounts receivable
	Inventory
	Prepaid expenses
	Investment securities
Long-term assets	Investments
	Property, plant & equipment
	intangible assets
	other assets

## Liabilities

Current Liabilities	accounts payable
	accrued liabilities
	short-term loans payable
	current portion of long-term debt
	Long-term debt
Long-term Liabilities	Capital lease obligation
	Deferred income tax liability

## Stockholders' Equity

Preferred stock
Common stock par value
Additional paid-in capital
Retained earnings
Treasury stock
Accumulated other comprehensive income

## Income Statements

Include gains & losses from  
the sale of land and  
equipment

Note: assets & liabilities  
are in balance sheet

prepaid expenses = asset

unearned revenue = liability

Some people refer to  
this as "the P&L"

Sales
- Cost of Goods Sold
Gross Profit
- Other operating Expenses
+ Gains
- Losses
<u>Operating Income</u>
- Income Expense
+/- misc. revenue, expenses, gains and losses
<u>Income before taxes</u>
- Income tax expense
<u>Income from Continuing Operations</u>
+/- income from discontinued operations
+/- extraordinary items
<u>Net income</u>
+/- unrealized gains & losses not included in Net Income
<u>Comprehensive Income</u>

basic format for  
the statement



# Statement of Cash Flows elements

## Operating Activities

- receipts from
  - sales of goods or services
  - sale of trading securities
  - Interest revenue
  - Dividend revenue
- payments for
  - Inventory purchases
  - wages & salaries
  - taxes
  - interest expense
  - Other expenses (rent, utilities)
  - purchase of trade securities

## Investing Activities

- receipts from
  - sale of plant assets
  - sale of business segment
  - sale of nontrading securities
  - collection of principle on loans
- payments for
  - purchase of plant assets
  - purchase of nontrading securities
  - loans to other entities

## Financing Activities

- receipts from
  - issuance of stock
  - borrowing (bonds, notes, mortgages)
- payments for
  - cash dividends
  - repayment of loans
  - repurchase of stock (treasury stock)

## Important Ratios

Debt Ratio  $\rightarrow \frac{\text{Total Liabilities}}{\text{Total Assets}}$  % of funds needed to purchase assets that were obtained through borrowing

current ratio  $\rightarrow \frac{\text{Current Assets}}{\text{Current Liabilities}}$  measure of liquidity; number of times assets could cover liabilities

return on sales  $\rightarrow \frac{\text{Net Income}}{\text{Sales}}$  number of pennies earned during the year on each dollar of sales

asset turnover  $\rightarrow \frac{\text{Sales}}{\text{Total Assets}}$  number of dollars of sales during the year generated by assets

return on equity  $\rightarrow \frac{\text{Net Income}}{\text{Stock Holder Equity}}$  pennies earned for each dollar invested

price-earnings ratio  $\rightarrow \frac{\text{Market Value of Shares}}{\text{Net Income}}$  amount investors are willing to pay for each dollar of earnings  
Shows growth potential

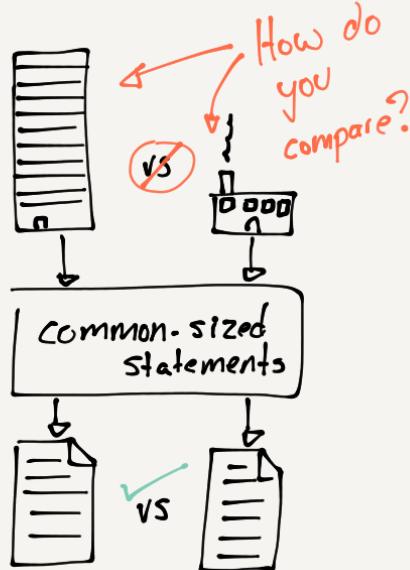
earnings per share  $\rightarrow \frac{\text{Net Income}}{\text{Number of Shares}}$  dollars earned for each outstanding share

# Return on Equity and the DuPont Framework

$$ROE = \frac{\text{Net Income}}{\text{Equity}} = \frac{\text{Net Income}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Assets}} \times \frac{\text{Assets}}{\text{Equity}}$$

Profit                      Efficiency                      Leverage

## Common-sized Statements



income statement →  
divide most line items  
by sales.

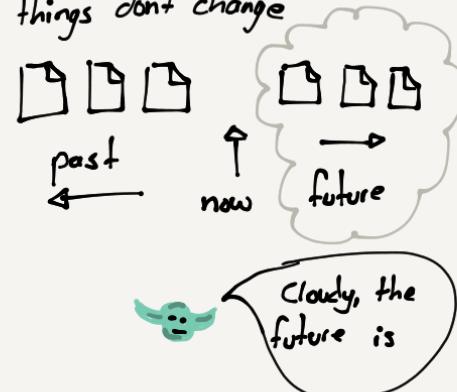
$$\frac{\text{Expense}}{\$} \text{ vs } \frac{\text{Expense}}{\$}$$

.37 vs .10

little company may  
be doing better?

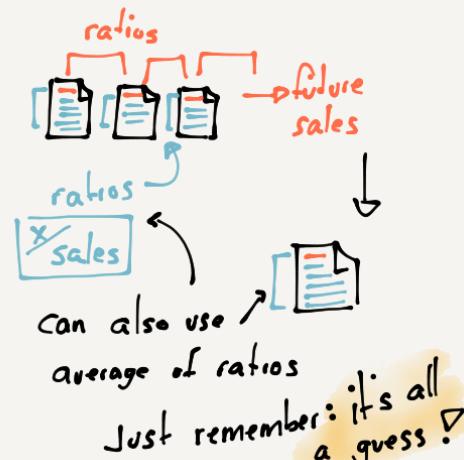
## Pro Forma

used to predict the future  
if things don't change



base future growth on  
ratios from past

can predict future revenue  
and then it's just like a  
common sized statement



## Housekeeping

If you are studying accounting instead of reading scriptures ... you're an idiot

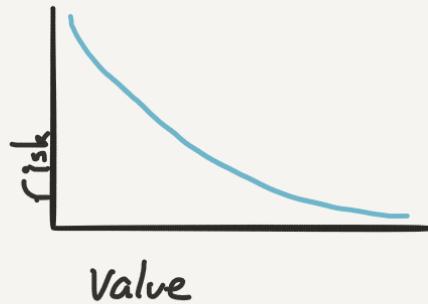
Most of what is on financial statements are estimates

Capitalize vs Expense

if it is a probable future benefit

then it goes on the balance sheet

The higher the risk (capitalization rate) the lower the present future value



Goodwill

- usually impaired in 2 years

When we decrease an asset it is impaired



## Impairment Test

1. Compare future cash flow to book value,
2. if - value ... impaired

Accounting is not an exact science and can be manipulated by estimates

you don't hire CPAs to fix a business, you hire MBAs



Why two methods?

direct  $\rightarrow$  easy to understand

indirect  $\rightarrow$  easy for accounting

$$\Delta \text{Cash} = \text{NI}^* - \Delta \text{OCA} + \Delta \text{CL}$$

$$\begin{aligned} & - \Delta \text{LTA} \\ & + \Delta \text{LTL} + \Delta \text{CC} - \text{Div} \end{aligned}$$

### Study Hints

- read scriptures
- pray
- follow prophet
- covenants
- tithing
- iron rod

3 hours  
not a group test  
don't discuss  
email to gmail acct.

An MBA is all about doing hard things and

Preparation makes you seem like a "cockeyed genius"

Beginning inventory

+ purchases

goods for sale

- ending inventory

cost of goods sold

Revenue operating cycles

# Accounting

## Final

This is to help  
us make good  
decisions

---

Time value of  
money - biggest  
single portion

Leadership

21 July 2017

## Change in schedule

"Change stuff in Aug"

Syllabus is upto date  
(to Aug 11)

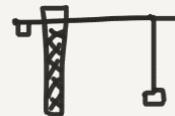
Send initial feedback  
requests before Aug 11



D+C 24:9

finance was not for  
Joseph Smith

## Unit 1: Building Your Brand



- convictions
- strengths
- change

## 2 roads to leadership development

- work on strengths
- work on weaknesses

"Jesus knew what he was and why. That meant he could lead from strength rather than weakness"

kimball  
Aug 1979  
ensign

## Peter Drucker

can only find strengths through feedback analysis

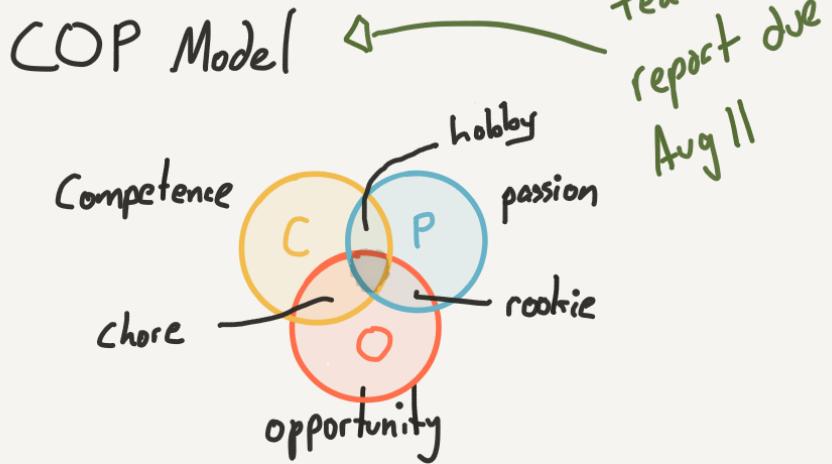
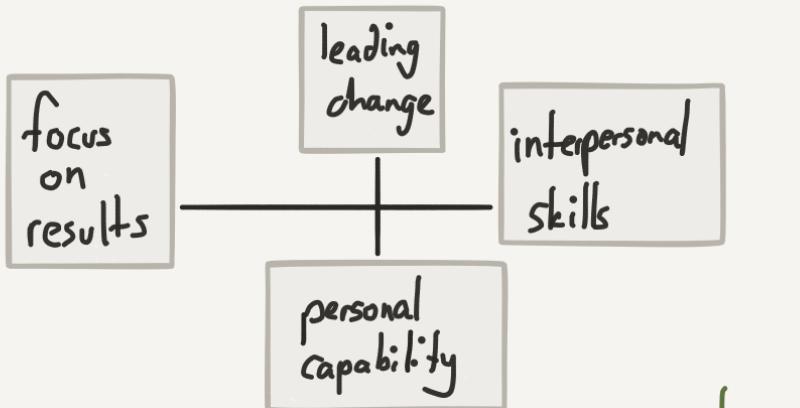
When you focus on strengths, you can stand out from the crowd

if doing something drains you  
then it's a weakness

S - success at it  
I - instinct  
G - growth  
N - fills need

Greatest value is realized through focus on strengths

Focus on stories that illustrate strengths



[whatconsumesme.com](http://whatconsumesme.com)

predictive index  
test

passion → what do you think about when you don't have to think about anything

"The body keeps the score"

jiro dreams  
(sushi chef)

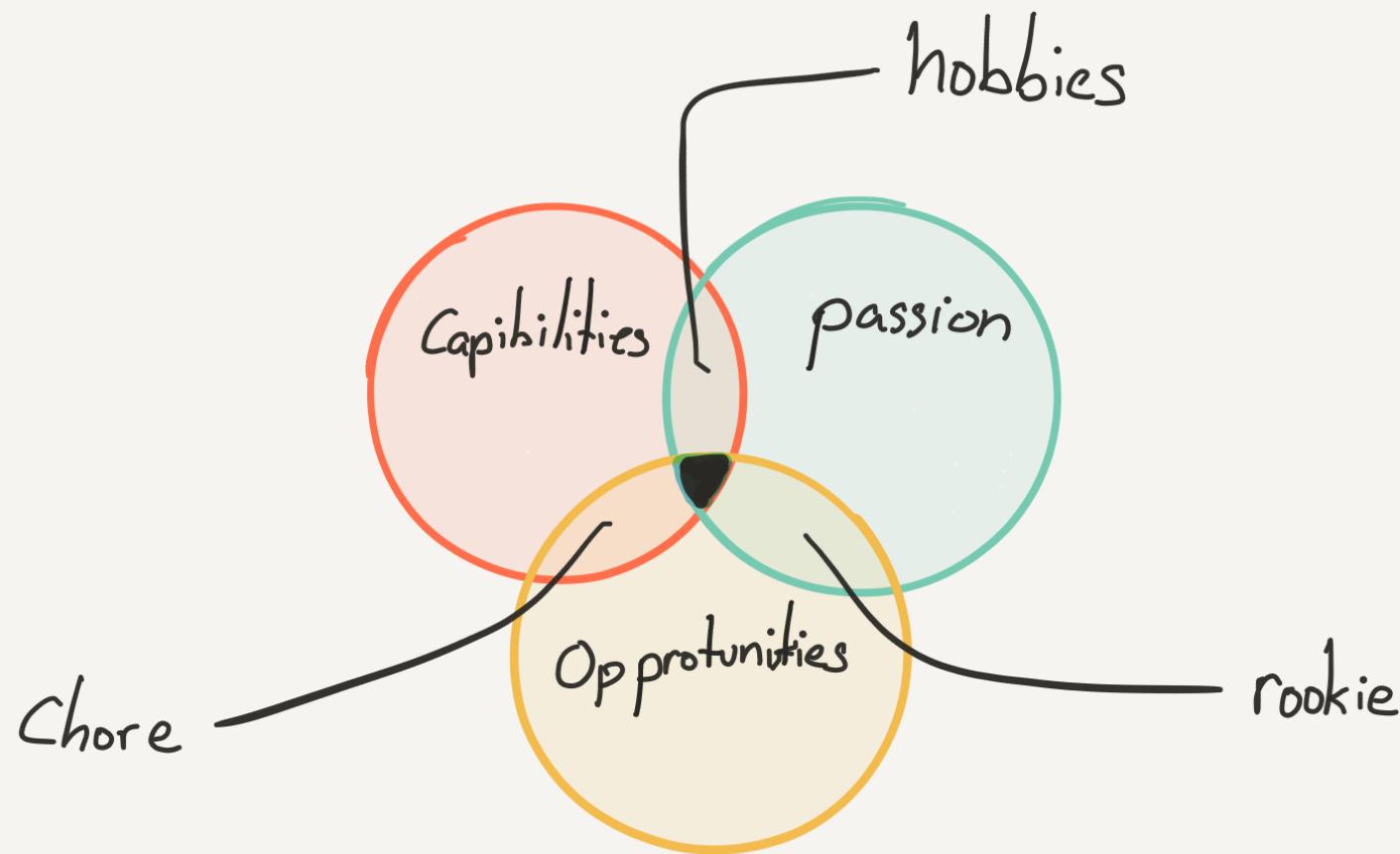
"So good they can't ignore you"

Motivation is based in...

- autonomy
- competence
- relations

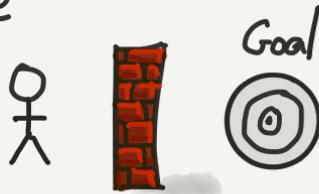
Reid Hoffman  
"The Alliance"

# The COP Model

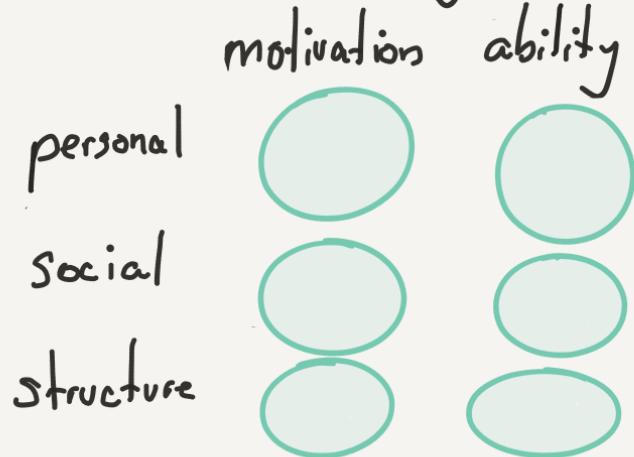


Can we change?  
YES!

We often get in our own way when wanting to change



## Universal Change Model



Usually change occurs in maturity

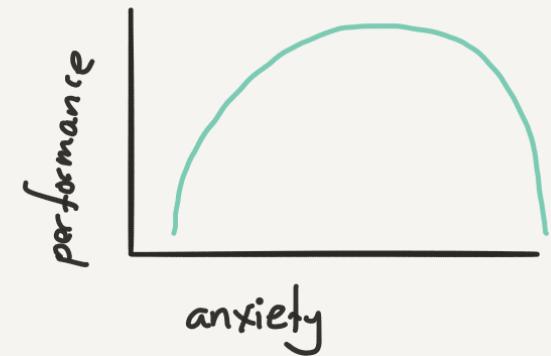
look at obstacles as behaviors leading to other goals.

# CHANGE

effective leaders learn how to manage stress through energy giving activities

energy network will 4x your success  
emotions are contagious

body is usually involved in major changes



We need to identify underlying motivations and find activities which fulfill those goals

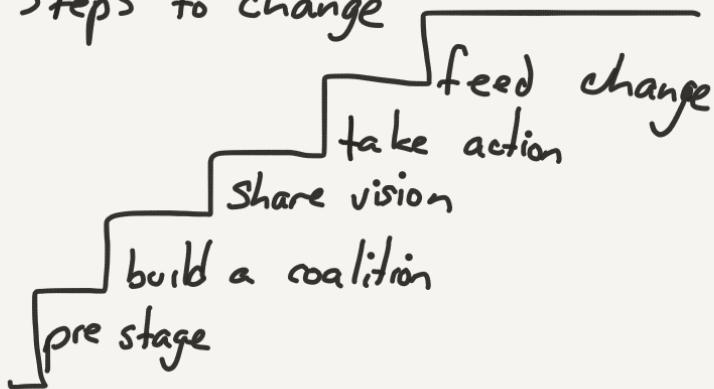
## Leadership Profile

- convictions
- strengths
- change

Leadership  
as a study of  
Practices

# Managing Change

## 5 Steps to change



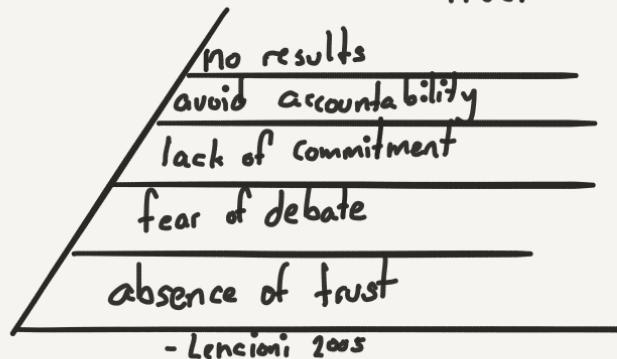
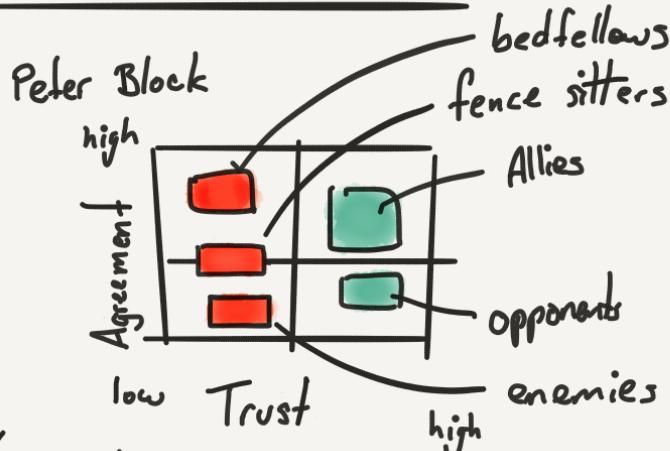
## Pre stage



- observe
- recognize
- what must change?

ask... is it worth it?

## Build a coalition



## Take actions

### Share Vision



know the reasons for resistance

### Feed the Change



celebrate the results

People who can lead change well are gold



### Allies

- leverage them

### Opponents

- talk to them

### Bedfellows

- show them

### Adversaries

- contain them

### Fence sitters

- fight for them

# Leadership

Culture has a lot of facets



develops over time

Tension between opposite values

can be good source of personal development

## Competing Values Framework

What makes an Organization effective



Human Moment has 2 key elements

- physical engagement
- psysic/mental engagement

# Leadership

## Clan vs Market Cultures

### Clan

primary focus →

people relationships loyalty

"Incubate"

employee involvement creates high performance

Primary competency: cultivation incubating

Value is created by doing the right things

people who thrive in this environment are ↗

individual attributes ♀

See potential in people  
good listener  
encourage participation  
builds teams  
respect differences

empower people  
creates trust  
helps others grow  
manages conflict well  
builds commitment

### Market

primary focus →

market share  
revenue  
profit

"invest"

sees world as hostile  
customers as self-interested  
and chaotic

Primary competencies: exploitation investing

Value created by doing things fast

people who thrive in this environment ↗

individual attributes ♂

goal oriented  
action oriented  
high achiever  
driven  
decisive

persistent  
loves challenges  
tough  
control oriented  
competitive

The best kind of person can bridge both attributes

# Leadership

Hierarchy vs Adhocracy Cultures

"Improve"



primary focus

found in places where failure is not an option (military, medicine, etc.)

Primary competency: improvement coordination

Value is created by doing things right

people who thrive in this environment are ↗

individual attributes ↗

planner  
details  
precise decisions  
one right way  
conservative

logical  
problem solver  
persistent  
follows procedures

## Hierarchy

incremental, continuous improvement

people who exemplify:

craftsmen  
technicians

implementing...

systems  
structures  
standards

negative example: -

the frozen bureaucracy

The best kind of person can bridge both cultures

## Adhocracy

"Invent"

primary focus

responsive to turbulent environments

Primary competencies: exploration  
imagination

Value created by doing things first

people who thrive in this environment ↗

individual attributes ↗

dreamer  
loves ideas  
creative  
learns from failure  
generalizes

innovation and uniqueness

people who personify:  
Geeks  
Artists

inventing...  
products  
services  
markets

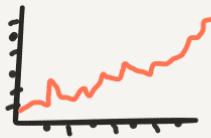
negative example: -  
the tumultuous Anarchy

persuasive  
visionary  
fast  
excitable  
enthusiastic

Leadership  
6 Oct 2017

## Hierarchy

deliberate practice



focus on process &  
improvement

continuous  
improvement

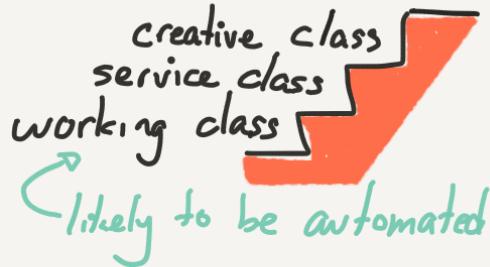
Evidence that a process  
needs improvement



- depend on key people
- slow
- competing on price
- duplicating work
- repeat mistakes
- good ideas are stuck

## Adhocracy

dynamic



Thinking is linked to

- ... physical actions
- ... materials used + created
- ... relationships w/  
others

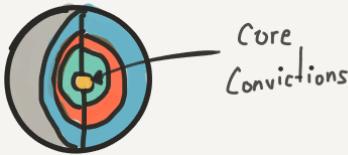
Creativity works better  
when you apply ideas  
from external places  
and apply them to  
your area

# Leadership

2017 Oct 20

Teach the Profile  
to others

Revisit Profile regularly  
... every 5 years?



We struggle with perfection

Managers can cause  
a lot of damage

We need good people in  
all levels

Character is the end, not the  
means

Virtue is to act from inclination  
formed by cultivation of those virtues



## The Character of Joseph Smith

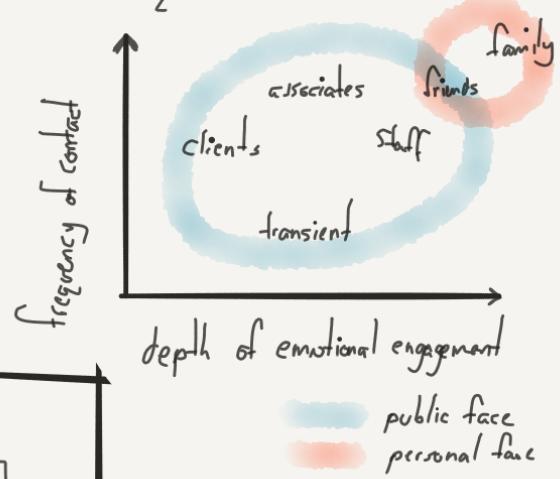
Moods are how we are  
tuned to the world



Managing moods are an  
important part of being a leader

emotions are contagious !

What kind of emotional labor  
is required for revelation?



### Character of Joseph

- Transparency
- Sharpness of rebuke
- Confidence
- Love and Enthusiasm

Focus  
on  
Results

rebuke

Leading  
Change

transparency

Character

joseph's traits

love

interpersonal  
skills

confidence

personal  
capability

Boundary  
moments

Joseph greeted  
everybody when they  
landed in Nauvoo and  
arrived in Kirkland

Look for ways  
to emulate and apply  
example of Lord  
(3 Nephi 11 ... joseph  
looked to bless others)

Pattern for mornings  
gratitude to God

spirit child of God  
feed your spirit your

examine

boundary  
moments

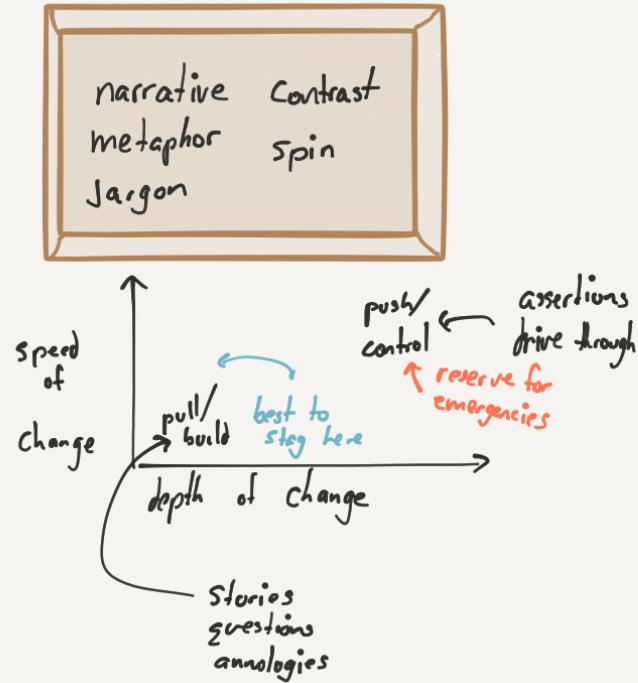
ask how you are doing



look for ways to make them  
impactful

Leadership 3 Nov 2017

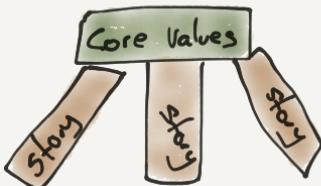
## Framing



Leaders Messages should be...

- heard (ear icon)
- remembered (brain icon)
- valued (money icon)

Stories in organization  
should support core values



Designing Narratives

- identify principle
- tell story
- compress & simplify story

### Story framework

hero confronts challenge  
takes unusual action to  
overcome it

Leaders make meaning  
from ambiguity

### flaws

- difficult to dislodge bad analogy
- confirmation bias

Analogy can provide a good framework for success  
Stories are key to any successful presentation

### Gladiator presentation

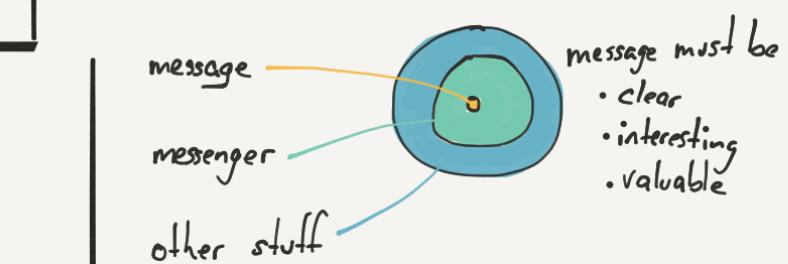
- no more than 6 min
- no travelog
- what is recommended (start with)
- call to action



### Analogy

- new problem
- has similarity to another setting
- solution that can transfer from to new problem

Having the correct similarity  
is key. Otherwise you're  
toast



Messenger  
sets the tone  
how you present matters

"I did not practice.  
This is who I am"

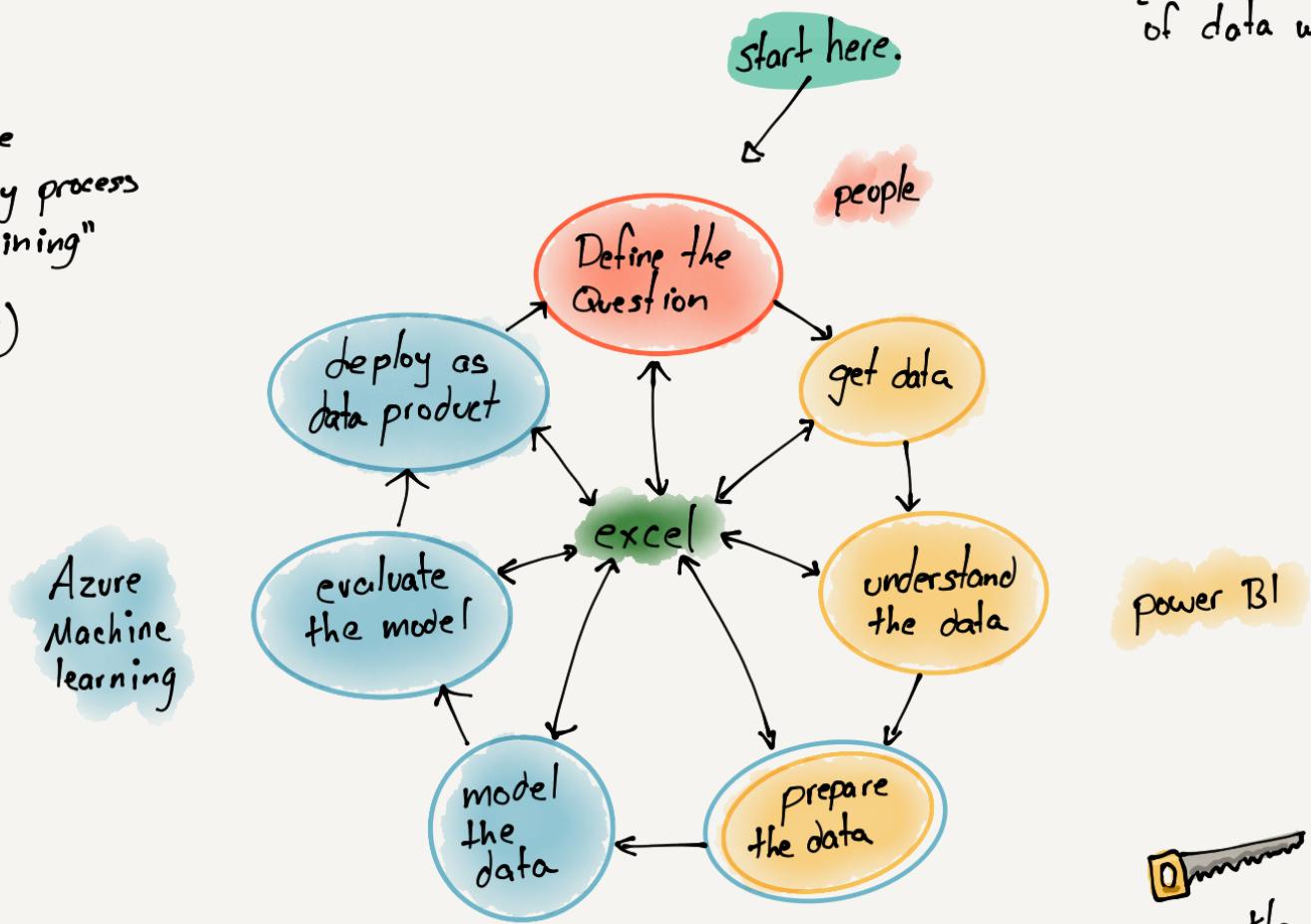
- > opening (hook)
- > agenda (headline)
- > body (evidence)
- > closing (CTA)

Single idea that  
moves to action

Quant

# Overview of the analytics process

(based on the "cross-industry process for data mining" or CRISP-DM)



If you ask the wrong questions, no amount of data will help ?

power BI



the tools shown  
are Microsoft specific,  
but there are other  
alternatives

# Quant

## Types of business analytics

### ① Descriptive

what has happened  
*explain*

Summary statistics  
Univariate visualization

#### Sample Questions:

How often is our product  
on feature, display, etc.

What is the average price  
per unit?

What are the lowest & highest  
prices charged?

How variable is our pricing?

What were total sales for the  
company in week 52?

Are total sales increasing  
or decreasing?

What about store 2003415

Which division is performing  
the best?

### ② Predictive

*forecast*

What will happen  
Visualization relationships  
Trend lines  
Models

#### Sample Questions:

How many units do we expect  
to sell in store 2003415  
in week 53?

How many units will we sell  
in west division in week 55?

How many units can we expect  
to sell in the east division  
if we put it on display?

What will happen to sales in  
store 200341 if we lower  
price to \$2.00?

### ③ Prescriptive

*recommend*

What should happen  
What-if analysis  
Optimization

#### Sample Questions:

What price should we  
charge for a bar of  
soap?

Which customers are likely  
to churn?

What products are customers  
likely to buy together?



## Data Visualization

powerful  
intuitive  
organized  
communicate  
understand

} data

### Reasons to visualize

#### 1. Explore

discover structure  
identify problems  
simplify

#### 2. Communication

report results  
persuade to adopt action  
track key metric

# Data Visualization principles

#### Visualize with a purpose

- it's powerful
- don't overuse it

#### Focus Attention

- use cues like color,  
shape and SIZE  
to focus attention

#### Keep it honest

make it visually  
accurate to the  
data

#### Keep it Simple

- avoid clutter
- clean, clear and focused

#### Keep it Clear

can be bundled to  
support to tell  
meaningful story

## Types of data

### Discrete data

#### Nominal

labels data  
can be summarized  
using counts, %,  
mode

e.g.: names,  
zip codes  
Upc codes

Q: "are you older  
than 30? Y/N"

#### Ordinal

ranks data  
can be summarized  
using counts, %  
mode, median, range

e.g: highest to lowest  
best to worst rankings

"How old are you?  
<30; 30-40; >40"

#### Continuous data

#### Interval

quantitative data w/ equal  
distance between each  
scale point

can be summarized using %  
mode, median, mean,  
variance, correlation

e.g: Likert scaled, Temp in

Farenheit

"How old are you?  
21-30; 31-40; 41-50; 51-60"

#### Ratio

quantitative data  
distances between  
scale points

can be summarized  
by all math f(x)

e.g: age, dollars,  
weight

"How old are you?  
(fill in the blank)"

# Quant

## Statistical Inference

process of using data to make conclusions about unobserved quantities

Statistical Inference is all about confidence in our predictions

Null hypothesis is status quo  $H_0$

Alternative is usually  $H_A$   
what we are interested in

$H_0$  vs  $H_A$

### Hypothesis Testing

mathematical differences  
numbers are not the same

statistical significance  
difference is large enough  
to not be a sampling error

managerially important  
difference is large enough  
to matter from a management perspective

hypothesis must be stated so both cannot be true

decision rule determines of significance level



### Test Procedure

1. define  $H_0$  &  $H_A$
2. specify level of  $\alpha$
3. use appropriate formula
4. compare calculated value against critical value
5. state result in terms of rejecting or failing to reject the null hypothesis



### Key elements

- decision rule
- significance level



Use a Z-test to test proportions.

Variations and how they act is important