New Product Development in Academe

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Associate VP (Enrolment Management)
&
Registrar

A bit of my background….

- Professor of Operations Management
- Former Dean of the Sobey School of Business
- Part way up the learning curve on current position

What is Operations Management?

We are to blame for ….

- Total Quality Management
- Continuous Improvement
- Lean
- Business Process Re-Engineering
- Mass Customization
- Project Management …..

What is different about B-School Deans?

- Attention of business community
- B-School rankings are more important than university ones
- Expectation that you have something new to offer
- Expected to generate income

What is an Associate VP (Enrolment Management)?

- Increasingly popular job title
- Reflection of increased importance of recruitment
- Recognition of inter-relationships among traditional silos: student services, recruitment, admissions, registrar, ….
- Recognition that Marketing, Sales, Operations, Customer Relations,… are part of senior management? O.k. not there but getting closer

Environment Today and Looking Ahead

- Demographics show continuous decline in traditional high school population
- Push to engage/access under-represented populations
- Move towards more “cross selling” and “upgrades” (post baccalaureate certificates and degrees)
- Consumers more demanding:
  - value,
  - customization,
  - shifting preferences, …

- Keeping traditional customers requires “Product Innovation/Change”
- Attracting new customers requires new products

“You don’t have them now because you don’t have something they want.”

“Why do you think tomorrow’s students will want yesterday’s programs?”

Welcome to the world of business

Associate VP Enrolment Management

= VP Sales and Marketing

Registrar = Director of Operations

So why do we get no respect?

SEM is Demand/Customer Management

Complex CRM environment

Equivalent to Yield Management in Hotels and Airlines

- advertising, pricing, incentives to fill beds/seats with “best” customers and CRM to keep them

Have large expensive fixed capacity (overhead) and need to increase utilization.

Capacity is primarily full time faculty

If you were in a business, you would also be involved in proposing/designing new and existing products to grow the business, maintain competitive position, increase productivity,…

You may not do this now, but times are changing – how many Associate VP's (EM) were there 5 years ago?

New Product Development

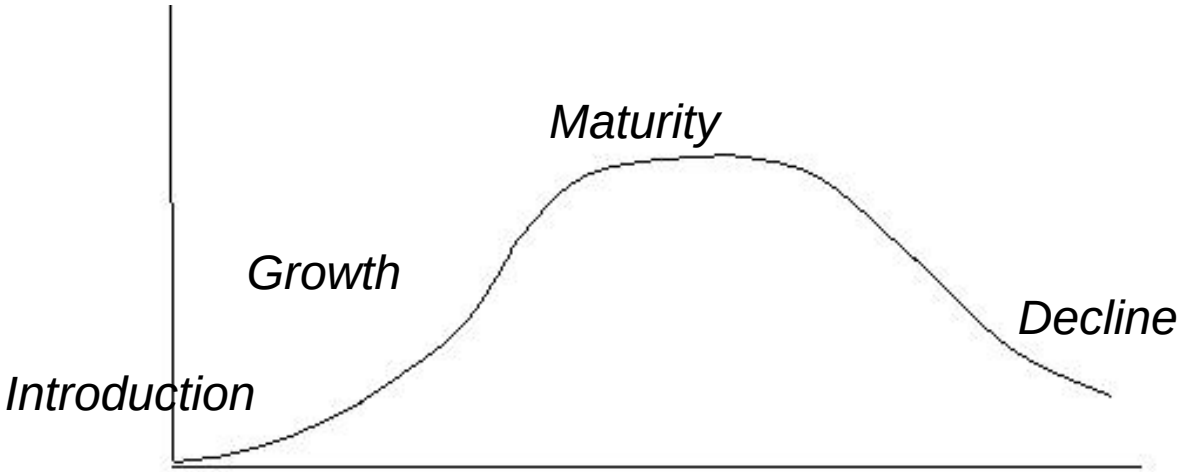
What lessons can we learn from the private sector?

What can we learn from Manufacturing? Most of the NPD research and tools began in manufacturing,

Like TQM, BPR, …not all concepts and tools are transferrable.

Community Colleges likely have the most to gain due to short programs, short “history”, more flexible “capital”,… Universities beware.

Product/Service Life Cycle



Re-invent products to restart the curve

Or just Kill It

NPD Processes in Academe:

Processes @ SMU

Faculty Member 

➲Engage department and draft proposal

➲Dean and Faculty Council

➲⇐ Revise

➲Academic Planning Committee – request info on market research, resources, finances,….

➲Senate

➲MPHEC

➲Find students – good luck!

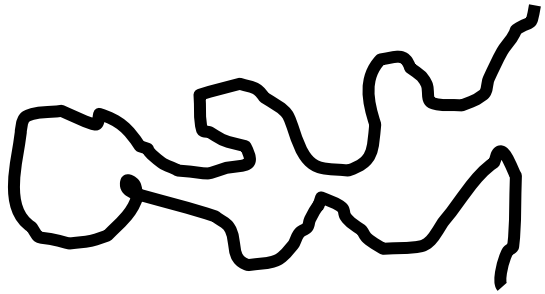
SAINT MARY'S UNIVERSITY SINCE 1802

One University. One World. Yours.

OR

Dean

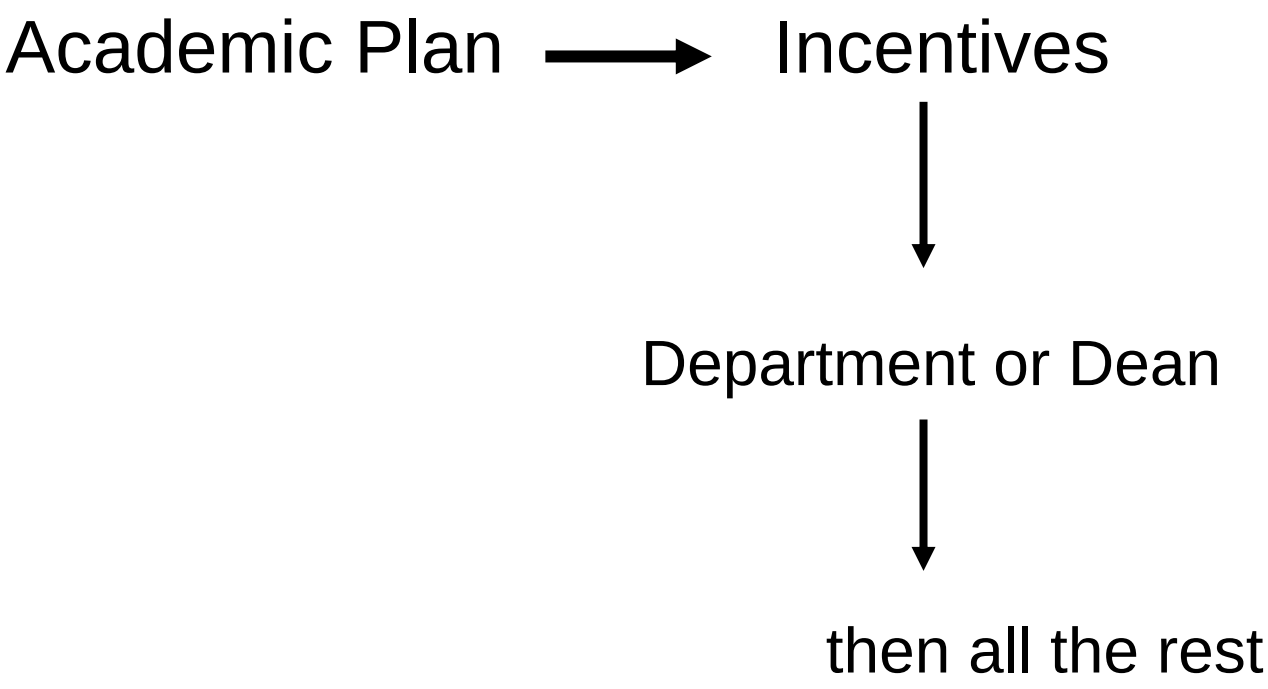
Department/Faculty



Dean and Faculty Council

… then all the rest

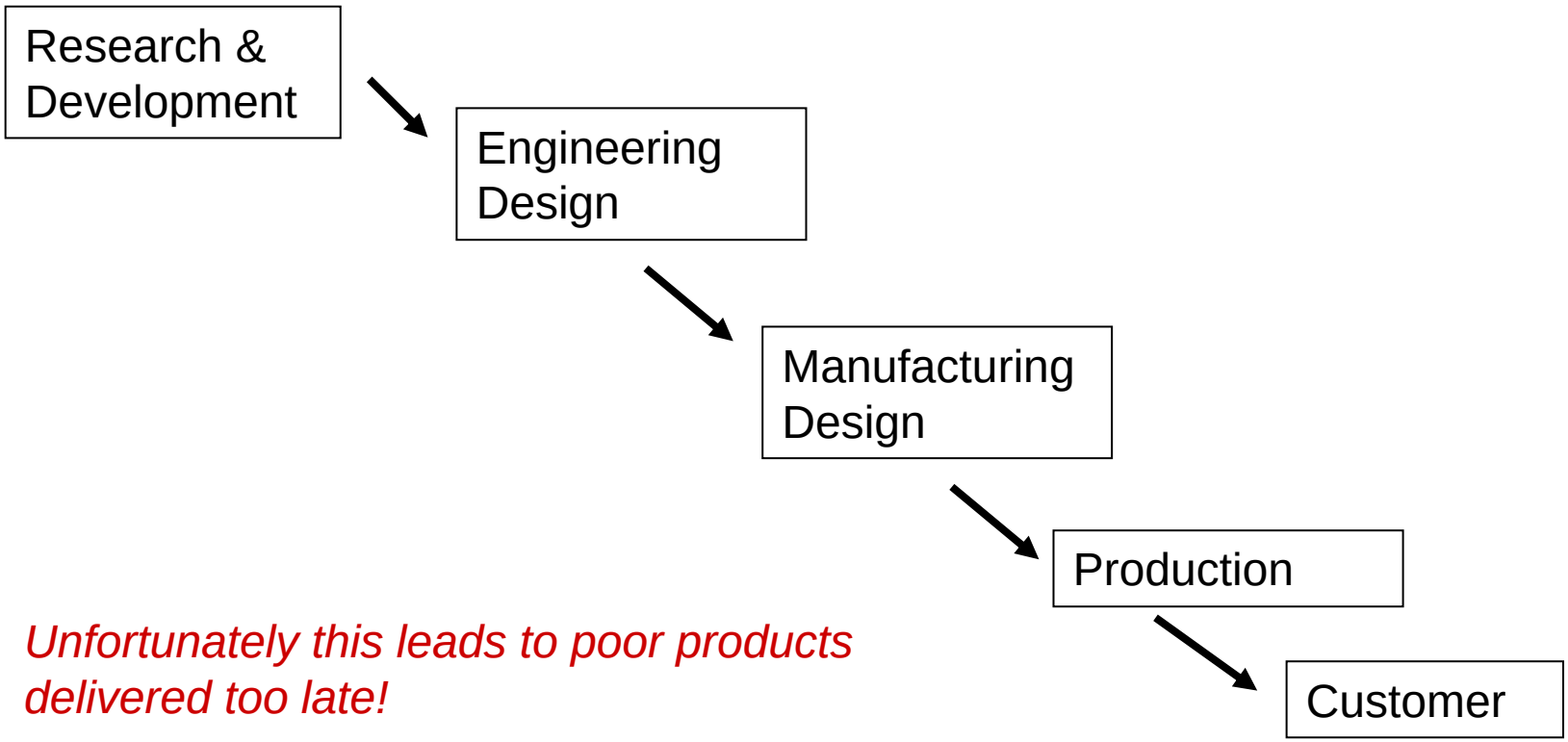
OR



- Departments/Faculty “own” courses and programs
  - this makes our environment unique

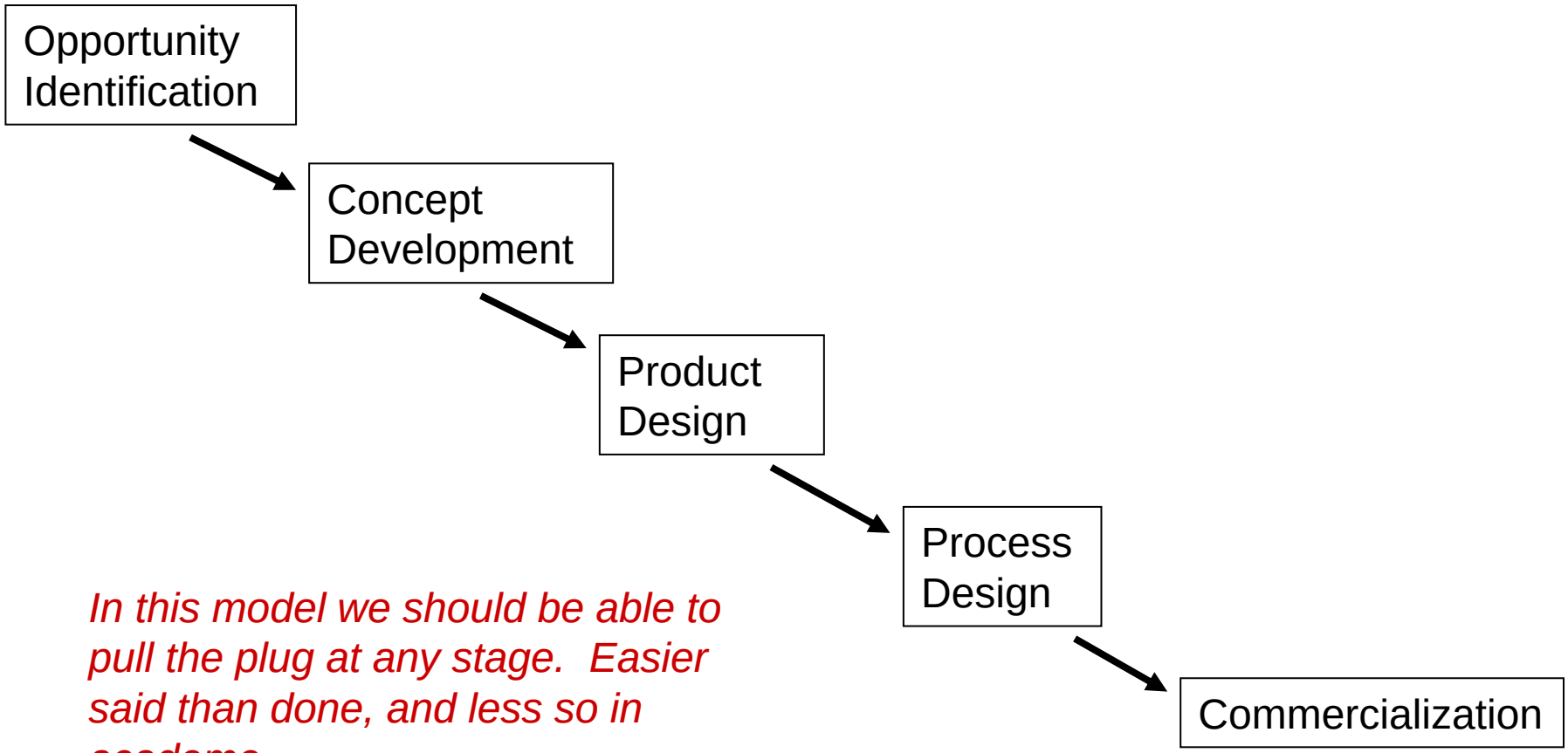
- Senate gives the final OK

Traditional Manufacturing Approach to NPD



Unfortunately this leads to poor products delivered too late!

Stage Gate Model of NPD



In this model we should be able to pull the plug at any stage. Easier said than done, and less so in academe.

Idea Generation

There is no one closer to the customer than the recruiters.

Do you have a feedback loop for gathering market intelligence?

Do you watch what others are doing and then copy?

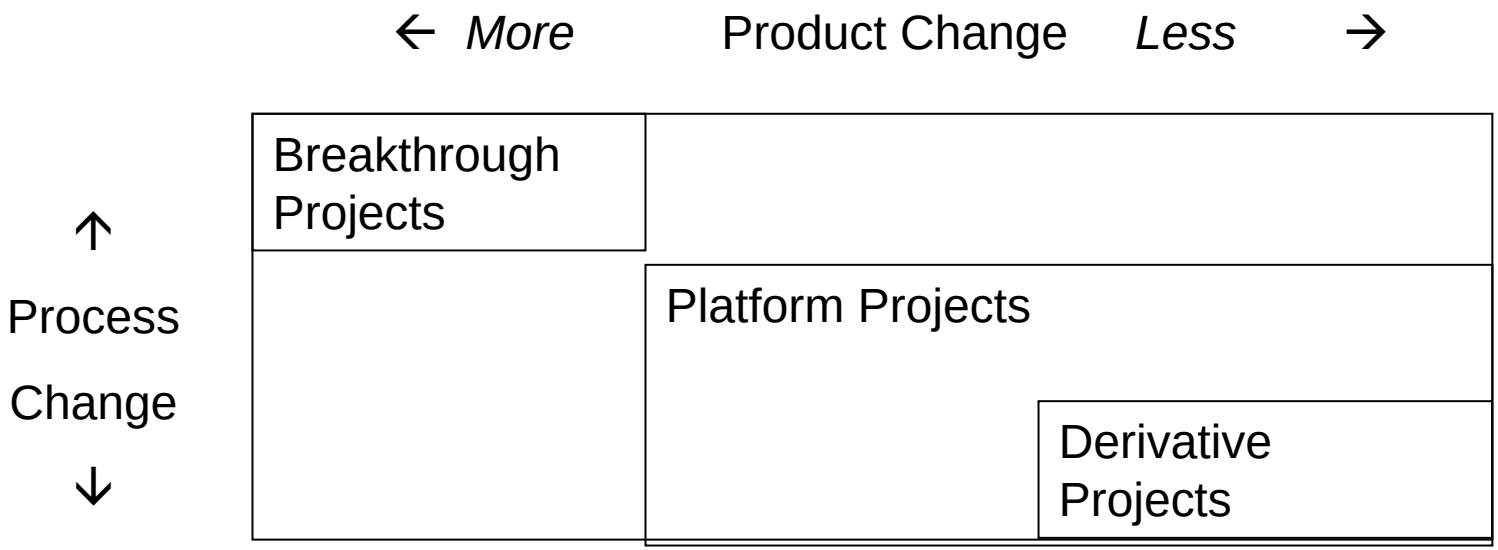
First mover advantage vs copy and do better
Procter&Gamble
– policy is 50% of ideas are to come from OUTSIDE P&G!

Key themes in NPD in Today's Manufacturing:

1. A portfolio of development projects
2. Agility in uncertain environments
3. Aligning the product to customer requirements
4. Designing the product/service such that it can be made/delivered efficiently

Portfolio of Projects

Steven Wheelwright and Kim Clark, “Creating Project Plans to focus Product Development”, *Harvard Business Review*, March-April 1992.



We are buried in “derivative” products – annual ritual of program change/revision

What is a “Breakthru” product?

- *Ipod/MP3*
- *Netscape*
- *Ebay*
- *Facebook*
- *Notebook computer*
- *Lithium Ion battery*
- *Swifter*

Can you think of a “breakthru” in academe?

Agility in uncertain environments

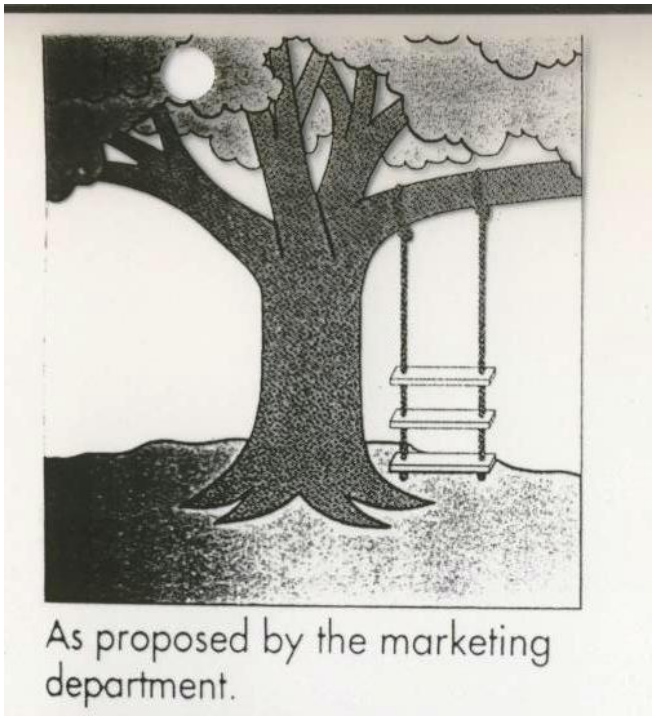
Stefan Thomke and Donald Reinersten, “Agile Product Development”, *California Management Review*, Vol. 41, No. 1, Fall 1998.

- Learning BEFORE doing vs Learning BY doing?
- Parts commonality

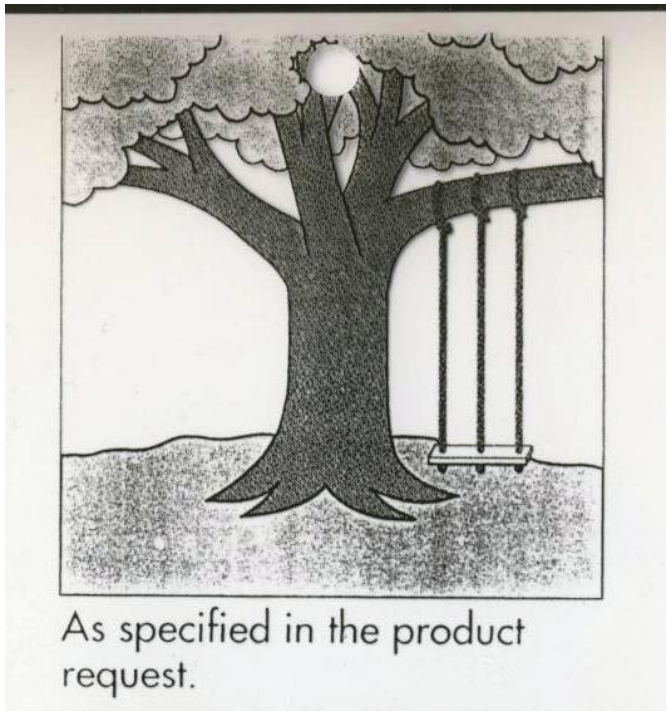
- Cohort degrees
- Short programs
- Can you pull the plug on an unsuccessful program?

Converting Customer Requirements to Product Specifications

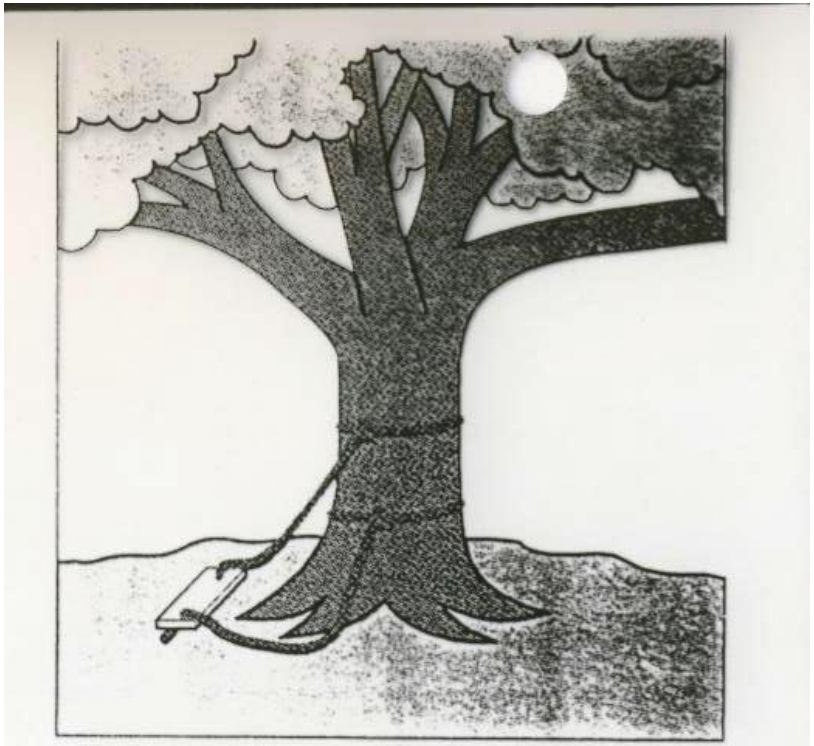
John Houser and Dan Clausing, “The House of Quality”, *Harvard Business Review*, May-June 1988.



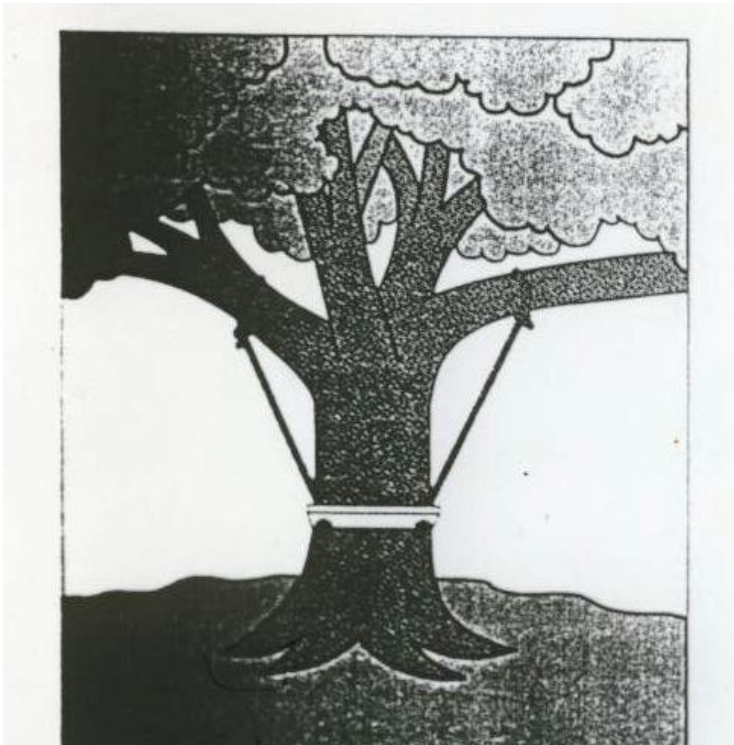
As proposed by the marketing department.



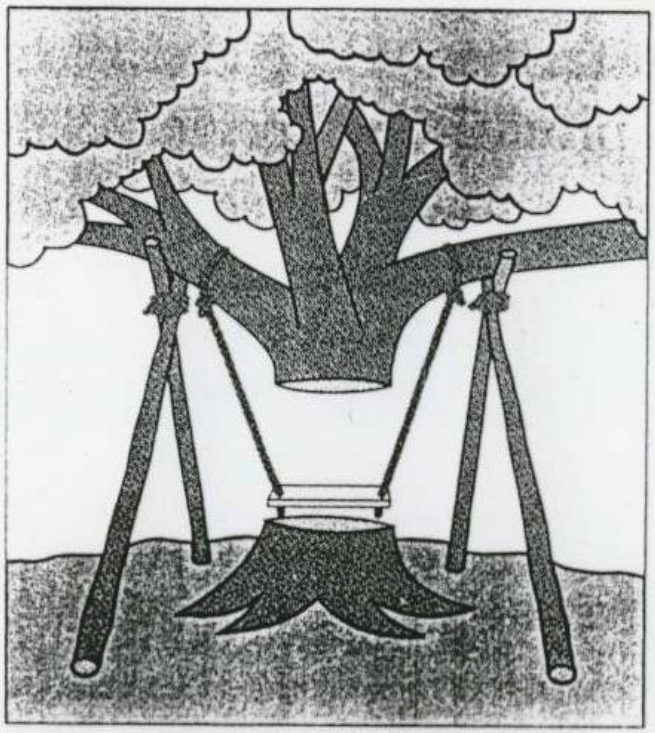
As specified in the product request.



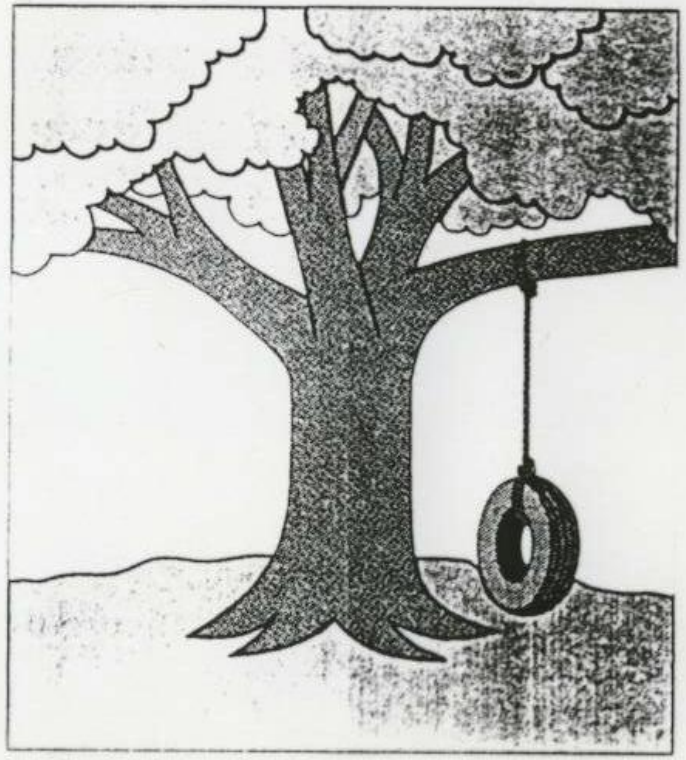
As designed by the senior designer.



As produced by manufacturing.



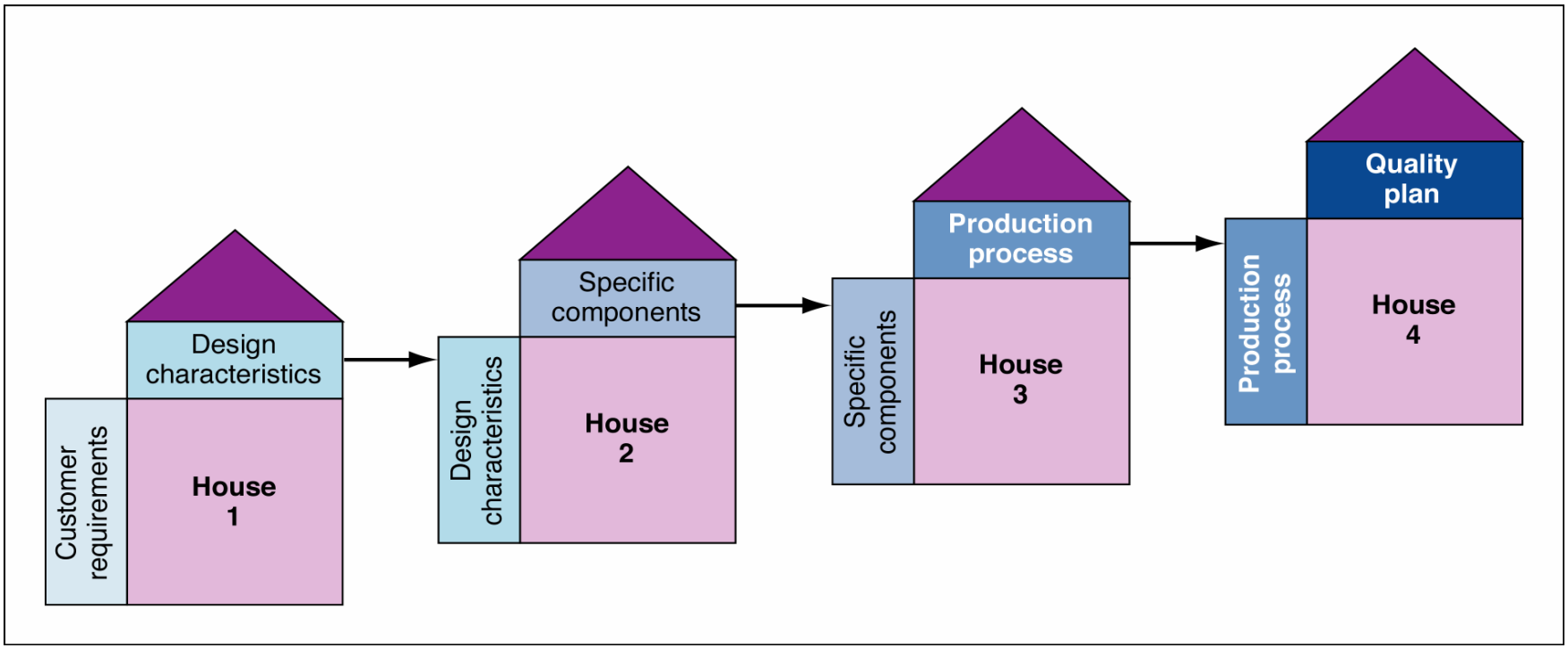
As used by the customer.



What the customer wanted.

House of Quality Sequence

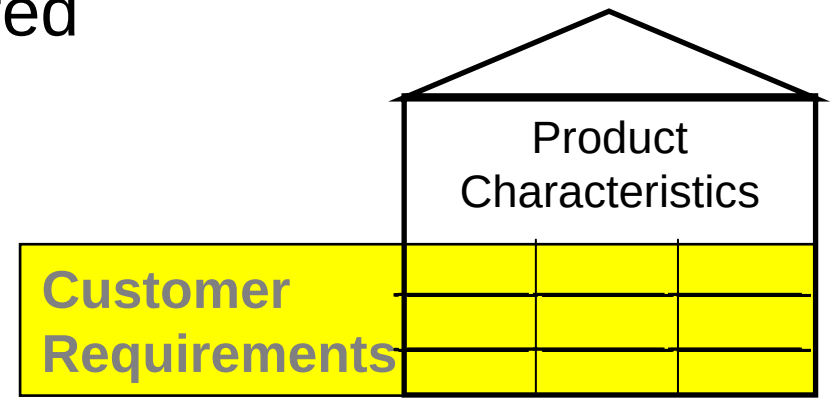
Indicates How to Deploy Resources to Achieve Customer Requirements



Customer Requirements Stage

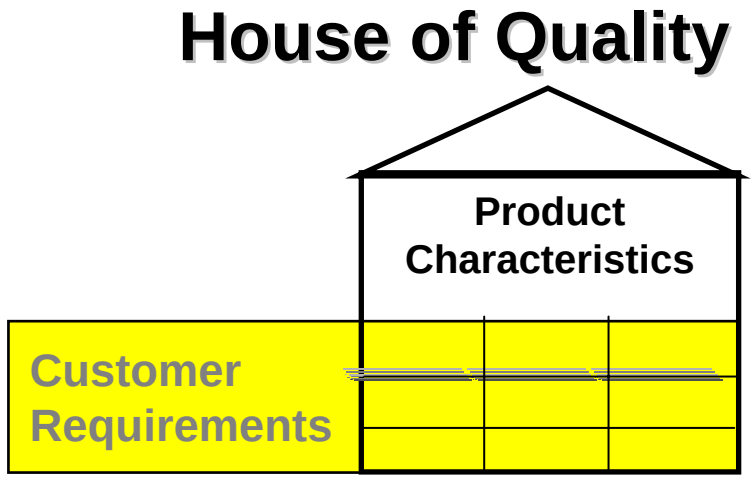
- Identifies & positions *key* product benefits
- Identifies detailed list of product attributes desired by customer

House of Quality



Functional Specification Stage

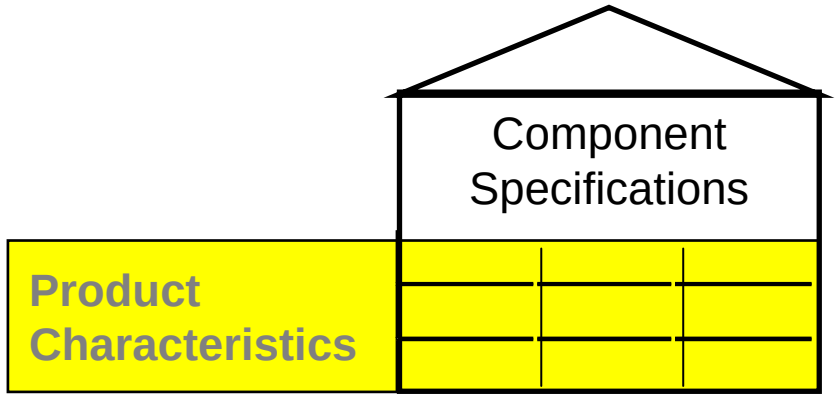
- Defines product in terms of how the product would meet desired attributes
- Identifies product's engineering characteristics
- May rate product compared to competitors'



Product Specification Stage

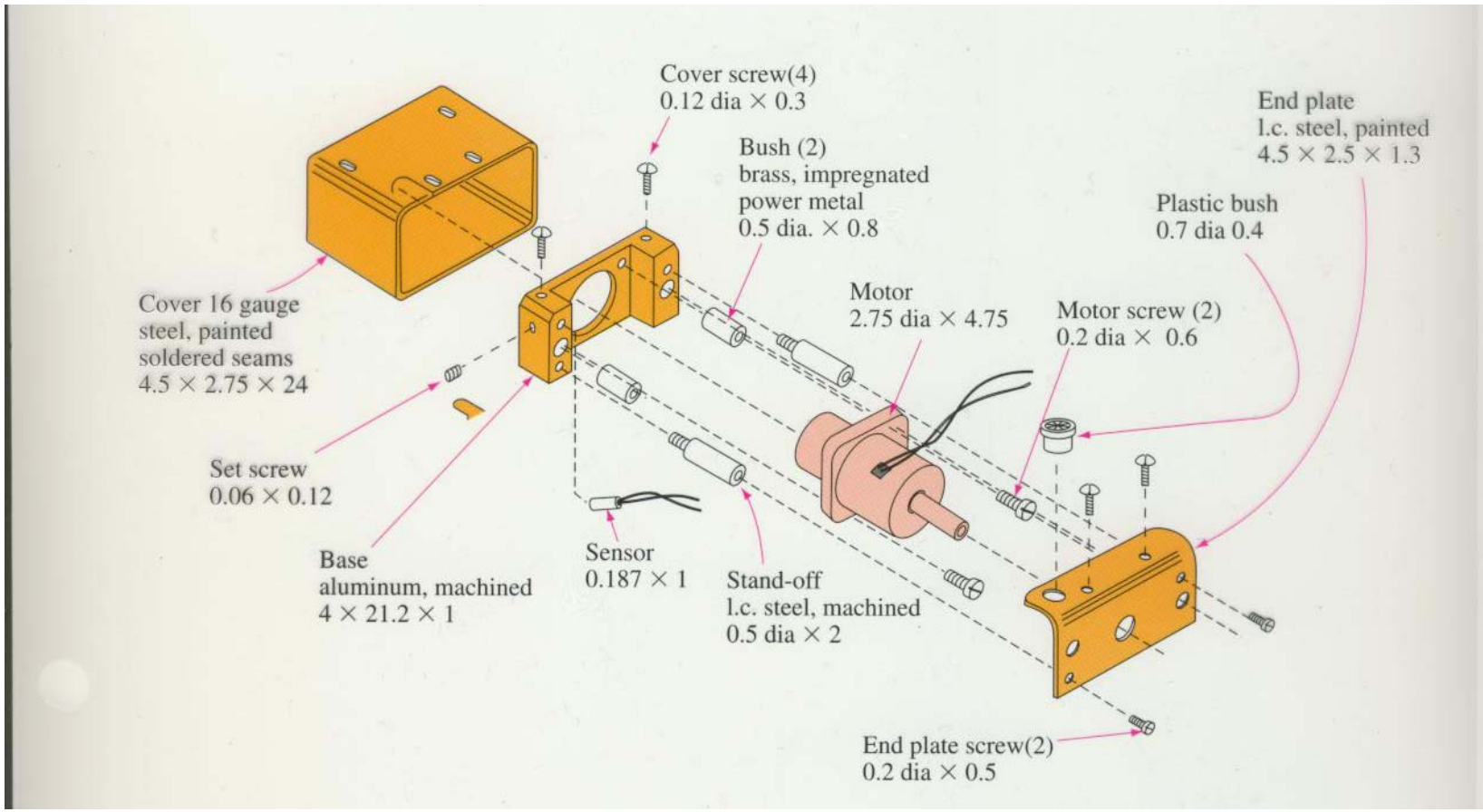
- Determines how product will be made
- Gives product's physical specifications
  - Example: Dimensions, material etc.
- Defined by engineering drawing

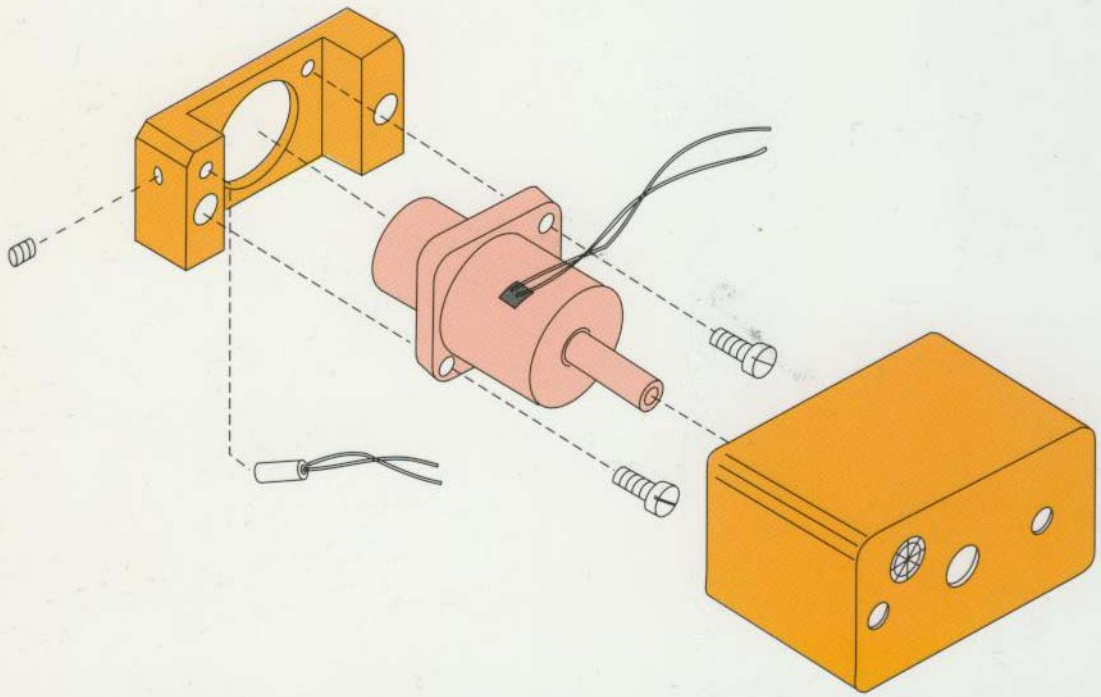
House of Quality



Can we make it and deliver it efficiently?

James Dean and Gerald Susman, “Organizing for Manufacturable Design”, *Harvard Business Review*, January – February 1989.





DFMA – Design For Manufacture and Assembly

Keep it simple

Since Registrars are charged with enforcing regulations, they have special knowledge about what works.

They oversee “manufacturing” operations

- How many programs have unnecessarily complex regulations?
- With every program change is complexity increased?
- Does anyone still remember the objectives on which the program regulations were founded?

New Program Development is Project Management

Many dimensions of PM but key are ***Leadership*** *and* ***Teams***

A project needs a Champion and a Sponsor

The team should represent the major stakeholders from market to production

A Champion will see the project thru to completion and can engender the support of the team.

The Sponsor will remove the barriers to success.

Some examples from my past life:

- *EMBA in Taiwan*
- *Master of Finance*
- *MBA-CMA*
- *Online EMBA for Tech Sector*
- *Online BComm for mature students*

EMBA in Taiwan

- Take an existing product and repackage it for a new market
- DISASTER
  - *Didn't understand market – needs, channels of communication, pricing, ….*
  - *Champion wasn't respected by team*

Master of Finance

- Customer did not fully understand what he wanted
  - asked for MBA for Chinese professionals
- Clients had limited time (working), weak language skills, wanted significant career advancement, new opportunity with joining WTO and creation of stock markets
- Did not ask for course choice or flexibility
- Approaching a school without significant “brand-equity” so was not looking at high price, but willing to settle for mid-price

•MBA was (is) crowded market

- hard to differentiate
- high price difficult to support without “brand”

•To be successful needed new product designed for client

QFD + DFMA

- *Create New Product (Platform?)*
- Cohort model
- Fixed courses
- Recycle existing parts (courses) but in accelerated delivery – 6 week modules to achieve depth
- Add ESL module (8 weeks)
- Learn BY doing

Had a champion!

But watch out, he added a research project – limits scalability

Estimated revenues for 2008/9 = $2+ mill with net of over 50%

Failed as new “platform” due to “ownership”

MBA-CMA

Customer was very demanding:

- Grads get real MBA
- Program makes “efficient” use of time
- Program is “accessible”
- Fixed price
- Limited time
- Meets CMA professional req’ts

- Ineffective champion, but strong sponsor
- Tried learning BEFORE doing but had to resort to learning BY doing
- End product was Hybrid degree that could be new “platform”

Notable Failures

- Online EMBA for Tech Sector (pre Y2K)
- Online BComm for mature students hitting ceiling

Needed partner – sought private, for-profit partner

Culture/Value clash

Associate VP (EM) vs Dean in NPD

- Can't propose products in business
- Can't mobilize products in Arts/Science
  – need a dean to lead
- No one to take ownership if outside an existing faculty
- Remember – Faculty/Departments **own** programs
- *But times they are a changing*

Opportunities in NPD

- Post degree, career focused, but not necessarily "graduate programs"
- Degree completion for community college grads
- If 20%-50% of students don't finish their degrees, what happens to them? Smart enough to get in but not engaged.

Challenges

- Product proliferation – confusion among customers
- Marketplace confusion
- Markets harder to reach than High School
- Faculty with PhD's – who has the skills for teaching career-focused programs?
- Mass customization vs product proliferation

Final Messages

- New era/opportunity for EM professionals
- Listen to the customer! (House of Quality)
- Keep programs simple (DFMA)
- Think outside traditional programs (e.g., short post degree but not “grad studies” territory)
- Look out for champions and cultivate them
- Work your way into the “inner circle”

Questions and Criticisms?