Innovation through Customer Design

Estonian Association for Quality
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Brown Sox v Mensa

- Problem Solving
- Mensa
  - Repeatedly beaten
- ‘Brown Socks’ Group
- Ordinary Guys
  - Additive Knowledge
  - Others did not have
- Mensa Group
  - Identical Knowledge
  - Not Additive
Collaborate to win

- Mozart, Hockney, Pepys,
  - benefactors collaborated
- Linus Pauling’s success;
  - better collaboration
  - not intellect
- C.S Lewis, JRR Tolkein
  - ‘The Lord of the Rings’
  - ‘The Chronicle of Narnia’
- Silicon Valley
  - Boston IT
Quality Today

- Focus is
  - ‘Conform to Requirements’
  - stop problems re-occurring

- Difference by
  - faster delivery,
  - cheaper price,
  - reliable performance.

- Does not address
  - unfulfilled needs
We ‘enable’ a customer

- ...to do a job
- Just satisfy customers
  - open to the competition.
- Delight the customer
- Easier they do their job
  - Less likely to switch
- We create a Benefit
Quality Tomorrow

- Quality with vision
  - Address unfulfilled needs
- Innovator ‘fulfills all needs’
- Today’s solution ‘Obsolete’

- Why unfulfilled needs?
  - Beyond existing capabilities
  - Customer’s problem not fully defined
Innovation Process – A Paradox

Creative phase
Where we develop ideas
Creative people are needed

Execution phase
Puts ideas into practice
Requires a ‘results’ type of person

1 Opportunity
2 Solution
3 Development
4 Delivery
Open and Closed Networks

Open
- Sharing knowledge
- Creativity

Closed
- Getting results
- Execution
Find the Opportunity

1. Data Analysis
2. Talk to the Customer
3. Observe the Customer
4. Be the Customer
5. Customer in Design
Changing Needs

- Change at Customer
  - Legislation
  - Technology
  - Social Change
- Customer doesn’t realize!
- ‘Environmental scan’
  - Changes in the market
  - ‘pain’ for the customer.
What we must do

- Explore
  - ‘Step out of the box’
  - Gain new learning.

- Collaborate
  - Interact with customer
  - Leverage diversity
  - Find the pain
Building Collaboration

- Each party brings an asset
  - market, IP or technology.
  - understand other’s asset

- Trust
  - understand behaviour
  - Perception of behaviour
  - ‘Detailed’ v ‘Slow’

- Build relationships
  - During the process
Collaboration – The Spark of Ingenuity

Breakthroughs; At intersection of bodies of knowledge.
The Right Questions

Don’t ask
- ‘What do you need?’

Do Ask
- What gives you trouble?
- Where do you waste time?

Find your opportunities.

Customer pain statement
- Understand Customer
- ‘Painstorm’
Customer Pain

- Cost & Time
- Effort & Emotion
- Risk & Worry
- Obstacles
- Keeps awake at night?
Focus for Needs

- Jobs that matter
- Pains/Gains that matter
  - Success Measures
- Many People & Complexity
- High Costs
- Emotional Satisfaction
Creative problem solving

- Use Collective knowledge
  - ‘right brain’ – lateral thinking

- ‘Butterfly Effect’
  - cause/effect not adjacent

- Henry Ford
  - mass production in meat factory

- Edison’s colleague.
  - Screw on light bulb

- P & G
  - InnoCentive, ‘Printed Pringles’.

*Einstein; No problem can be solved with the same level of consciousness that created it*
Creative Process

- Problem Definition
- First write ideas
- Circulate - stimulate
- Eliminate ‘big voice’
  - fear of rejection
- Allow wild ideas
- 40% more ideas

- Repeat Daily!

Linus Pauling;
‘the best way to get a good idea is to get lots of ideas’.
Innovation Process

1 Opportunity

2 Solution

3 Development

4 Delivery
Assess Risk

- Need Data, Information
- Each idea rated on
  - time cost risk radical.

Select Solutions
- Mitigate Risk.

Radical innovations;
- More profit,
- more risk.

If you see a bandwagon, its too late
- James Goldsmith
Upstream and Downstream Risk

- Internal Risk
  - Easier to manage

- Supplier Risk
  - New Suppliers
  - Multiplier Effect

- Delivery Risk
  - Budget Constraints
  - Decision Cycle
  - Adoption Cycle
  - Keep Customer Close
Development

- Make it “user friendly”
  - Kahneman

- Narrow focus
- Move with speed
- Avoid staying ‘loose’

- Closed Network
- Frequent Monitoring
- Project Management
  - Stage-gates and Reviews

Genius is 1% inspiration and 99% perspiration
– Thomas Edison
Monitor Execution

- Fast and Not secretive
  - Speed to market essential.
- Discipline vital.
- ‘Thinkers’ –
  - go wrong staying ‘loose’
- Review Selections
  - Monthly, ¼ ly Meetings
- Six to eight people
  - Customers, Partners
- Check ROI and Risk
Try Ideas

- Open Mind
- Open Discussion
- Many Alternatives
- Quick and Cheap
- Retain Creativity
- Seek Criticism
Making Choices

- Collect Knowledge
- Record Everything
- Fail Early
- Market Differentiation
- Hard to Copy
- Core Skills
Value Proposition Analysis

- ‘Features’ to ‘Benefits’
- Parity
  - Same as Competition
- Difference
  - Better or Worse
- Focus 2/3 key Benefits
- Address customer pain
Deliver the Solution

- 3000 ideas - 1 makes it!
- Operations and Customer
  - Advance notice
  - biggest advantage.
- Know obstacles
  - Upstream
  - Downstream
- ‘Early Adopter’
  - Your Customer
Customer Driven Innovation

- Team Sport
- Looks simple
  - Hard Work
- The Epiphany
  - Time to think
- Collective Knowledge
  - The Customer’s gift

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