

Innovation Talent

innovation and leadership



What Business Are You In?

“Question:

What business are you in?” ...

“You should answer:

‘We’re in the business of continuous problem solving for our market’.”

Tuned In

Graig Stull, Phil Myers, and David Meerman
Scott



Problem Solving/Innovation

What is the difference between regular ‘problem-solving’ and innovation?

We innovate when we want a competitive advantage, otherwise, any old solution will do.



Power of Knowledge

- “...acquiring and applying knowledge will become the key competitive factor.”

Peter Drucker

- “...creating new knowledge will become the key to competitive advantage in the future.”

Nonaka and Takeuchi



Business Innovation Defined

- **We innovate to**
Gain competitive advantage by creating new knowledge that solves a problem.
- **We seek to protect this new knowledge.**
- **Innovation starts with a problem, not a solution.**



How to Create New Knowledge

- **“New” means new to the human race.**
 - **Discovery**
 - Charcoal burns hotter than wood
 - **Experimentation**
 - Build kiln technology to make charcoal
 - **Synthesis**
 - Natural Fiber and Starch = briquettes



Today's New Knowledge

- **Little 'directed discovery'**
- **Some serendipitous discovery**
- **Experimentation at enterprise level**
- **Experimentation in creating know-how**
- **Lots of Synthesis**

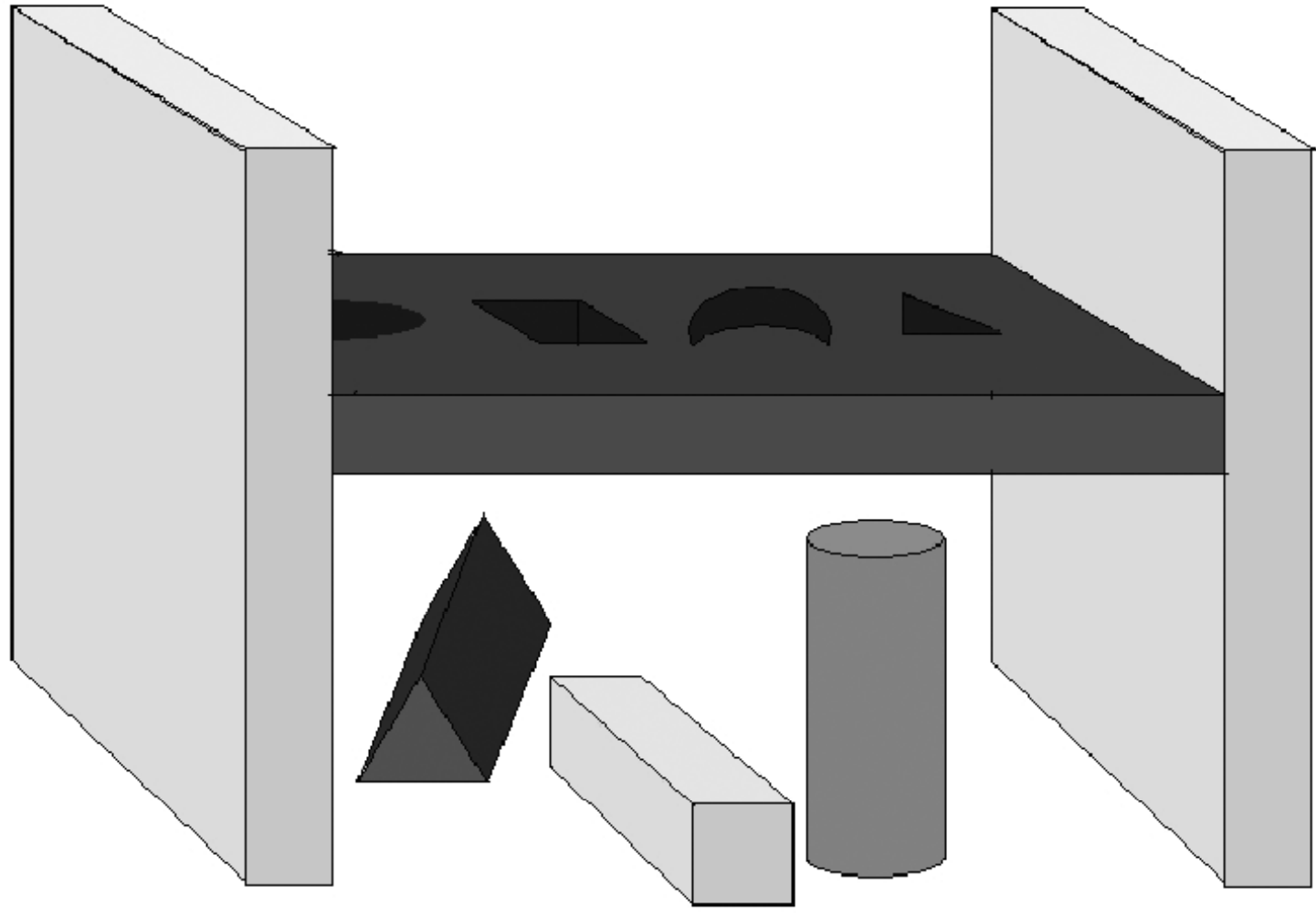


What is Synthesis

- **Combining existing knowledge to form new knowledge.**
 - **Disappointing Gift**
 - **Sinking the Pipeline**



Who Synthesizes?



2/10/2009



Two Synthesis Experiences

- **Analysis and Synthesis**
- **Flash-o-Inspiration**



C.R.A.P.

- **Compound Remote Associate Problem**

rocking/wheel/man

CHAIR



C.R.A.P. – Analysis/Insight

- **note/chain/master**
- **spoon/cloth/card**
- **reading/service/stick**
- **sage/paint/hair**



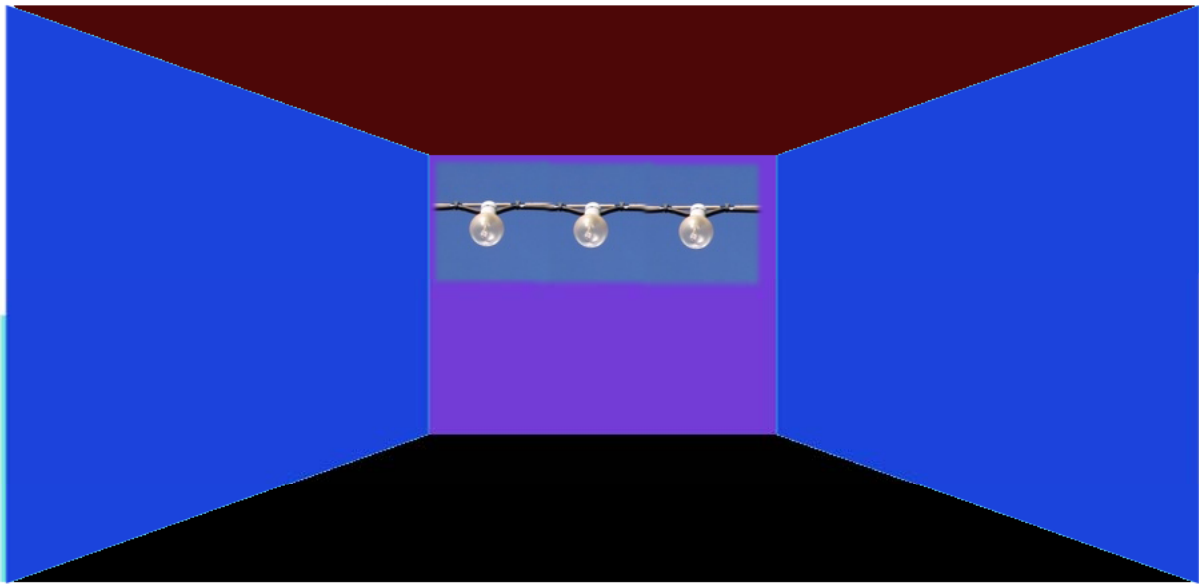
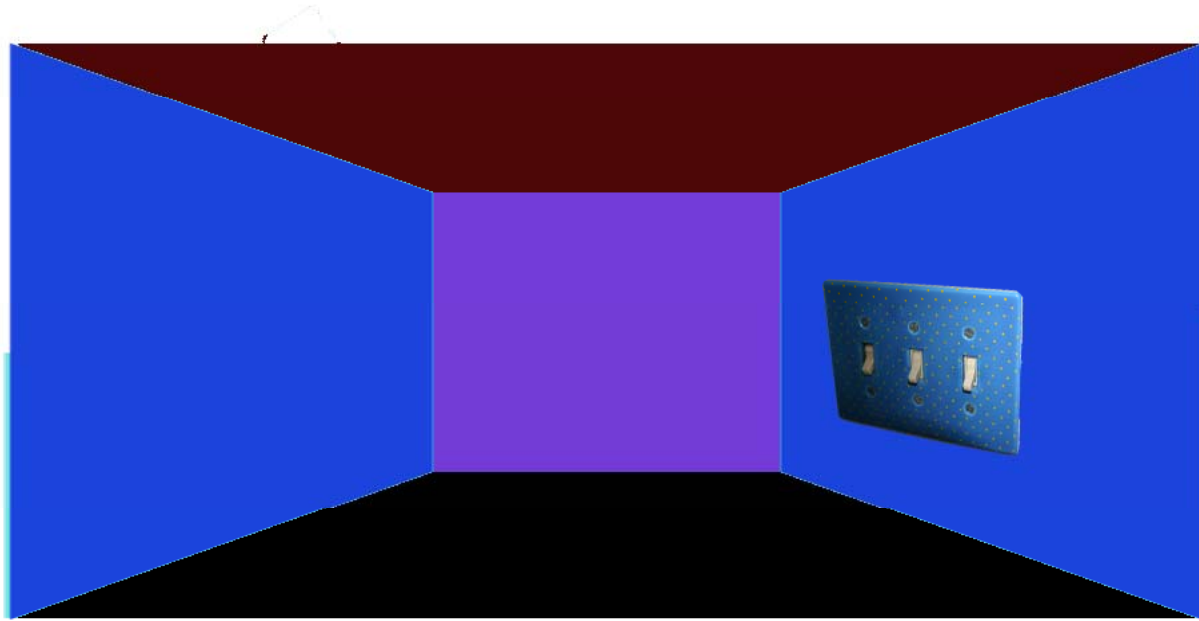
C.R.A.P. – Flash-o-Insight

- **dew/comb/bee**
- **cottage/swiss/cake**
- **night/wrist/stop**
- **cream/skate/water**



Synthesis

- **Synthesis is how humans solve most problems.**
- **We all do it.**
- **In the workplace who are the innovators – Creating new knowledge to solve problems and gain competitive advantage?**





Analysis/Synthesis

- **Determine the relevant characteristics of the problem.**
- **In organizing this information the brain files knowledge ‘patterns’.**
- **The solution is found by combining and matching these patterns with existing patterns.**
- **It happens in one brain at a time.**



Teamwork

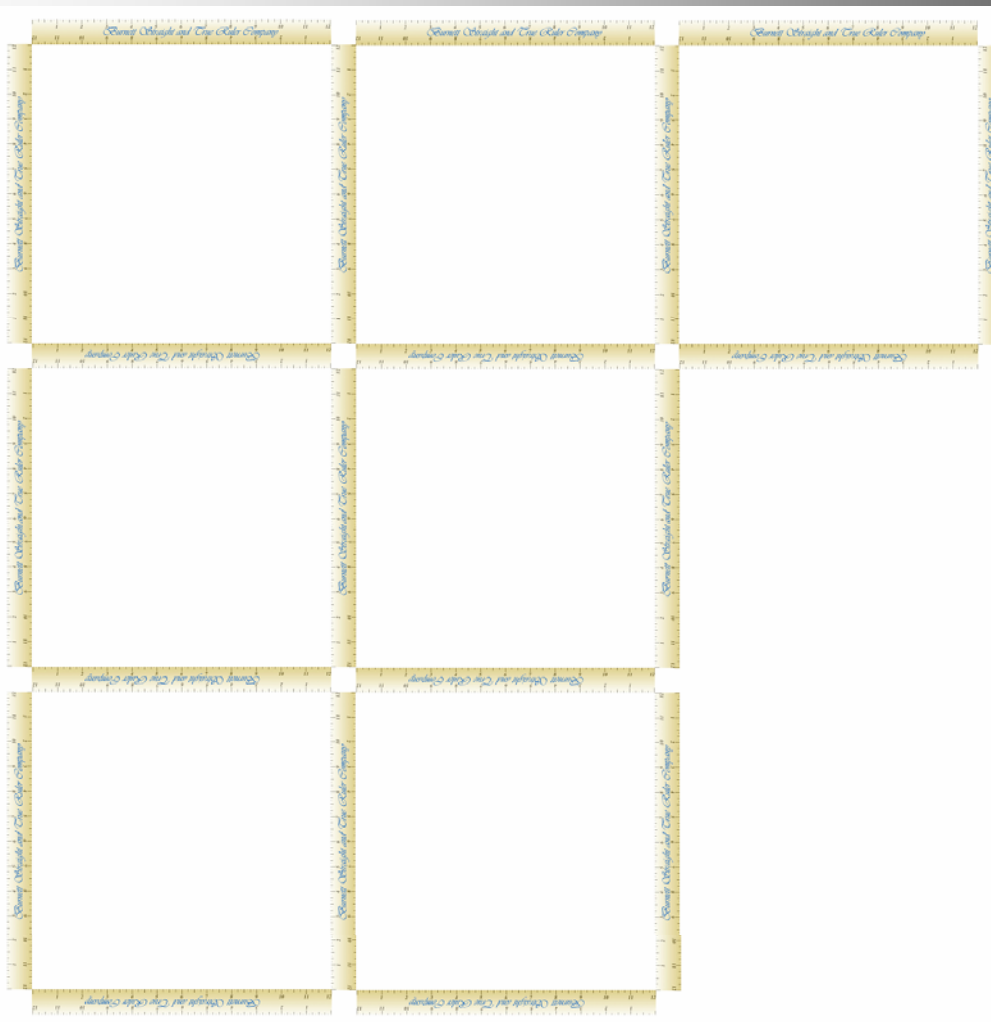
- List properties – even the most ‘obvious’ ones.
- Look for different approach.
- Think about how properties are related.



Teamwork

Reposition 3
rulers to
make just 5
equal
squares.

Cannot place
a ruler on
top of
another
ruler.



All rulers
must be used
to make
these equal
squares.

Use Analysis
and
Synthesis to
solve this
puzzle.



Teamwork

- Need a new box. Rulers cannot go where a Ruler currently is.
- Count the Rulers
- 4 Rulers needed to make a box
- Total Rulers divided by required number of boxes = 4.
 - Boxes cannot share a side.
 - Can only touch at corners.
- If adding a new box how many of the old boxes will obtain?



Teamwork

- Used Each Other's Knowledge
- Sought Relevant Facts
- Worked as Peers to Solve Problem
- Worked in Adult-to-Adult interaction.



Innovation is a form of Problem-Solving

- **We all do it.**
- **Create New Knowledge**
 - Discovery
 - Experimentation
 - Synthesis
- **In the workplace who are the innovators – Creating new knowledge to solve problems and gain competitive advantage?**



Why Do Companies Struggle with Innovation?

- **Internal Focus - not customer problem solving.**
- **Focus on delivery, delivery, delivery!**
- **Six Sigma consistency**
- **“Just do what I’ve asked you to do!”**
- **If you take a personal risk, you might be rewarded, or you will be punished.**
- **Mindset.**
- **‘Sure’ thing gets priority. ‘Sure’ is something we already know how to do.**



Why Do Companies Struggle with Innovation?

- **Hierarchical**
 - **Intelligence.**
 - **Ability.**
 - **Insight.**
 - △
 - **Best Ideas Come From People at the Top.**
- **Decision Process plays important political role.**
- **If it's Politics vs Truth, Politics wins.**
- **No Real Innovation Process.**



NUMMI Example

1982 – General Motors worst plant in terms of quality and productivity was its Fremont CA Plant

- **Double digit defects in every car**
- **Most hours needed to assemble the model**
- **Daily absenteeism topped 20%**
- **Huge drug and alcohol problem**
- **Threats of violence – supervisors armed themselves**
- **Backlog of 5000 union grievances**



NUMMI Example

- **1982 – General Motors closed the Fremont Plant and laid off all the workers. •**
- **1983-1985 –Toyota enters JV with GM**
 - **Toyota hires back 85% of the union workforce.**
 - **1985 – First year of production**
 - **Same plant**
 - **Same people**
 - **Same equipment**



NUMMI Example

1986 – General Motors best plant in terms of quality and productivity was its Fremont CA Plant

- **One defect per car.**
- **Least hours needed to assemble model.**
- **Daily absenteeism dropped to 3%.**
- **Over 90% of employees contributed an innovative idea.**
- **Over 10,000 ideas implemented.**

By 1988 NUMMI was heralded as the world-class standard.



NUMMI Example

1998 – 12 years later, still going strong...

- **Over 86% of employees contributed an innovative idea.**
- **Over 3 ideas per employee.**
- **Over 83% of ideas implemented.**



NUMMI Example

What had Toyota done?

- Reduced 100+ job descriptions to 1 – ‘team member’.
- 14 levels of management reduced to three:
 - Team Leader (a union worker earning an additional \$0.50)
 - Group Leader
 - Plant Management (HR ran the plant)
- Implemented a no lay-off policy.
- Installed small teams and job rotation.
- Employees were given responsibility and authority for product and process at their place on production line and the power and responsibility to shut down the line.



NUMMI Example

What had Toyota done?

- **NUMMI shows that hierarchy should provide support and expertise rather than a mere command structure.**

Toyota method taps into the sources of adult motivation –

- **Cause trumps task – the 5 whys**
- **Common cause is more inspiring.**
- **Meaningful work begets a desire for excellence.**
 - **Excellence means always looking for a way to improve.**
 - **Empowered people, doing meaningful work, seeking excellence in what they do, need no management!**



Problem-Solving and Leadership

- **Leadership Approaches**
 - **Autocrat – Raze the earth to win.**
 - **Appeaser- Lets stick together people.**
 - **Luminary - I'll lead you to my answer**
 - **Conductor - Delivery, My Friends, Now!**
 - **Leader & Peer - Truth, Peers, Adults**



Leader & Peer - Action

- **We interact – work and play- as adults.**
- **The work each of us does is personally meaningful, valuable, and consistent with our sense of worth.**
- **We do this meaningful work together.**
- **We earn income via ceaseless and peerless problem-solving for our market.**



Leader & Peer – Adult-to-Adult

- **Hierarchy is about responsibility, not:**
 - Ability
 - Intelligence
 - Power
 - Prestige
- **Vernacular of equals**
- **No Perks**
- **Act without power**
- **Fairness is paramount**



Leader & Peer – Meaningful Work

- **Toyota's 5 'Whys'**
- **≅ Making the world a better place**
- **Keeping it real**



Leader & Peer

- **Purpose driven – “We continuously seek competitive advantage by creating and protecting new knowledge in solving these problems.”**
- **Fiercely competitive**
- **No tolerance for mediocrity**
- **Seek truth always, act decisively upon it as a team.**
- **Find ways to try impassioned ideas**



Turnaround to Leverage Workforce

- **Australian Company**
 - **Losing money**
 - **Declining market share**
 - **Tyrant CEO**
 - **Hierarchical structure**
 - **Risk averse culture**
 - **Mounting problems**
 - **Demoralized employees**



Turnaround to Leverage Workforce

- **Australian Company**
 - New CEO – same staff.
 - Inverted & Flattened Organization Chart.
 - Musical chairs.
 - Changed the vernacular
 - Everyone is a ‘colleague’.
 - Created a sense of greater purpose.



Turnaround to Leverage Workforce

- **Australian Company**

- **Big lift in morale**
- **Musical chairs fostered teamwork.**
- **Groups of colleagues started taking risks to make changes.**
- **After 12 months back in the BLACK.**
- **After 3 years highly profitable, innovative, and recognized as one of the best performing companies in Australia.**



Good to Great

Level 5 Leader in all 11 companies-‘Group Work’

- **Paradoxical mix**
 - **personal humility**
 - **professional will**
- **Ambitious for the company not themselves**
- **Compelling modesty, self effacing and understated.**
- **Attribute success to other people and good fortune**



Good to Great

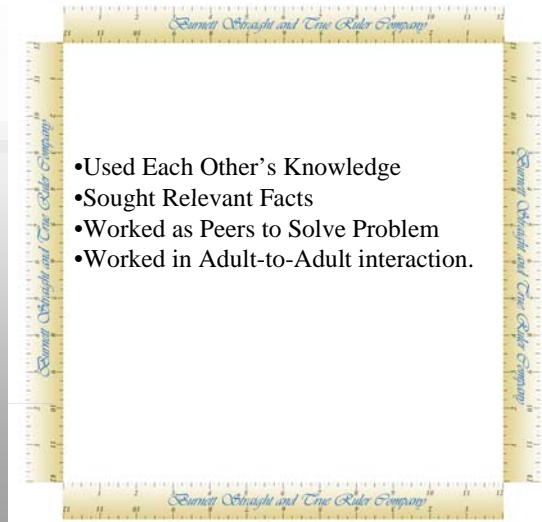
Truth

- **Lead with questions.**
- **Dialogue and Debate, not coercion.**
- **Debate vigorously in search of best answers and unify behind direction**
- **Spread no blame.**

Good to Great

Get the facts

- **Honest and diligent digging for truth often makes the solution become self-evident.**
- **Culture where people have a tremendous opportunity to be heard.**
- **Where, ultimately, the truth is heard.**



8/26/20

17



Good to Great

People

- **Spending time trying to motivate people is a wasted effort.**
- **The right people are self-motivated.**
- **The key is to not de-motivate**
- **Create framework and give people freedom to drive change within it.**
- **Manage the system, not the people.**



Harvard Business Review

- **Top “Action Logic” – The Alchemist**
- **Not seeking to build personal skills.**
- **Can speak to the hearts and minds of Kings and Commoners .**
- **Focused on collaborative inquiry.**
- **Reframing questions – devoted to the truth.**



Conclusion

- **The best run companies earn income via ceaseless and peerless problem-solving for our market.**
- **They continuously seek competitive advantage by creating and protecting new knowledge in solving these problems. They innovate.**



Conclusion

- **Nummi Assembly Plant, Australian Company, 11 Good to Great Companies, The HBR study, all point out the best run companies:**
 - **Everyone can contribute to innovation**
 - **Truth is most valuable.**
 - **Leadership of equals works.**
 - **The only motivation is self-motivation.**
 - **Meaningful work.**
 - **Common Cause Teams.**
 - **Truth will be heard.**
 - **Free to take risks.**
 - **Focus on continuous problem-solving.**



Conclusion

Look for and eliminate words that signify adult to child relationship:

Superior – Subordinate

Boss – Employee

Senior – Junior

Manager - Worker



Conclusion

Look for ways to blur the distinctions between managers and team members:

You're listening, coaching, mentoring, and gaining consensus around key initiatives.

No executive perks

Fairness is paramount



Conclusion

Ask the 5 Whys

Allow every job to really be about the betterment of humanity.

Engage in dialogue and debate around problem definition and problem solution.



Conclusion

Establish the two party suggestion box.

**You cannot submit your own suggestion.
You must get someone else to submit it,
or two other people, or more.**

**Everyone in the suggestion submission
shares credit when solution is delivered.**

Culture



Conclusion

**Cultural changes take time to be reflected
in behavior change.**

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Questions