MICHELMAN®

Innovation, Easy to Say, Hard to Do.

An Innovation Model that Works!



Agenda

- Terms
- Innovation then and now
- How to get from then to now
- Keys to success
- The Model that Works
- Parting words of advice

Terms

Innovation

 The commercialization or value capture of unique creative ideas.

Internal Innovation

• The commercialization or value capture of unique creative ideas generated within a company.

External or "Open" Innovation

 The commercialization or value capture of unique creative ideas generated from sources <u>outside</u> of a company.

Holistic Innovation

 The <u>natural</u> use of <u>either</u> internal or external innovation as a seamless mechanism to generate value.

But Why *Holistic* Innovation?

- <u>All</u> companies have <u>some</u> of the answers but <u>no</u> companies have <u>all</u> the answers!
- Change is happening faster and faster.
- It makes the "world your lab".
- Helps you to achieve truly market changing concepts.

Issues to Address

- Intellectual Property Issues—who owns what?
- Confidentiality issues
- Revenue sharing challenges
- Cultural issues.
- Trust issues

All of these can be addressed in a positive manner.

Innovation Then



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10 to 15 years ago or so....

- Innovation was inwardly focused
- Short term in thinking— <u>customer</u> centered.
- Innovation was largely iterative i.e., small tweaks to existing products
- Only "external" innovation was in directing suppliers on what a company needed and holding back on detail necessary to succeed.
- Lots of siloing i.e., Business units/groups were isolated from each other.

Innovation Now



Now

- Still a lot of customer focused research—good!
- Still a lot of iterative innovation-- okay.
- Greater top down support and encouragement on the use of holistic innovation practices— great!
- A blend of transformational, categorical, marketplace and operational innovation— critical.
- Partnerships with suppliers, customers and universities-- chancy
- Newer facilities promote collaboration

 good but...
- Tools that allow for more open and broader internal and external innovation— great!

How Does a Company Get From "Then" to "Now"?



The Evolution Begins

- Sometimes it takes a crisis in business to "stimulate" alternative thinking
 - Remember TQM (Deming)?
 - How about oil from shale?
- Many corporate leaders have recognized that their product line is "over the hill" and profits are eroding.
- They also realize that they can no longer grow sufficiently just by doing the same thing over and over and over again.
- In other words, internal innovation alone is not enough.

Keys to Success



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Key #1-- Get Us Out of the Fray!

- Create a New Technology department/new business development with a <u>long term commitment</u> from executive leadership.
 - This department does not reside in <u>any</u> business unit/group.
 - Rather it sits apart from them yet in constant <u>collaboration</u> with them.
 - This keeps them out of the everyday fray and fire fighting that commercial groups face.

But There are Challenges to Overcome!

- Cultural change
 – not an easy thing to do!
- Commercial Business Units operate in the here and now and they <u>need</u> to!
 - But they frequently seek short term solutions to long term challenges.
 - This favors a culture of <u>iterative</u> internal innovation.
- In house expertise is lacking on how to make this transformation become real.

And There Are Mistakes Along the Way

- Commercial priorities getting in the way of strategic priorities.
- Presuming the need.
- Incomplete or absent marketing data to support perceived needs.
- Lack of buy in from the business groups.
- Result:
 - Lots of resources and efforts put against ideas and product developments that no one cares about!

Key # 2--Back to the Black Board!

Key things for a company to learn to optimize innovation success:

- How to balance short term and long term needs in parallel with equal priority.
- How to <u>properly</u> technology scout.
- How to <u>properly</u> do market research.
- How to leverage external search partners.
- How to access data bases that can help in searches.
- How to network with other companies to learn how they do innovation.
- What types of innovation there are and how they fit in with business models.

Key # 3--Innovation Types*

- Transformational
- Categorical
- Marketplace
- Operational.

Key Point and Red Flag!!

Each one of these types posess a different thought process and an optimum environment/culture in which to thrive.

* Special thanks to Jane Stevenson of Korn/Ferry who educated *me* to this reality.

Key # 4--Create and Fill an Innovation Tool Box!

- External search firms
- Literature databases
- Credible marketing studies and patent searches,
- Connection with industry experts
- Internal Ideation
- University Affiliations

Key # 5--Collaboration

Assuming that a New Technology Group is created:

- Meet with each Business Group to discern their strategic i.e., long term, priorities.
- Ask them to qualify <u>and</u> quantify these.
- Then meet with <u>all</u> Business Group Sales/Marketing/Technology leaders <u>collectively</u>.
- Finally, generate a <u>corporate wide</u> prioritized <u>master</u> list.

Reality—Resources are limited. You cannot do it all!

Key# 6--Establish Innovation Metrics

Just a Sampling:

- New product numbers over the past five years (volume, revenue, income).
- Measuring new products whose concepts originated outside the company:
 - Over the past X Years
 - As a percent of revenue
 - · As total income.
- Number of ideas that came from outside that were employed in research projects.
- Number of grants awarded and amount.
- Number of university projects/alliances
- Number of joint development agreements and what percent of those become commercial.

Metrics—A Word of Caution

- Sometimes metrics can box in innovation.
- Metrics are many times rear view mirror in scope.
 - In other words don't put in place a metric that anticipates a high success rate in terms of <u>number</u> of projects that commercialize.
- External innovation driven projects are much like aggressively managed mutual funds— they have high potential but high risk as well.
- Successful companies do not pale at this prospect but rather embrace it!

Summary-- Keys to Holistic Innovation Success

- Top down support, promotion and long term commitment.
- Vision.
- Strategy.
- A recognition that this cultural shift will not happen over night—patience, patience, patience!
- Tools that allow you to engage.
- Passion to succeed.
- Putting the right people into the right innovation roles.
- Resources dedicated to longer term strategic opportunities.
- Networking

 it's all about continuous improvement!

The Model



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The Model

- Determine to be in it for the <u>long</u> run.
- Establish a group focused on longer term initiatives.
- Staff with the right innovation mindsets for <u>your</u> company.
- Provide a means of collaboration between this group and the Business Groups
- Have a marketing presence that confirms needs before pursuing solutions.
- Create, fill and <u>use</u> the tools in an Innovation Tool Box
- Establish forward looking metrics of success.

Eight Keys to Innovation Failure

- 1. Lack of a long term commitment to the process by executive leadership—give it at least five years.
- 2. Failure to define and reinforce terms used.
- 3. If you are not good at internal innovation you will not be good at external innovation.
- 4. Don't copy what a competitor is doing unless it matches your culture. Design an innovation system that works for you!
- Lack of alignment, particularly by commercial business units.
- 6. Executives unwilling to take risk and give up control.
- 7. The current best innovative people in the company may not be the best holistic innovation people.
- 8. Failure to focus on win-win scenarios for your company and your customer.

Words of Advice

- Be patient
 — changing the culture takes time.
- Define your terms.
- Recognize that what is needed is a healthy blend of external and internal innovation.
- Develop an Innovation Vision and communicate this to the entire work force <u>constantly</u>.
- Separate strategic projects from tactical projects and have the discipline not to take resources from strategic projects to tactical projects when crises occur.
- Establish metrics that work for your company.
- Get involved with networking opportunities
- Equip your toolbox.
- Reward your innovators for taking a chance!
- Keep in mind that innovation is not limited strictly to product development.

And Lastly...

Enjoy the Journey!!

MICHELMAN®

Thank you

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