More Impact Innovation eZine for April/May 2011

Six questions for unlocking the potential in your new product programs

Do you ever have doubts or concerns about whether new products your company is working on really have the potential to deliver what has been promised? This frequent concern is addressed by renowned TOC author, Eli Schragenheim, in this special edition of the More Impact eZine.

The More Impact eZine - Strategies and tools for companies committed to creating more value for their customers with new product and service innovation. Brought to you by Guided Innovation Group.

If you have friends or colleagues in your network who could benefit from More Impact please feel free to forward this issue. You can also join the conversation at our blog or sign up for the RSS feed

==
This issue of More Impact is based on an article written by renowned TOC author Eli Schragenheim and published on our Simplifying Innovation blog.

Due to the in depth nature of this article, a brief summary is in order. While TOC has provided the Critical Chain approach for the planning and execution of projects, this doesn't help determine which projects, especially new products, present the best opportunities.

Eli Schragenheim developed the following questions for evaluating new product ideas based on the constraints or limitations that they remove for potential customers as well as the constraints to selling them.

1. What is the power of the new technology?

2. What current limitation or barrier does the new technology eliminate or vastly reduce?

3. What policies, norms and behavior patterns are used today to bypass the limitation?

4. What policies, norms and behavior patterns should be used once the new technology is in place?

5. In view of the above, what changes/additions to the new technology should be introduced?

6. How to cause the change?

The rest of the article will unpack each of the six questions in more detail.

Question 1: What is the power of the new technology?

The first question is the only one from the perspective of the technology developer. Its objective is to gather the basic information for the later questions. Here we expect a clear list of the capabilities in order to be able to answer the other questions.

Question 2: What current limitation or barrier does the new technology eliminate or vastly reduce?

This is a key question. Actually it is a clear verbalization of a practical need. If there is a practical need, then there has to be a barrier for something. Now there is a solution which eliminates that barrier.

Some examples:

The technology of cellular phones eliminated the need of someone away of home to find a phone to make a call. Note that, from the user point of view, the fact that cellular phones are built upon wireless radiation is not important. The basic capability, as might have been expressed in the answer to the first question, is really using wireless connection, rather than cables. But, the value to the user is eliminating the barrier of having to find a phone, because at that time all phones were tied to a location. Another barrier is the possibility to get calls anywhere while, without that technology, it is not possible.

Another example highlights the difficulty in pinning down the main barrier – the DVD as a new technology replacing the VHS tapes. One might come up with a barrier of low picture and sound quality which is upgraded (the barrier is reduced) by the DVD technology. But, it seems that the most valuable barrier is the size. The DVD technology vastly reduced the space required for a having a library of movies at home, or even at a library. Thinking more about the limitation of weight and size of the old VHS tapes might have led the developers to be faster in introducing the portable DVD. It now faces competition with laptop computers. The alternative smaller files required to watch movies on the move with acceptable quality for the size of screen allows loading high number of movies on laptops and provide a way to watch a selection of movies while travelling.

The most important point is to force the developers to verbalize the practical need of the users at the very early stage of the idea. This is the first step in establishing the value to the user. We are not there, yet. We would need two more answers to questions to establish the possible value.

By the way, did Microsoft have a very clear idea what barrier would be eliminated or reduced by Vista?

Question 3: What policies, norms and behavior patterns are used today to bypass the limitation?

The first aspect this question deals with is to set the comparison between the current situation and the suggested future one. The previous question already defined the main limitation, but this does not mean that there are no other ways to deal with the imposed limitation. Before the time of the cellular phones public phones were in use to allow access of travelers to phone calls, and beepers made it possible to know that someone was looking for you. The ability to find a public phone made it possible to bypass the limitation of phones being tied to one place.

So, the real added value of the cellular phones is not simply making it possible to call from anywhere and getting called almost anywhere, but by making it immediate and easy. Before the age of the DVD we had the heavy and bulky (we had not thought much about it being bulky until we saw the DVD) VHS tapes, and we had to choose the movies we would like to have in our library more carefully because the shelves at home could not hold very many.

Goldratt emphasizes the need to analyze the behaviors required to bypass the limitation the new technology tackles and warns us to take real care in understanding those behaviors. In the VHS era, we had to have more discretion and we often recorded another movie replacing older ones which we assumed we would not be watching again. With the DVD it seems less important and the demand for erasable DVD was not very large. As a result, this feature did not last very long. Maybe there is a lesson to learn from that. The ability to re-record a movie was useful because we could not afford to have too many cassettes, and not in order to save some money. Once there is no problem in handling many DVDs, noting the current bags where you can easily store 25-50 DVDs, there is no need to consider re-recording. What for?

Before the era of the cellular phones, we also had to learn to behave in a certain way. People going on a long trip used to leave a list of locations, each with the appropriate phone number, with their spouses as well as with their business associates. Moreover, whenever you were in such a trip and arrived at a location with a phone, you used the opportunity to call people who might have tried to reach you.

The point about analyzing the current behaviors in view of a limitation that might be eliminated is that old behaviors do not necessarily stop once the causes for these behaviors cease to exist. It takes time to understand the new paradigm and its behavioral ramifications.

Inquiring about policies, norms and behaviors is even more relevant for organizations, because it is much more difficult to change a policy in an organization than to change the behavior of a person. This will become even more important when we examine the next question.

Question 4: What policies, norms and behavior patterns should be used once the new technology is in place?

This question closes the definition of the relevant information regarding the practical need that is addressed by the new technology and how to valuable it. Now we have the key for comparison: in the current situation, it is how you address the needs given the existence of the limitation. You probably get only a partial answer to that need and compare it to the suggested future situation where the limitation is gone or reduced. You realize that you

really get a full answer for that need. This comparison is the heart of the added value that could be gained by the new technology. If the current ways cannot really achieve anything of the need, then the potential value is as high as one recognizes the need to be. If the current ways achieve part of the need, while the new technology, plus following the new policies and behaviors achieve much more of it, then it is the difference in the answer to the need that generates the added value.

Let's demonstrate the comparison in a very fictional technology, so all our intuition is based on the current limitation. Suppose there is a new technology that could take us from any place to any place in the globe within one hour! This new technology is personal: you decide to move from New York to Hong-Kong and in an hour you are there.

<u>What limitation is vastly reduced?</u> Mostly the time it takes to move from one point on earth to another. After all, one can easily get from Hong-Kong to New-York. However, it might take 24 hours, or even more, recognizing that there are a limited number of flights a day, it takes time to go to the airport, go through check-in, passport control and security, then go through similar activities at your destination and, finally, a ride from the airport to the specific destination.

So, the real difference in the limitation is between 24 hours and one hour. Is that all?

Let's analyze our behavior patterns considering that currently it takes at least 24 hours from a decision to go from Hong-Kong to New York until arrival. Usually such a decision is taken well ahead of time due to work and family considerations, unless it is an emergency. Currently planning such a trip has to include what should be done in Hong-Kong during the time of absence, which is usually much longer than one day. At the time of planning the trip more missions to be done in NY are considered on top of the one that has caused the need to go.

Considering now the new behavior patterns when the new technology is in place, we can imagine a substantial change: one can easily and simply decide to go, do whatever is required, and come back. If the whole trip takes only few hours, no need to extend the stay and no need to plan what the other people do during your absence. After all such a trip would be the same as driving for an hour, doing what needs to be done, and driving back. No big deal.

Now we can appreciate more the practical value of such a new technology. Sorry, the author has no idea how to materialize such a miraculous technology.

But, did we consider the new policies, norms and behaviors only to make the comparison and make sure the value gained is truly substantial?

Let's continue with the fairy-tale about being able to go from Hong-Kong to New York in one hour. Let's make the reasonable assumption that one still needs a passport for such a trip. In this particular example, there is even a need for a visa. This means that in order for you to draw the full value of the new technology, you must have your passport with a valid visa in your possession at all times – much like you have your driving license with you at all times. Being that easy to go everywhere in the world without spending too much time would allow you many more business, maybe even personal, opportunities. So, it is also expected that you'd go to many more places in the world much more often than you do

today. You definitely would be able to hire people living elsewhere in the world to work for you or with you, as the direct touch with them is no longer problematic. You might also realize that similar opportunities would be open for other people all over the world and thus you might have many more visitors. All in all, we can feel that such new technology would make a huge change on your policies at work, on your norms of life and behavior. You better prepare yourself as early as possible for those changes.

An observation: the fourth question does not clearly encourage looking for the negative branches of the new technology. But, the author asserts that it should be an important part of evaluating the new set of policies and behaviors. It is certainly a part of the required comparison between the current state and the future state. For instance, moving through the world with huge speed might have medical impact on our body leading to the possibility that only healthy people could take that type of transportation. It is thus imperative that analyzing and preparing the answers for question 4 should include a full analysis of the all the negatives. The analysis of the negatives of the new technology is also valuable to the following question as the reader shall see.

After giving good answers to the first four questions two important categories of information have been achieved. One is a better idea of the value to the clients and the other is the challenge of moving from one set of policies, norms and behaviors to another set. The latter understanding is a key in the answers for the next question.

Question 5: In view of the above, what changes/additions to the new technology should be introduced?

In other words, what features should be included in the developed technology that would support the use of the policies, norms and behaviors that draw the best value from the new technology?

Question no. 5 comes back to the project planning and focuses it on what is truly necessary. Certainly the negative branches of the new technology should be addressed and a way to eliminate them should be searched.

A missing analysis of the current relatively new technology of searching the internet might have delayed us from getting the full value of it. The author strongly believes that we are NOT searching the internet enough for information that is truly valuable for us. The value that could have been drawn, mainly in business but also for personal life, from searching the internet is enormous. The problem is that the current search engines are not focused, thus providing huge numbers of "hits", most of them not relevant to the user. This should have been analyzed as a significant negative branch of the current methods. The other problem is that the search is not friendly. If the need for a search of information had been more thoroughly analyzed, then it could be that we'd already have a much more effective search. The change in behavior would have been faster and most organizations would rely much more on really good information critical to the business.

Question 6: How to cause the change?

Actually this question is targeted at what Marketing has to do, either before the launch of the new technology or afterwards. It is the duty of Marketing to accelerate the speed of change in behaviors that would enhance the use of the new technology and, by that,

enhance the perception of value of the new technology. Marketing here has a formidable challenge to wipe away the notion of "it is too early for the users to grasp the value". We did in the past have inventions that took a very long time until they were properly appreciated, For instance, the infrastructure for the Internet existed long before the mid-90s where it really started to grow. This demonstrates that inventing a new technology is still far away from having most people appreciate its value. The questions are all geared to make it happen much sooner.

Conclusions: The value of the six questions

The guidelines of the six questions are not a product and certainly not a technology. It is just a verbalization of a thinking process that could be valuable in a huge number of cases, especially by companies struggling to develop a profitable next product/technology.

There are three different values that can be obtained by using the above guidelines for new product development:

1. Having better assessment of the added value of the new product.
2. Focusing the development on the issues that truly contribute to draw the most value of the new product/technology.
3. Focusing the marketing and sales efforts to achieve the required high perception of value of the users.

The above procedure could be much enhanced by publishing actual analyses of new ideas that use the guidelines of the six questions. The author believes we need the documentation of analyses that led to stopping the idea/project as well, of course, to analyses where the project has been developed so we can realize how the development and marketing were impacted by the analysis.

Special thanks to Eli for sharing his enlightening views on identifying and unlocking the potential in any new product.

Until next time - Here's to your growth,

Mike Dalton
Managing Director and Chief Innovation Coach
Guided Innovation Group, LLC

If you'd like to find out more about our proven approach to establishing a competitive advantage in new products, you can download our free report at: *www.GuidedInnovation.com/5steps*

Or if you're need more impact from your R&D investment, you can contact us at www.GuidedInnovation.com/Breakthrough for a confidential, no-pressure discussion.

I promise that you'll never feel pushed to buy or make a decision. That's simply not the way we operate at Guided Innovation Group.

[Get Mike's New Book on Amazon](#)

Contact info:
Michael A. Dalton
Guided Innovation Group, LLC
3115 Pleasant LaneRacine, WI 53405
(262) 672-2700
Mdalton@GuidedInnovation.com

===
About the More Impact eZine and About Your Subscription
===

If you want to change your email address or unsubscribe, click the link at the very bottom.
Only takes a second or two to leave or to make changes. Thanks!

If someone has forwarded this copy to you, you can get a free subscription at:
http://www.guidedinnovation.com/eZine or subscribe to the RSS feed here

It only takes about 20 seconds and you'll also get our free report: "Are new products failing
to drive your bottom line? Five steps to rapidly improved innovation results."

We respect your email privacy. I promise you won't be flooded with a ton of email trying
to sell you something. Occasionally, we'll notify you about a new report or a program we've
developed. And, of course, you can opt out any time you choose with the unsubscribe link at
the bottom of every email.

Guided Innovation Group, LLC • 3115 Pleasant Lane, Racine, WI 53405 • 262-672-2700
www.GuidedInnovation.com

including live web site link. Please also notify me where the material will appear. The attribution should read:

"By Michael A. Dalton and Guided Innovation Group. Please visit their web site at www.guidedinnovation.com for additional articles and resources on improving new product innovation." (Make sure the link is live if placed in an eZine or in a web site.)

==
About the More Impact eZine and About Your Subscription
==

If you want to change your email address or unsubscribe, click the link at the very bottom. Only takes a second or two to leave or to make changes. Thanks!

If someone has forwarded this copy to you, you can get a free subscription at: http://www.guidedinnovation.com/eZine

It only takes about 20 seconds and you'll also get our free report: "Are new products failing to drive your bottom line? Five steps to rapidly improved innovation results."

We respect your email privacy. I promise you won't be flooded with a ton of email trying to sell you something. Occasionally, we'll notify you about a new report or a program we've developed. And, of course, you can opt out any time you choose with the unsubscribe link at the bottom of every email. We never give your email address to any other person or business at any time for any reason. Period. You have my word on it.