



Society of Concurrent Product Development

“Managing the Fuzzy Front End – Idea Capture and Management”

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Many of us are challenged in these days of condensed timelines to maintain effective visibility to the next new technology or solution that is being cooked up in the lab or engineering. Likewise, many product developers or engineers would like visibility in a safe environment to collaborate on an idea before making it more public. The goals, of course, are the same: be first to market with the latest innovation. This month's topic will investigate the ins and outs of effective idea capture and management based on a pilot conducted two years ago and the subsequent outcomes.

The fuzzy front end is best described as the formative stages of any new idea that loosely aligns with customer need(s), business strategy, and market trends. Often, many new ideas never get the attention they deserve due to "higher" priorities, a more dynamic proponent, or simple lack of visibility. Good ideas sometimes never get the proper "marketing" input or benefit from broader exposure which can be attributed to many factors. That is why we strived to identify a platform that would allow us to capture, collaborate, share, and approve ideas in a more timely fashion. Our common goal was to provide more visibility to ideas and get them proper resourcing, if warranted, to increase the velocity of potential solutions through our New Product Introduction (NPI) system.

Initially, we agreed that the platform needed to be e-enabled and user-friendly. We desired to have a platform that was electronically agile due to the far-flung nature of our business (for routing, approval, collaborating, etc.) and a self-enabling technology that would be easy to use (minimal training, intuitive, etc.). We found a commercially available Web-enabled solution that not only met, but far exceeded, our needs and expectations. This turned out to be the Innovator™ tool marketed by MindMatters Technologies, Inc. (Please refer to the seminar announcement in this month's News & Notes).

Briefly, the attributes of the Innovator™ tool and interaction with MindMatters Technologies were integral to the success of our program. The security features and Web-based hosting on their server were features that overcame internal IT constraints. Real-time performance and reporting improvements were another benefit that facilitated our approval process, as we made iterative changes over a three month period. The foundation of our success was rooted in the intuitive nature of their user interface, as many users could easily work their way through idea entry and routing. The Innovator™ tool became the enabler of our process due to the unobtrusive nature of its architecture; the software was not our issue. Making the process work became our biggest challenge.

The process of idea capture and management can be broken into three distinct sub-phases:

1. idea entry and collaboration
2. submission and approval

3. successful hand-off to the NPI process , as shown in the diagram below;

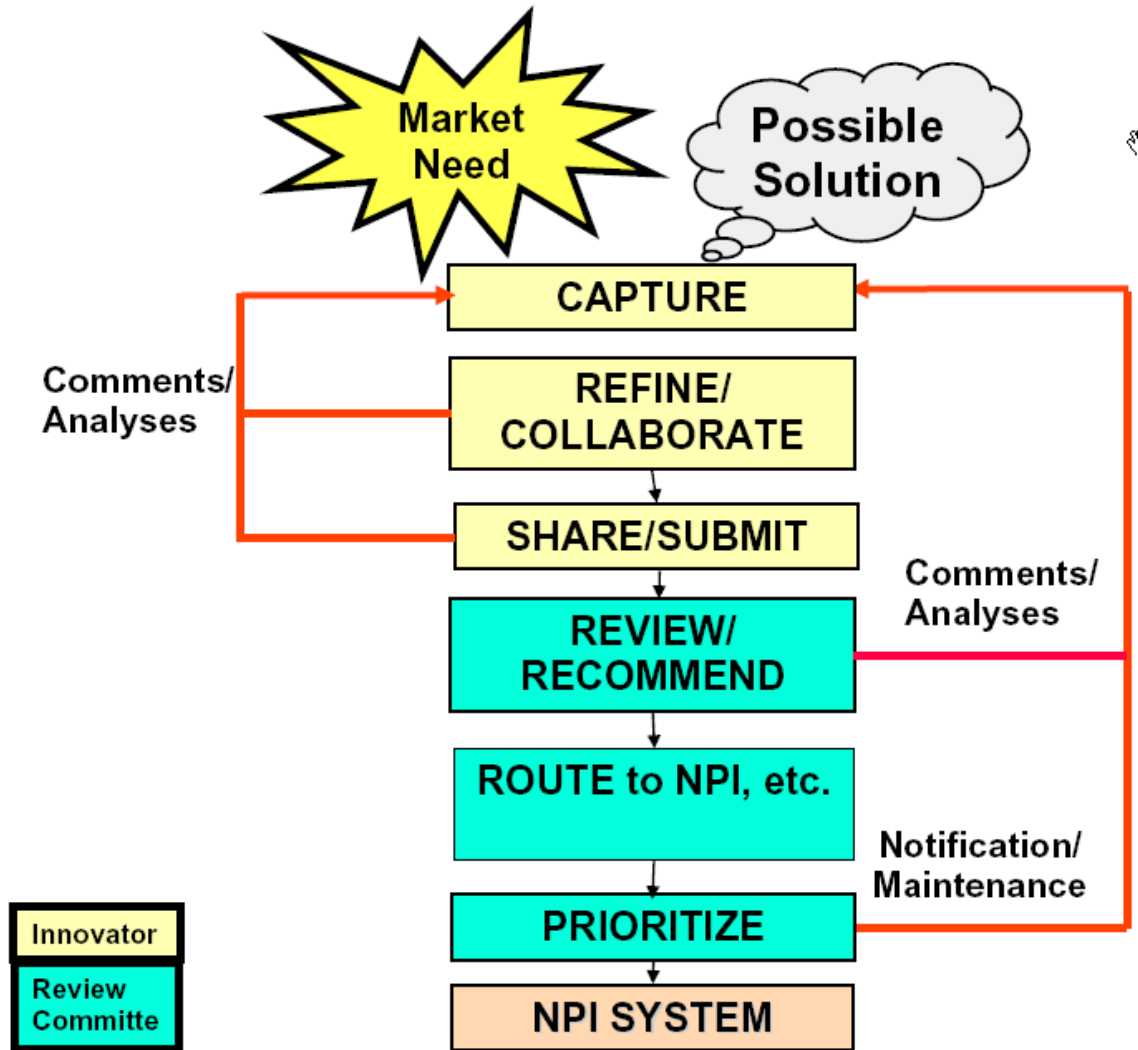


Diagram 1

The diagram gives a simplistic view of how an idea flows once it is captured. Each of the sub-phases will be examined in more detail, including the lessons learned as we refined the entire process.

Idea Entry and Collaboration: Once an idea has been captured, i.e.; entered into the electronic system, there are four courses of action that the submitter can take. They are:

1. route the idea to other developers, co-innovators, marketers, engineers, etc. to get “expert” opinions and more input.
2. link the idea to a unique bar code to use as labels for “reduction to practice” examples for future IP review.
3. save the idea in their “private” electronic file cabinet for future editing prior to submission.
4. submit the idea directly to the Review Committee for immediate action.

As part of the initial training, each potential submitter was given the assignment of providing a personal profile that reflected their work history and contributions as well as their personal hobbies. This became the pool of “experts” that other submitters could choose to share their ideas with prior to submission. Collaboration became a centerpiece of this early activity, as each submitter was anxious to get more viewpoints on the validity, strengths, and weaknesses of their particular ideas. Only chosen co-innovators or “experts” were capable of viewing ideas in this stage; the Review Committee had no visibility to the content, only the total number of ideas. Opinions as to the proprietary nature of a given idea were also sought; any proprietary ideas were placed on parallel paths – NPI and IP.

Private collaboration enabled the rapid maturation of some ideas off the grid, but in a fun, safe space. Co-innovators or experts are notified of ideas needing their review once they have logged in to the Innovator home page and can jump directly to the subject idea with a single click. Once they have reviewed and commented, a link to their response is posted on the submitter’s home page. Since the system is electronic, every touch and document is logged as Innovation Activity for every idea submitted. Everyone was encouraged to take as much time as they felt necessary before making a formal submission. This rapid exchange of ideas and reviews netted an overwhelming 54 idea submissions for review in a three month period.

Submission and Approval: The submitter chose when they wanted to formally push the “Submit” button and make an idea visible to the Review Committee. The Review Committee was initially composed of a small contingent of our Operating Committee, which immediately ran afoul of the process, as conflicting calendars made it impossible for them to get together on a regular basis. In other words, submitted ideas were not being reviewed in a timely manner even though the process was entirely electronic. A new committee was formed that had one permanent Operating Committee member and several content experts, managers, and engineers. There were three criteria for selection to this committee, 1. breadth of experience (not just years of service), 2. demonstrated competence in the use of e-tools, 3. demonstrated good collaborative skills on previous NPI teams. The final Review Committee totaled 8 dedicated individuals.

Submitted ideas were completely visible to the committee, including all supporting comments from other selected co-innovators or experts. The background documents were reviewed in total before the idea is “scored” on the merits of an R-W-W (Real, Win, Worth) question set created for this purpose. The committee also had a menu of choices from which to choose: 1. Accept the Idea (and route to the NPI system), 2. Put on Hold (pending more information), 3. Reject the Idea (resourcing not justified at this time), or 4. Idea Routed to Department X. In this fashion, the submitter receives notification of the “Status” of their idea and what future actions need to be taken on their behalf. This part of the process was able to qualify 18 ideas for submission to the NPI system; we successfully captured and approved 33% of submitted ideas for scale up in a total of 4 months!

Epilogue: one idea in particular has become a very successful platform for future growth. The concept has been patented and the market acceptance and demand keeps growing. Spin off products and line extensions are coming as the result of feedback from our customers. Not a bad conclusion into managing the fuzzy front end.

In the meantime, enjoy and stay concurrent.

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