

Rapid Contextual Innovation

How to Start And Run A Customer-Value Driven New Product Development Program

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Paul Sherman
ShermanUX



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About This Document

This document describes how an organization can build a program of work to innovate through intensive, focused efforts to spot opportunities for new products and services, rapid prototyping and validation of product concepts and designs, and quick introduction of new products and services. This program is referred to in this document as the “Rapid Contextual Innovation” program, or RCI.

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Introduction

The primary audience for this document is contributor- and management-level change agents who wish to advocate for and lead efforts to jump-start a program of innovation within their organizations. Another important audience is the people who are able to drive change in their organizations and have the authority to support those changes with allocation of resources. Typically, these are general managers as well as directors and vice-presidents of product management, marketing and engineering.

In this document the approach used to spot opportunities in a customer-focused fashion is referred to as the “3-3-1” process model. This name comes from part of the model’s process: to successfully spot and validate opportunities, the model requires 3 people from different disciplines, putting in full-time effort for three weeks to document a single solid opportunity or small cluster of related opportunities. At the core of this process is a strong focus on extensive interaction with potential customers – i.e., the people in your target markets with business problems that need solving.

The 3-3-1 approach draws from several different sources. The sources relied on most heavily are listed in the References and Reading List section of this document.

1. A Model for Rapid Contextual Innovation

1.1 RCI and 3-3-1 Process Model

The RCI program and 3-3-1 process model start from the premise that ***the best way to discover potential customers’ wants and needs to spend time with them at their places of business, watching what they do and how they do it.*** It explicitly rejects the idea that new product and service ideas can come solely from market-level quantitative surveys of large groups of respondents, or from groups of technologists in meeting rooms having little or no contact with people in the target market.

It’s true that some organizations may “get lucky” by launching products based on survey data, an engineer’s creation of new technology, or an executive’s hunch. However, according to the research literature the average success rate for all new products and services ranges from 5% to 10%. (Source: Cooper, “Winning at New Products.”) Cooper defines new product success as a product or service with a payback period of three years or less.) This means that even in the most optimistic scenarios, only about 1 out of 10 new product initiatives succeed.

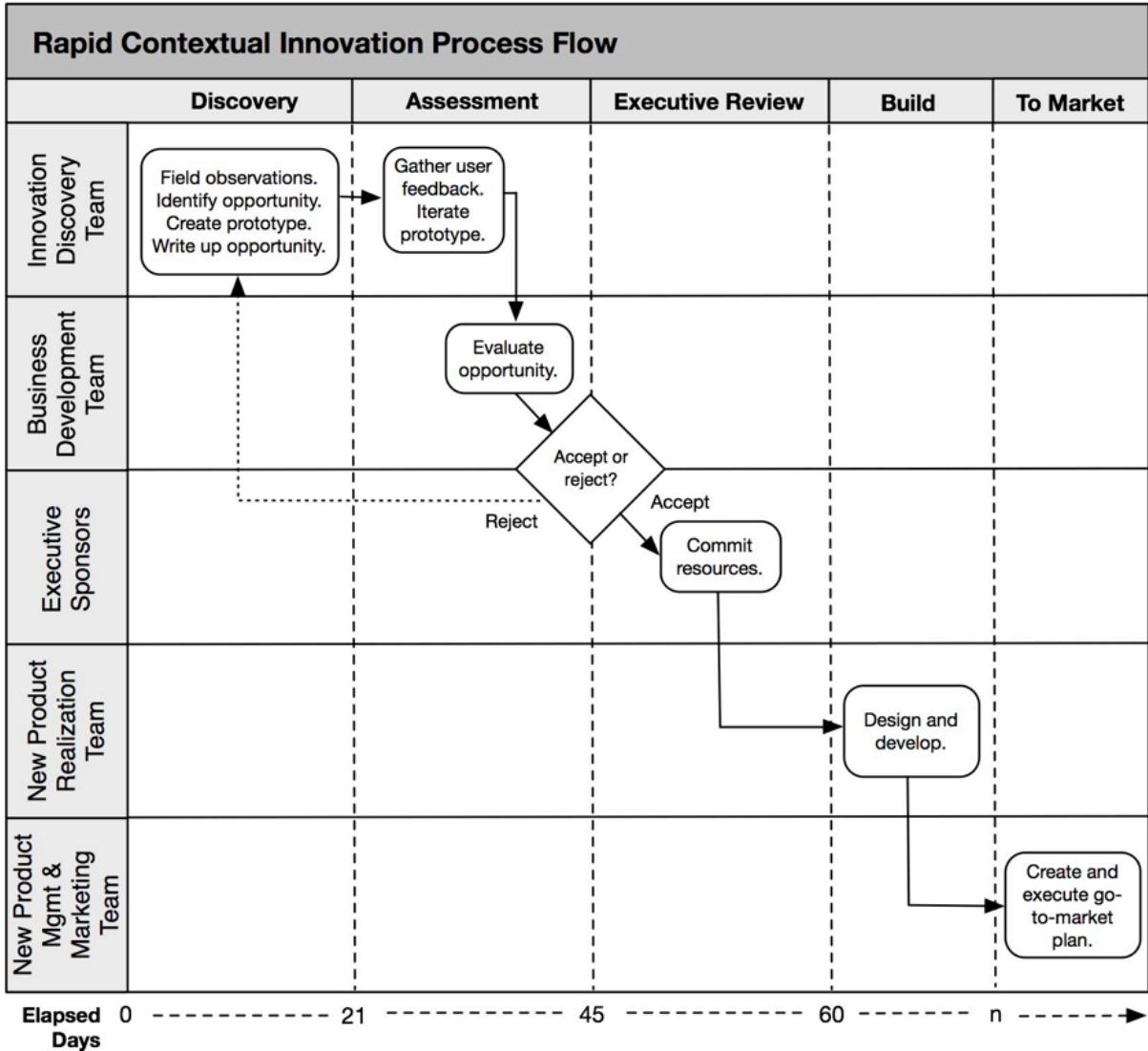
However, their chances of success increase greatly when organizations focus on identifying customer problems through direct observation and interaction, and validating the designs that purport to solve the problems through prototyping and gathering feedback from potential customers.

The 3-3-1 process described here has several defining characteristics. The most important of these are as follows:

- ***It is focused on the customers and their needs:*** The teams are charged with observing and discovering *customers' actual* problems, and figuring out how to solve them.
- ***It is closed-ended:*** The innovation team forms and works within a 2 – 4 week period. Project constraints are identified and adhered to through close management of each innovation project.
- ***It is fast:*** One of the most consistent findings in the innovation literature is that organizations that move fast gain an advantage over competitors. The RCI process is designed to provide the business with viable product and service concepts within 75 days from research and opportunity-spotting to project approval and development greenlighting.
- ***It removes distractions:*** It removes the innovation team from the regular work environment for the duration of the project, and immerses them in the potential customers' world.
- ***It is facilitated:*** The research team is assigned a facilitator who helps them narrow (or broaden, if necessary) their focus, channel their creativity, and ensure that the team produces high-quality deliverables.
- ***It is measurable and improvable:*** Innovation team contributors can be evaluated on the quality of the team's innovation as well as their ability to work on a small team. Tracking these metrics will allow us to identify the most effective innovators in an organization. This helps put the right contributors in the right roles.

The figure below provides a visual overview of the 3-3-1 process and subsequent phases critical to new product and service realization. These phases are described in greater detail below.

Figure 1. Process flow for rapid contextual innovation



1.2 Discovery: Field research and opportunity spotting

In this first phase, the business decides that an innovation initiative is needed, and sponsors the formation of an innovation discovery team. The innovation team is tasked with going into the field, interacting with customers or prospects, observing their work and processes, uncovering opportunities, and documenting their findings.

Ideally, in the 3-3-1 process a group of 3 people – representing user research, product management, and development – comprise the innovation team. Ideally, members of the innovation team will be drawn from staff on hand. Because team members will be removed from their regular working environment for 2 up to 4 weeks, these contributors will need to be removed from project plans or capacity calculations.

Removing team members from capacity and freeing them from their typical work environment is a critical success factor. Experiences at other organizations as well as research literature indicates that it is exceedingly difficult – if not impossible – to do “part-time” innovation. It’s just too much to ask that contributors concentrate on spotting opportunities and developing high-quality product or service concepts while still performing their regular job functions. Opportunity-spotting requires team members to maintain focus and think deeply about what they see in the field. The various interruptions and issues associated with regular work responsibilities prevent innovation team members from attaining the required focus and depth of analysis.

A user research contributor is included on the innovation team because the opportunity-spotting activities call for contributors who are trained in field-based observational research methods. For contributors unfamiliar with observational research methods, it is far too easy to lead participants in the target market to a particular answer or behavior, or focus too narrowly on what target customers say instead of observing what they actually do.

To further ensure that the innovation team remains focused on spotting valid opportunities a facilitator should be assigned to each team. This facilitator shall be knowledgeable in the theories and practice of innovation, as well as experienced in conducting field-based observational research.

The facilitator will be responsible for training discovery teams in the basics of innovation, observational research, and opportunity-spotting, and for guiding the team through the analysis and production of deliverables.

The innovation team’s work culminates in a short but detailed write-up that describes the opportunities they uncovered as well as the risks and rewards associated with each opportunity. The innovation team will also be responsible for pitching the most promising opportunities to the business development team. We envision that the innovation team will make a formal presentation of deliverables to the business development team.

Depending on the innovation team member’s skills and available time, the team might elect to create a low-fidelity mockup or storyboard of their proposed product or service that demonstrates how customers will use it to solve a particular problem. Should the business development team approve the opportunity, the mockups and storyboards can serve as the basis for a prototype that can be later tested with target customers.

1.3 Assessment: Evaluating the research team’s deliverables

The business development team’s role in the RCI program is to evaluate the quality and feasibility of the innovation team’s findings. The business development team’s main responsibility is to make initial go / no-go decisions, and flesh out the business case for opportunities that pass this first level screening. It is important to note that in our model the business development team cannot devote resources to developing an opportunity; this is seen as the executive sponsors’ role. The business development team can only recommend (or not recommend) that the executive sponsor review the business case for the proposed product or service.

The business development team should represent both business interests and technology constraints. We envision the business development team as being comprised of senior

managers and directors from the R&D and product management groups. It is likely that the organization's software architects and principal developers will consult to or serve on the business development team as well. A key point is that during the assessment phase, opportunities are assessed both from the business and technology perspectives, not just one or the other.

When the innovation team and team facilitator present their findings, the business development team must decide whether to accept the opportunity advocated for by the innovation team, or reject it. If an opportunity is rejected, the innovation team may be offered the opportunity to rework it, at the discretion of the business development team. If the business development team decides to accept an opportunity, team members will begin work with the discovery team to further hone the deliverables and write a formal business case in preparation for review by the sponsoring executive.

1.4 Executive review: greenlighting and funding

The next step in the process is the executive review. This phase is straightforward as well. During this phase, a small group consisting of innovation team and business development team members make a formal pitch for funding to the RCI program's executive sponsor. The executive sponsor decides whether to approve or reject a proposal. Like the business development team, the executive sponsors can also offer the team the chance to rework a pitch, or they can reject a pitch outright.

A key point of this portion of the process is that in order to actually move to the product realization phase, the executive reviewer must have the authority to allocate money and headcount to a particular initiative at any time, *without* having to go back to their superior for incremental funding.

The RCI process seeks to vest resourcing authority with the executive reviewer for two reasons: first, speed to market is a competitive advantage. Nearly every expert in this area agrees that the most successful organizations are those that can quickly approve, resource, and develop a viable opportunity.

The second reason is because it leaves the specifics of new opportunity development to the people who are closest to the customer base. This does not mean that executives at the highest level should have no authority or visibility into the development of new opportunities. Top executives have a right and a responsibility to keep tabs on resource allocation within their organizations. What this process advocates for is that top executives provide overall financial responsibility and oversight of new opportunity development.

1.5 New product realization team: Designing, validating and building

Obviously, no product organization can deliver on new product and service opportunities without a team that can execute. Product organizations should prepare for implementing new products and services by either designating in-house design, development, and QA resources as new product and service specialists, or by arranging for contract design, development and QA resources in advance. These teams should also support the early-

stage prototyping and concept testing activities that are critical to early assessment of new product or service concepts.

1.6 Going to market

The product management and marketing teams will be responsible for charting the product or service direction – that is, target market, price, positioning, and feature set – and implementing the go-to-market strategy as the product moves out of the development phase and into deployment.

2. Roles, Resources and Artifacts

Because this initiative is basically a greenfield effort, your product organizations will need a number of resources besides dollars and heads. Below are the roles, resources, and artifacts needed to start and maintain an innovation program within a single product organization.

Table 1. Roles, resources, and artifacts needed for innovation.

	Innovation Project and Program Management		Innovation Discovery Team	Business Development Team	Executive Evaluator
Role (Dedicated; Non-dedicated; Variable)	Innovation program manager (Variable; depends on org's amount of innovation work)	Innovation team facilitator (Variable)	Innovation team members (Non-dedicated)	First-level evaluators (Non-dedicated)	Final approver (Non-dedicated)
Responsible for:	Managing the overall program: scheduling teams & reviews; maintaining the opportunity portfolio; liaising with innovation program managers in other orgs.	Guiding innovation teams during research, analysis, and documentation; assisting teams during opportunity write-up and delivery.	Writing up and presenting the opportunities to the business development teams.	Evaluating opportunities; establishing the business case for viable opportunities.	Making final go / no-go determination; assigning financial & personnel resources to approved initiatives.
What they need to succeed in this role:	Authority to schedule innovation teams and opportunity reviews.	Time to work with innovation teams before, during, and after research.	Dedicated block of time to conduct research, analysis and write-up.	Time to devote to the evaluation and business case creation processes.	Actionable, accurate information. Ability to fund initiatives at their discretion.

Artifacts & deliverables produced:	1. Program evaluation metrics including individual and team ratings. 2. Opportunity portfolio, including disposition for each opportunity.	Description and rating of innovation team performance.	Research report of potential customers' problems and pains; a description of how Sage could address them. (Optional: prototypes, mockups, etc.)	1. Initial go / no-go / more worked needed decision. 2. A formal business case for viable opportunities.	A formal signoff indicating that the opportunity should be assigned financial and personnel resources.
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3. References and Reading List

If you are reading this document onscreen, you may use the hyperlinks below to access the materials (or a link to purchase the materials).

Table 2. Innovation readings

Innovation Resources	Source and Link
Books	
Blue Ocean Strategy: How To Create Uncontested Market Space and Make the Competition Irrelevant	W. Chan Kim and Renee Mauborgne - http://www.blueoceanstrategy.com/
Mastering the Dynamics of Innovation	James M. Utterback – Link to Amazon.com listing
Seeing What's Next: Using The Theories of Innovation To Predict Industry Change	Clayton M. Christensen, Scott D. Anthony and Erik A. Roth – http://www.seeingwhatsnext.com/
The Innovator's Dilemma: The Revolutionary Book that Will Change the Way You Do Business	Clayton M. Christensen – link to Amazon.com listing
The Innovator's Solution: Creating and Sustaining Successful Growth	Clayton M. Christensen and Michael E. Raynor – link to Amazon.com listing
The Ten Faces of Innovation: IDEO's Strategies for Defeating the Devil's Advocate and Driving Creativity Throughout Your Organization	Tom Kelley – link to Amazon.com listing
Winning at New Products: Accelerating the Process From Idea To Launch	Robert G. Cooper – link to Amazon.com listing
Articles	
Camp Samsung	BusinessWeek, July 3 2006, page 46–48 http://www.bloomberg.com/bw/stories/2006-07-02/camp-samsung
Contextual Invention: A Multi-Disciplinary Approach to Develop Business Opportunities and Design Solutions	HP.com Technical Reports - http://www.hpl.hp.com/techreports/2005/HPL-2005-18.pdf
Going Home With the Customers	Newsweek, May 25 2005 http://www.newsweek.com/going-home-customers-119233
Innovation and Organizational Learning Pathways and Pitfalls	http://www.clemmergroup.com/articles/innovation-organizational-learning-pathways-pitfalls-part-1/
The Art of Innovation	Signal Without Noise: by Guy Kawasaki - http://blog.guykawasaki.com/2006/01/the_art_of_inno.html
The Hidden Traps In Decision-Making	Harvard Business Review, January 2006 https://hbr.org/2006/01/the-hidden-traps-in-decision-making

