

The art of rapid, hands-on execution innovation

Anssi Tuulenmäki and Liisa Välikangas

Anssi Tuulenmäki is a Chief Innovation Activist at MIND (www.mindspace.fi), a program to develop strategic innovation capability at Aalto University School of Science and Technology (anssi.tuulenmaki@aalto.fi) in Helsinki. Liisa Välikangas is a Professor of innovation management at Aalto University School of Economics (liisa.valikangas@aalto.fi). Aalto University was formed by the recent merger of the Helsinki School of Economics, University of Technology and University of Art and Design.

In order to increase the likelihood of achieving the kind of breakthrough innovation that develops into successful new business models, our recent field experience indicates that companies should scrap the comforting safety of new product planning and stage-gate schedules. Instead, company leaders should learn to practice high-speed innovation experimentation, from ideation to operational execution, in order to offer products and services with unique customer benefits. We suggest that companies start this process by conducting experiments that promote a radical rethinking of a business opportunity and then continue experimenting as the original idea evolves into a product. We call our model “rapid execution innovation” (see Exhibit 1 “Planning-driven development vs rapid execution innovation”).

Much of the previous research on innovation focuses on the initial ideation phase, the so-called fuzzy front end. But after brainstorming an idea to match a business opportunity, a business then needs to innovate the execution of the idea. For example, hundreds of companies throughout the world are in the business of offering inexpensive furniture, but none of them have executed the idea more innovatively than IKEA, which pioneered a unique system for designing, making, selling and delivering its products. The intended outcome of our approach – that is, a new business model with a number of features that give it significant marketplace advantage – only emerges after a learning process of iterative experimentation. The very purpose, and value, of instant experimentation is to actually create the business system in the course of experimentation. The final business model may well be one that no one foresaw at the outset,[1] which makes our approach distinctly different from other product development systems, such as stage-gate,[2] flexible development models[3,4] or flash development.[5] In our experience, though seemingly simple, such an experimental approach to business model innovation is rarely practiced even in businesses dedicated to innovation.

Innovate to execute

Everyone knows there is a long and tortuous path between an idea and its execution, but how to be the first to traverse that trail is a matter of some dispute. Some firms start with a business plan and then put growth ideas through a number of “stage-gates” to test them. We argue that most truly novel ideas, the ones with potential to become distinctive business models, are not plannable or executable at the outset. To become viable businesses they need to be tested and developed through a process of execution innovation. Execution innovation flows from experiments that seek to innovate how to implement the conceptual business opportunity. For example, a business opportunity such as “selling inexpensive furniture” requires many execution innovations – such as flat packaging the furniture to save transportation costs and designing products that are easy to assemble by customers – features that are not derivatives of the original idea. In fact, this implementation innovation requires exceptional creativity. That is why the actual business opportunity – the

Exhibit 1 Planning-driven development vs execution innovation

<i>Planning-driven business development</i>	<i>Execution innovation development</i>
Exploit or discover the existing opportunity New ideas go through a pre-planned business development process. The idea and its targeted outcome are developed early on and stage-gated. The ideas champions are not responsible for execution details. Market introduction and channel delivery systems are not integral to development	Create the opportunity Separate innovation process is not necessarily needed. Execution innovation process starts when possible outcomes are recognized. Execution experiments are needed to grasp the opportunity
Discovering the initial idea is delegated to a creative team. Creativity and implementation are accomplished by different departments First, think out of the box. Doing comes after thinking Plan to avoid mistakes and rework. Planning is the major learning vehicle	Creative people are needed in creating initial ideas and execution ideas. Execution innovation involves the majority of the organization Act out of the box – and new thinking will also occur Prepare to be wrong; rapid and cheap mistakes and experiments, i.e. things that are not working well are the major learning vehicle
Commit to an experiment or test facility	Commit to experimenting, radical incrementalism
Creativity serves strategy. Well-planned Implementation is the goal	Use potential opportunities to inform strategy. Practical experiments show whether the fundamental assumptions about radical innovation are correct
Emulate competitors	Implementation invented here. Unique practices, invented while implementing ideas in our own context, provide competitive advantage
Best practices, developed in other contexts, stimulate competitiveness	

combination of identifying a value creation opportunity and innovating a supply chain to deliver it – can best be developed through the process of execution innovation.

Beyond the opportunity idea

Business opportunity ideas typically need to be accompanied by many additional execution innovations in order to achieve any business benefit. For example, the fuzzy front end idea of selling discounted airplane tickets required a number of execution innovations before it became a profitable business. For Southwest Airlines, the process innovations included how to save time on the ground to service four routes with three aircraft. Exhibit 2, “Key execution innovations that enabled ‘fuzzy’ business opportunities,” offers a number of examples of creativity that moved beyond the identification of the opportunity. Such innovation cannot be outsourced to design consultants unfamiliar with a company’s customers. For a product or a service to be successful, the operating model will likely require as much or more original thinking as did the identification of the business opportunity. In our innovation model, the execution phase melds creativity and learning through continuous experimentation.

Consider Kaipaus, a Finnish startup that designs jewelry and other items that can preserve a particular personal fragrance for many weeks using nanotechnology. The idea that there might be a market for a unique fragrant jewelry product line occurred to the founder, who frequently traveled on business, after she noticed that when her young daughter was left at home she was comforted by a scarf that “smelled like Mother.” Kaipaus is a company that moves rapidly to experiment. Though test marketing with affluent women demonstrated interest in customized fragrances, the jewelry was not a success with traditional department store retailers. As an experiment, the firm opened a pop-up store in a high-end shopping district in Helsinki shortly before last Christmas. To make the experiment fast and inexpensive, the store furniture was created from cardboard boxes that were wrapped in fabric to look like giant gifts, a festive touch! Based on its commitment to constant

Exhibit 2 Key execution innovations that enabled “fuzzy” business opportunities

<i>Business opportunity</i>	<i>Execution innovations</i>
Selling cheap furniture	Flat packing the furniture to save transportation costs. Build stores outside city centers. Customers pick up the goods, transfer them to their homes by their own cars and assemble them at home using the tool included in the package (IKEA)
Offering new interior design concepts	Showcase new interior design ideas in model rooms (kitchens, living rooms, offices, etc.) in the store that customers can duplicate in their home using inexpensive products (IKEA)
Selling cheap airline fares	Flying the routes of four planes with just three aircraft by minimizing the time on the ground. This is done by enlisting the flight crew to help with ground chores. Planes fly back-and-forth between two airports, avoiding central hubs and waiting for connecting flights. Eliminating food, paper tickets and allocated seating (Southwest Airlines)
Lending money to the world's poorest people	Loaning very small sums of money to women-owned businesses. Obtaining community backing for the loan (Grameen Bank)
Offering cheap, fashionable clothing	Continuously experimenting with market acceptance by producing small series of new designs. Minimizing the time it takes to ship the clothing to the store by manufacturing in nearby factories. Sending clothes to the store already on hangers (Zara)
Offering reverse auction	Selling luxury products like expensive cars via an auction in which bidding costs one euro and the cheapest bid wins (Bidster.com)

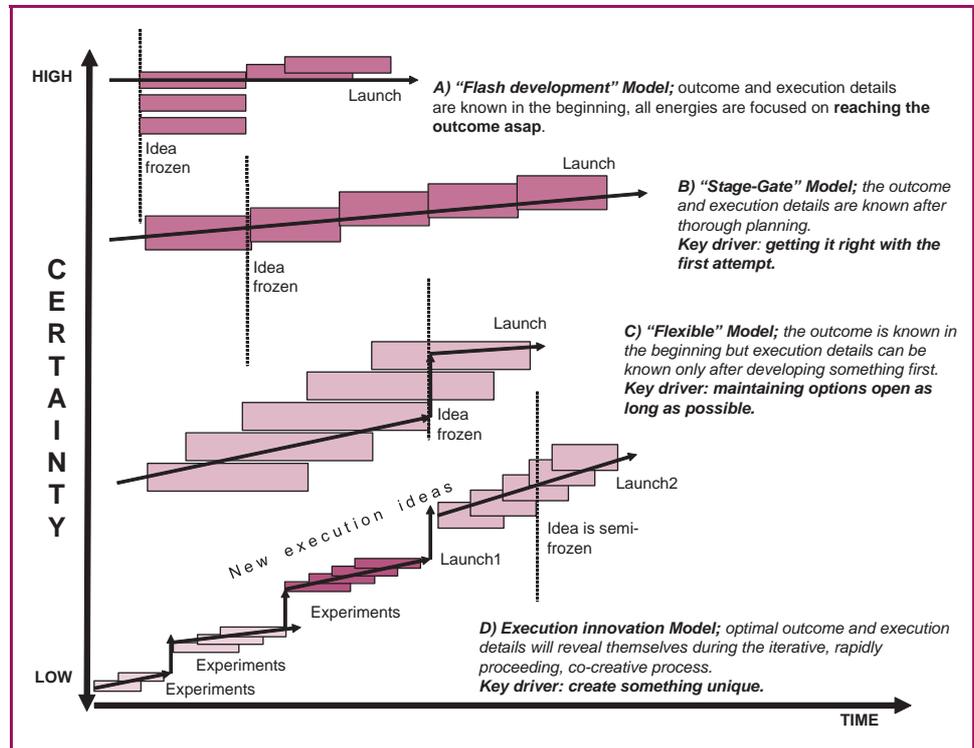
experimentation, Kaipaus continues to innovate to perfect its unusual business concept at design expos in Shanghai and Japan this year.

For a mature example of a business that practiced execution experimentation, consider U-Haul, a US moving firm that started in 1945 with only \$5,000 of initial funding.[6] The opportunity: fill the need for nationwide do-it-yourself moving equipment that could be utilized on a one-way basis. However, success required many execution ideas and continuous experimentation. Leonard Shoen, U-Haul's founder, promoted the firm's brand by painting vehicles bright orange and lettering billboard-sized ads on the trailers and trucks. Moreover, “he convinced friends, family members, and customers . . . to individually make down payments on trucks and then lend him the use of the trucks” thus cutting his borrowing costs.[7] Further, “he contracted with service station outlets . . . to merchandise trailer rentals, eliminating the need for buying space in cities across the country.”[8] These and numerous other execution ideas essentially created the opportunity, which led to the birth of a new industry.

Alternative innovation models

The stage-gate model. Among the most well-known approaches for managing new initiatives, the one commonly used in product development, is the stage-gate model or “waterfall” type of models.[9] (See Exhibit 3): “Differences between the execution innovation model and other development modes.”) The original purpose of the model was to increase the odds of success for a new product or service by providing formalized, sequential steps and formal evaluation “gates” at the critical decision points along its development. All the necessary creativity and a basic assessment of customer needs is assumed to exist at the

Exhibit 3 Differences between the execution innovation model and other development modes



outset of the process. So the critical task is to collect the relevant information, identify the key issues, and develop a well-thought-out business concept and a process plan. In order to avoid any unnecessary rework and to speed time to market, the stage-gate process seeks to freeze the product or service concept as early as possible. The technology and logistics are thus assumed to be relatively stable and the main management issue is that of internal coordination.

Flash development. This process begins with a defined desired outcome and focuses all energies on reaching that outcome as soon as possible.[10]

In "flexible" versions of the flash development model[11,12], some details will be worked out during the later phases. To keep options open and in waiting for the information from preceding phases, several phases must be carried out concurrently.

In contrast, execution innovation seeks to maximize the opportunity for rapid experimentation, rather than to reach a particular preconceived outcome or to pick winners from a portfolio of projects. Execution innovation begins with a series of small experiments, after which the results are assessed and the experimentation continued. At some point the purpose of the experimentation is no longer just discovery, but the creation of opportunity through continuous innovation. It's a process of opening the door to fresh insight, learning, taking action, thinking, iterating and reiterating.

“An experimental approach to business model innovation is rarely practiced even in businesses dedicated to innovation.”

“Companies start this process by conducting experiments that promote a radical rethinking of a business opportunity and then continue experimenting as the original idea evolves into a product.”

Execution innovation invites and builds upon many small failures and errors that are treated as important learning points. They provide the next target for execution ideas – and are addressed in the next wave of iteration. Thus, execution innovation is about thinking by doing and about acting and thinking differently. Such experimentation promotes the development of game changing value chain innovations, a key source of competitive advantage. In contrast, conventional product development processes often simply imitate and perhaps augment best practices shared in the industry.

The execution innovation strategy is particularly apt for creating something unique and novel. Part of its strength lies in engaging the developer-innovator team in continuous experimentation from ideation through every stage of the supply chain. At each stage, experimentation becomes everybody's job, a way of changing thinking through action. This ability to experiment without knowing the exact final features of a product, service or even a new business model enables more strategic ideas to be discovered and created than what is possible with planning-driven methods. This is because truly strategic ideas usually require changes in many activities and linkages. And because of that, one cannot just plan the whole new activity system in advance – there are simply too many variables to consider and control.

From staffing point of view, the biggest difference between planning-driven product development and the execution innovation approach is that the latter does not require a separate innovation process, teams of “creative” people or product design consultants.

Execution innovation occurs along the entire value chain. It does not require managers who control or assess progress. Rather, execution innovation encourages the original idea champions to continue to be engaged in experimenting and deliberating side by side with everyone from all the activities that are affected by a novel idea. Thus experimentation combines action with a conversation about what can be achieved and how. The CEO could participate but so could the factory worker. Indeed, Best Buy, a consumer electronics retailer in the US invites all of its store employees to experiment on ideas in their stores, thus turning the store network into a large



A Gym of Mind rapid innovation experiment session at MIND (Managing Industry Changing Innovations, www.mindspace.fi), an initiative seeking to “make Finland the world leader in strategic business innovation.” Photo by Reetta Maila

experimentation field. Many of its senior executives are involved in this (see <http://ourstories.iambestbuy.com/>).

Strategies for execution innovation

There are a number of ways to promote the fresh thinking that powers innovation execution initiatives:

1. Find someone who has already done a key experiment.
2. Build a prototype and get reactions.
3. Change the business process and see what happens.
4. Build experimental spaces.
5. Create imaginary, virtual, and theatrical playgrounds.
6. Joint venture with developers and experimenters.

1. Find someone who has already done the experiment

Search for lead users^[13] – they have probably invented something useful for you already. Or engage with people who are massive users of your service. What are they doing differently from other users? Or look for analogs in other industries and business contexts. For example, a seminar in Helsinki considered the question: “If money was meat, how would it be regulated?” By considering the regulatory practices in food, some new perspectives relating to finance were gained. (However, do not use this strategy as an excuse for a failure to experiment yourself. It’s just the first stop in the learning journey.)

2. Build a prototype and get reactions

Look for any small step that can take you forward. For example, a team in a US retailer set a desk and two chairs next to the company cafeteria with a sign: “We Are Your Personal Idea Bankers – Come Tell Us Your Idea. We Will Help You.” Inspired by the playful spirit of the overture, many people did indeed come and talk.

3. Change the business process and see what happens

Try doing something ordinary in an extraordinary context. Or try to do ten times more than you would normally do in a day or week and consider the overload as multiple experiments on your own or your organization’s capacity. Or accelerate the speed of the activity – do something in a minute or in a day. FedEx conducts a number of experiments every day. One of the recent winners invented and implemented software that would automatically look up background information about the caller (see <http://blogs.atlassian.com/rebelutionary/archives/000495.html>).

4. Build experimental spaces

Do you have a place where you can develop your innovation “muscles” and rehearse experimentation? The MIND innovation platform, for example, which has contributed to the development of execution innovation ideas, operates in Aalto Design Factory (<http://aaltodesignfactory.fi/>), Protomo Aalto, and Act Out of the Box Center of Finland, which all are innovative places for experimentation in Helsinki. Or go to a place where you can think of the

“Act out of the box – and new thinking will also occur.”

problem in an entirely different environment – for example, Tahiti, Peking or Ivalo. How would people in a remote island in the middle of the Pacific Ocean approach the issue? Or in Finnish Lapland? Why not organize your own guerrilla group that undertakes innovation missions that no one dares to embark upon?

5. Create imaginary, virtual and theatrical playgrounds

Take the experiment to its absolute extreme via simulations. Execute a videogame that approximates the innovation. Build your innovation in Second Life and try and capture customers (or build it with the help of willing avatars). You may also wish to use improvisational theater as an experimental venue. What does the audience think?

6. Learn from new kinds of developers and experimenters

Malcolm Gladwell in his New Yorker story *Bake-off* writes about a competition to bake the best tasting, most healthy cookie. Three teams compete for six months, but the teams are organized differently: one follows the matrix organization form, the second is inspired by XP (extreme programming) strategy, and the third functions as an open source team. Alternatively, organize a web-based open forecasting or prediction market. Sometimes such open market systems outperform official forecasts that tend to start following the wisdom of the crowds. Threadless.com is a good example of acquiring all of its product ideas from customers and user groups by allowing “collective customer commitment”[14]. Each new design suggestion is evaluated first by the user community, and only those designs that have garnered the necessary amount of pre-orders will be manufactured. Thus, experimenting new ideas is outsourced and it is totally risk-free!

About this research

This article draws on an ambitious research project in Finland called MIND (Managing Industry-Changing Innovations, see www.mindspace.fi), which seeks to “make Finland the world leader in strategic business innovation.” With its partner companies in leading Finnish businesses and universities, MIND seeks to develop new strategies for innovation and execution. During the past three years, MIND has interviewed many serial entrepreneurs, top class product developers, and radical TV-series format designers, each of whom has accomplished strategic innovation in their industry. MIND has found that they all have many unusual execution ideas beyond the original “idea.” This research was put to use in a course at Aalto University – titled “Managing Change and Innovation.” Students experimented with business ideas and built fast real-life experiments of their innovation ideas and document feedback from the target audience. Finally, research ideas were further developed in Anssi Tuulenmäki’s forthcoming book (in Finnish) *Lupa toimia eri tavalla*. The title translated into *License to Act Differently* (WSOYpro 2011) and Liisa Välikangas’s book *The Resilient Organization* (McGraw-Hill, 2010) that documents how experimentation and rehearsal can enhance corporate resilience.

Notes

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Corresponding author

Liisa Väläkangas can be contacted at: liisa.valikangas@aalto.fi

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