

**Innovation, Entrepreneurship, and Small Business  
Development for the Better Indonesia**

**Editor**

Dwi Larso

**Associate Editors**

Isti R. Mirzanti, Togar M. Simatupang,  
Agustina Ciptarahayu, Leo Aldianto, Salfitrie R. Maryunani,  
Sonny Rustiadi, Asisthariani S., Dohar Bob M. Situmorang



Center for Innovation, Entrepreneurship, and Leadership (CIEL)  
School of Business and Management (SBM)  
Institut Teknologi Bandung (ITB)

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**The Indonesian Conference on Innovation, Entrepreneurship, and Small Business**  
**Bandung, West Java, Indonesia**  
**July 20-23, 2009**

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## **Programs**

### **Sightseeing and Outdoor Activities**

Mt. Tangkuban Parahu/Crater Mountain Tour  
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Mt. Tangkuban Parahu/Crater Mountain Backpacking  
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### **Workshops**

Trends and Opportunities in Internet-based Business, by *Budi Rahardjo*  
Intellectual Property Rights, by *Adi Pancoro, Ahdjar Romadoni, Rizky Adiwilaga*  
Developing Incubation Center for Creativity, by *Gustaff H. Iskandar*  
Business Planning by *Leo Aldianto & Sonny Rustiadi*  
Intrapreneurship, by *Dwi Larso & Tita J. Subandhi*

### **Mengembang Layar**

This event provides opportunities for aspiring entrepreneurs to present their business ideas and plans in front of potential investors. As a result of the Entrepreneurship Track Program at ITB's School of Business & Management about 20 selective business ideas will be presented.

### **Masters and Doctoral Consortium**

Featuring Prof. Howard Frederick, Prof. Nawaz Sharif, and Prof. Ina Primiana Syinar

### **Welcoming Cocktail**

Conducted at the *Selasar Sunaryo Art Space* Galery

### **Conference**

Featuring: Howard Frederick, Sandiaga Uno, Tri Mumpuni, Gerald Lidstone, Bangun S. Kusmuljono, Betti Alisjahbana, Sakti W. Trenggono, Triharyo Soesilo, Nawaz Sharif, Agung Adiprasetyo, Dwi Larso, Martha Tilaar. Additionally, there are about 80 paper presentations.

### **Lunch with Vice President of Indonesia**

Featuring Vice President M. Jusuf Kalla

### **Social Event**

Auction of Paintings. Paintings are donated by **Tisna Sanjaya and friends**. Proceeds go to *Beasiswa ITB Untuk Semua*, a full scholarship program dedicated for ITB students from unfortunate families.

## PREFACE

The growth of small businesses through innovation and the growing number of entrepreneurs are critical in gaining prosperity of a society. Indonesia, with a very limited number of growing entrepreneurs and a very large number of not-growing small businesses, is in poor shape in shaping its prosperity. It must be stopped, must be solved!

The 1<sup>st</sup> Indonesian Conference on Innovation, Entrepreneurship, and Small Business (ICIES '09), initiated by the Center for Innovation, Entrepreneurship, and Leadership (CIEL), the School of Business and Management (SBM) at *Institut Teknologi Bandung* (ITB), is intended to support the development of innovation, entrepreneurship, and small business for the better Indonesia. We challenge ourselves to learn, study, and create local knowledge with global mindset to provide some lights in the development of new entrepreneurs and small businesses. This Conference provides a venue for Indonesian scholars and a network with international experts to collaborate. Programs in the Conference include Natural/Cultural Sightseeings, Workshops, *Mengembang Layar* (a biz-plan pitching event), Masters & Doctoral Consortium, Welcoming Reception, Gala Dinner & Social Event, and the 2-day Conference.

This inaugural ICIES '09 has attracted more than 400 abstract submissions and about 100 reviewed and invited papers are included in full length in the Proceedings with the topics ranging from entrepreneurship theory to creativity and innovation, to entrepreneurship education, from social entrepreneurship to corporate entrepreneurship, from small business to family business, to growing business. Authors come from various institutions in Indonesia and several other countries. At least 12 key and featured speakers from 4 continents are contributing to and at least 200 participants from many countries are attending this Conference.

In this occasion, I am honored to thank all contributors to the Conference including all Authors and Reviewers, all Key Speakers and Program Facilitators, Participants and Prominent Guests, all Sponsors including Academic institutions, small-to-large Businesses, Governmental institutions, and Communities. I have been blessed to work with a dedicated Organizing Committee consisting of about 40 young and restless and entrepreneurial individuals such as Sandiaga S. Uno, Adijoso Soejoenoes, Ahmad 'Eky' Zaky, Tisna Sanjaya, M. Ridlo Eisy, and Perry Tristiano, and to receive a lasting support from SBM-ITB Alumni Association and Forum ITB'84 turning 25 years old this year. Thank you. Thanks and appreciations are also due to Prof. Surna T. Djajadiningrat, Dean of SBM, and Prof. Djoko Santoso, Rector of ITB, for their continuous supports to CIEL.

*Tiada gading yang tak retak* (Nothing is absolutely perfect). We apologize for any mistakes found in the Proceedings. I hope it will contribute to the development of innovation, entrepreneurship, and small businesses in Indonesia. As the Conference is intended, I look forward to seeing an entrepreneurial and better Indonesia; full of pride and prosperity!

**Dwi Larso, PhD**

Conference Chair and Director of CIEL

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# Lean Innovation: a strategy to survive

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## **Abstract**

*Innovation has been used as a promising strategy for an organization to survive and to sustain in a turbulence business. However, in practice it is not always work as-plan regardless the size of organization or the business type. It was experienced that several big companies with medium-volume high-end products is nowadays downsizing to a difficult business situation. In fact the innovation is now threatening of discontinuing to a certain level. Therefore the objective of this paper is to explore the innovation discontinuity phenomenon especially in today situation. It is expected that this paper can provide a method that enable innovation to go forward regardless the economic downturn. This paper presents a scenario that enable a company maintaining its innovation process at the same time they are reducing the unnecessary activities to secure efficient operation. The scenario will ensure the existing product development process keep focus on its front-end activities especially in the screening process of ideas. At difficult situation, the author proposes that a company must ensure the innovation is moving by migrating from normal Innovation concept into Lean Innovation concept.*

*Keywords: (Lean) Innovation, Open Innovation, Lean Thinking*

## **1. Introduction**

In today global market, in highly competitive business environment, only some companies can survive while others struggle to compete. To compete, companies generally consider overcoming the traditional business pressures namely Time, Profitability, Functionality, and Quality and Reliability [1].

- Time: does the product reach the market at the required moment in time?
- Profitability: is the difference between product cost and product sales price adequate?
- Functionality: is the product able to fulfill its intended function(s)?
- Quality and Reliability: does the product fulfill customer requirements at 'all' customers, not only at the moment of purchasing but also during operational life of the product?

However, in today business environment they are no longer work well. Consequently

to secure the business companies must adopt newly business pressure such as Innovation capability. For example: companies usually shorten Time-to-Market of their product in order to arrive in the market earlier. The expectation is that by arriving in the market earlier they have the privilege to dominate the market and dictate the market price. However, this will not add value if the new products have no newness. Therefore, this paper interests to explore innovation as a weapon and strategy of defense and offense applying by manufacturers. However in practice, especially in today economic downturn, companies must have a strategy to deliver not only innovative products but they have to do it in an efficient and effective manner. In doing so companies are expected to extend their presence in business.

## **2. New Product Development**

Product Development (PD) is simply a process that transforms an idea into a real product. However, the objective of a PDP is

not merely to make a product. On top of that, the objective of the PDP is to encourage creativity that can lead to an innovation, resulting in the rapid development of profitable new products for the manufacturer.

Product development process can simply be divided into several stages. Many authors have defined several different stages of PDP [1]. Baskoro (2006) categorizes PDP stages into “must-have” stages and “recommended” stages. The “must-have” stages are the stages that are frequently used by several researchers in their PDP model. The “recommended” stages are less frequent used by several researchers in their PDP model but they are necessary. The must-have stages are Idea/Concept Generation, Idea/Concept Screening, Concept Development and Testing, Product Development, and Testing. The recommended stages are Business analysis and Commercialization.

Between these stages this paper argues that all of the stages contribute to the innovation process in different scale. However, perhaps only several stages are considered important related to the success of (lean) innovation.

### 3. Innovation

Baskoro (2006) stated that Innovation is widely known by the manufacturers because they believe that innovation can sustain the profit. Innovation is also done to increase product superiority with the criteria of unique feature(s), more functionality, meeting customer requirements, and acceptable price/performance [11]. The simple illustration of innovation is about making things differently (different product or different technology). Innovation is also used as a strategy to achieve competitive positioning by manufacturers.

Niebling and Christie in Baskoro (2006) defined that innovation is one among other methods used to counter-attack the

opponents. The counter-attack is part of the defensive approach used by the manufacturers. In the counter attack, innovation is considered as the most successful method.

**Creativity + Technology → Innovation**

*Figure 1. Simple Innovation Concept*

Even though innovation commonly requires high spending in R&D, innovation also gives promising rewards to the manufacturers. Considering the importance of innovation for the business, the manufacturers invest and allocate their resources and capability to exploit innovation as much as felt appropriate.

Many researchers argued on the terminology of innovation that leads to several ways to say the similar thing. Often innovation is defined as “radical”, “really-new”, and “discontinuous”, also innovation is defined as “breakthrough”, “revolutionary”, “game changing”, and “boundary expanding” [4]. To avoid confusion and wrong perception, a clear definition of innovation is needed. For example, if innovation is defined as the degree of “newness” on the product, then the “newness” can be interpreted as new to the world, new to the market, and new to the manufacturer.

Therefore, Garcia and Calantone (2002) defined innovation as an iterative process initiated by the perception of a new market and/or new service opportunity for a technology-based invention, which leads to development, manufacturing, and marketing tasks striving for the commercial success of the invention [4]. McDermott and O’Connor in Baskoro (2006) defined innovation as a new technology or combination of technologies that offer worthwhile benefits. Commonly, the word ‘innovativeness’ represents the degree of ‘newness’. ‘Highly

innovative' products, for example, are seen as products having a high degree of newness.

#### **4. Innovation Model**

There are at least two ways to make distinction of innovation i.e. 1. Close Innovation and 2. Open Innovation. The important of the innovation, as this paper concern, is how a company can capture value from it. According to Chesbrough (2003), a company can capture value from an innovation in three ways:

- Using the technology in its existing business
- Licensing the technology to other firms
- Launching a new venture that uses the technology

Therefore, whatever the innovation model a company choose in their operation they have to focus on optimizing the value created by the innovation itself.

##### **4.1. Closed Innovation Model**

For so long the paradigm of innovation is locked on traditional concept. It was seemingly a mechanic approach of innovation that tends to loose the objective of innovation itself. In the past companies established their own R&D and laboratories to explore the scientific by means of research. It is the basis of closed innovation concept. The idea is that: "if you want something done right, you have got to it yourself" [2]. Thanks that there were a lot of inventions have been done by the effort and work. In this paradigm, a company that unable to build up their own research will not take the privilege. In this concept, the vertical integration enables the research invention into a meaningful innovation for life.

This can simply be explained that not all research projects resulted in useful patents. It is often that the research is never reach to valuable output such as patent or other

promising development. In other cases the completed research projects are kept by the company with hope for a promising market opportunity, if luck, or never reach a market opportunity at all. This is what this paper means as closed innovation. According to Chesbrough (2003), the closed innovation paradigm has eroded due to the following factors:

1. Increased mobility of skilled workers
2. Expansion of venture capital
3. External options for unused technologies
4. Increased availability of highly-capable outsourcing partners

##### **4.2. Open Innovation Model**

According to Chesbrough (2003), the open innovation is simply mean the expansion of the knowledge sources and markets through exploitation of internal and external options.

The open innovation is a way of thinking that the process of innovation can be done not just by the company itself. There are two important things to be considered i.e. 1. Idea, and 2. Market. In this concept, the source and target of both idea and market is not limited to internal and or external sources. Open innovation can combine both internal and external ideas to advance the innovation. Similarly, the result of innovation can be marketed to existing or new market opportunity even from outside company business channels. The main consideration is to efficiently and effectively generate value.

#### **5. Lean Innovation Concept**

The idea of lean innovation is that innovation, in this regard both open and closed, shall be done in a cost effective way. This idea is fully considered based on the business environment nowadays that 1. Market is limited and saturated, 2. Global economic is down turned to recession. We

have witnessed today that several major car manufacturers in US declared for financial difficulty up to bankruptcy and ask government for help. For example in June 1, 2006 Yahoo reported that 100 year giant automaker General Motor file for bankruptcy as a result of economic misconduct (Bubble economy) taken place in US recently. In reality they have laid off hundreds to thousands workers from the factory. The bailout funding from government will not bring those companies into a stage they have been there before. It is only a stimulus that enable them get out from the recession in short term. In contrast, the market itself is also going down.

In this situation, there are no choices that companies must sustain their innovation process whatsoever. As indicate earlier that the only way to survive is that companies must look way to generate new market by means of innovative products. Doing innovation in crisis is quite different than before. Companies, with limited financial backup, must innovate in cost effective way. This paper introduces a concept of lean innovation that enables companies to do cost effective innovation process.

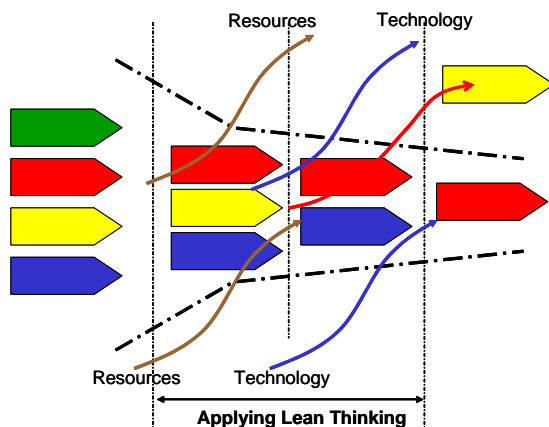


Figure 2. Lean Innovation Concept

The Lean Innovation concept, figure 2, combines the concept of lean thinking and open innovation. In open innovation itself the

mentality “all invented here” and “all to do it yourself” is no longer popular. As a result the innovation is now cost effective. This will be sharpened by lean thinking that enables reduction of wastes in all aspect so that effectiveness is getting higher [12].

## 6. Discussion

In the basic concept of innovation there are two important drivers i.e. 1. Creativity, and 2. Technology. A creative idea without an influx of technology will not be considered as innovation. However, build up those drivers inside organization requires strong financial backup, so that only limited organization can do it. With open innovation concept, it is possible that the sources of creativity and technology can be taken from outside organization. The remaining is to make the process cost effective. This is answer using lean thinking concept that reduce waste, due to people or due to process, at all time.

The lean thinking takes place at the process of product development where there are possible sources of wastes. Many references indicate that the product development process due to its iterative process can generate intentionally or unintentionally wastes. The source of wastes is both due to people and due to ineffective process. In lean thinking both wastes will be identified than eliminated.

Combining both concept of open innovation and lean thinking is expected enable companies sustain their legacy in business. The lean innovation enables companies to continuously delivering their innovative products in the market in a cost effective manner.

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