

IDEAS TRANSFORMED INTO BUSINESS ENHANCING ENTREPRENEURSHIP EXPLORING THE "BEST IDEA OF THE NETHERLANDS" CASE

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Abstract

In 2004 a private initiative started in the Netherlands, to stimulate innovation and the cooperation between students and industry. This resulted in the development of a television formula "The Best Idea of the Netherlands", in which students and Dutch citizens in general are challenged to enter in an annual competition with their new ideas. The competition has been presented in a series of prime time and partly live television shows with increasing popularity. In 2004 110 ideas entered the competition; in 2008 this number has reached 1836.

The research question is: does this new television formula indeed foster new product and business development, how is the innovation process organized and what are the outcomes so far?

The rationale behind and justification for the development of the TV-formula is that product innovation has to be stimulated. Failure rates are high and The Netherlands lags behind on innovation in comparison to other European counterparts (Lisbon council, 2008). European countries have embraced this goal in the Lisbon treaty as their primary objective for 2010: to become leader in innovation worldwide. Innovation is a driver for national economic growth (Smits, 2006) and for continuity and company growth (Brezet, 2004; Harkema, 2004). Sources of innovation stem from companies as well as research education institutes, including students. The BIN television formula as presented in this paper is a mechanism through which co-operation between SME business and academia is fostered.

The first results of the study indicate that the BIN-formula has triggered a new, very popular approach for product innovation in the Netherlands. Several stakeholders seem to profit from this phenomenon: Vacu Vin Ltd. as the first European TV-based product innovative company, IdtV and SBS6 as TV-producers and the general public as co-creators of their 'own' new products.

The platform resulted in 14 products which were launched on the market and 100 in development. The television show also triggered educational institutes to set up new courses to stimulate creativity and to participate in the television program.

In the next phase of the project, a theoretical reflection and refining of the model are envisaged.

1 Introduction

In 2004 a private initiative started in the Netherlands, to stimulate innovation and the cooperation between academia and industry. This resulted in the development of the television formula "The Best Idea of the Netherlands", in which industrial design and business students are challenged to enter in an annual competition organized around this program with their new ideas. The competition has been presented in a series of television shows with increasing popularity. In 2004 110 ideas entered the competition; in 2008 this number has reached 1836.

"The Best Idea of the Netherlands" (BIN) is developed from a vision of Bernd Schneider, entrepreneur and owner of the Dutch company Vacu Vin Ltd, with the aim to stimulate product innovation, creating bridges between education and the business world and tap into the creativity of students and people in general. In his vision, students and innovation are the basic ingredients for future economic growth and personal development. To stimulate the cooperation his former company Vacu Vin Ltd offered internships to students from several universities. During their internships students generated several good and innovative product ideas, which are subsequently handed over to the R&D department for realization. However, in the regular product development process the time to market from an idea generated during an internship until market introduction was very long. In order to open up the traditional innovation model like the model developed by Cooper (1987), get more ideas from a broader group of inventors and to reduce the time to market, the Best Idea of The Netherlands competition is set up. In this way, Vacu Vin Ltd. created a platform for innovative ideas from everywhere.

The vision behind the competition is based on several considerations. Through the BIN competition:

- a) a platform is created for presenting novel product ideas;
- b) the possibility is created to assess their commercial feasibility; and
- c) the opportunity emerges to communicate in advance on rights and obligations with respect to ideas and future revenues.

Besides the BIN- formula and television-program c.q.-contest, a Foundation has been set up to stimulate novel approaches for innovation in the Netherlands and to intensify the knowledge exchange between academia and industry. Particularly, the Foundation aims at bridging the knowledge gap between practice (industry) and theory (universities) in the area of new product development process.

2 Research question and goal

An effective innovation process is crucial for the existence and future position of product formulating companies. New ways of organising the process are needed, supported by the possibilities of ubiquitous product technology. Television, internet, computer assisted searches and emerging other media are envisaged to play a potential influential role in an advanced product innovation process. Therefore, the research question of this project is: "Is it possible to create and successfully implement a television and new media based product innovation model, via a popular design platform? And does this new television formula indeed foster new product and business development, how is the innovation process organized and what are the outcomes so far?"

The goal of the project is to start an open forum for product innovation –The Best Idea of The Netherlands- for students and the general public, to explore and describe its required characteristics, as well as to test a novel business formula and assess the first outcomes. Based upon this explorative study, propositions could be formulated for further testing and refining the –The Best Idea of The Netherlands- innovation model, for both regional and international application and diffusion. This study is aimed at giving some first insights in the BIN-innovation practice. A more theory based reflection is envisaged as a follow-up of this first step in the research project.

3 The BIN model of product innovation

The BIN formula is based upon a process model that guides the transformation from idea to product –on-the-market

The general product design process, as taught in most curricula and used in industry, describes four phases: (1) planning and clarifying the task, (2) concept design, (3) embodiment design and (4) detailed design. The main deliverables connected to the phases can be found in Roozenburg and Eekels (1995). A gate separates each phase of the product design process, allowing a check and go no/go decision. Non product specific innovation models follow a similar path. The funnel model of Cooper (1987) is an example of such a model, which is used as a standard in large companies.

It is envisaged that prototypes are built in the last phase, the embodiment and detailed design phase of this process. However, design practice shows that this moment is too late to alter the design, because it is too far in the process and therefore too costly to change or adapt the design. The traditional innovation model lacks early stage prototyping. This "flaw" in the traditional model forms one of the reasons for the development of the new BIN innovation platform.

Through the platform created and the model developed, students and other inventors are encouraged to realize as soon as possible working test models. When ideas become tangible in such an early stage of the process, this offers early and easy insight in pros and cons. Combining design on a desk top and working in the workshop/atelier is included in the BIN model as an essential element. Practice shows that creating things by working with the hands on machines and with physical material gives a boost to the creative process. The prototype has a dimension, weight and tangible qualities, which a computer screen doesn't offer. An important side effect of this way of working is that the idea has become tangible for marketers and commercial staff who are not well trained in reading drawings.

4 The Best Idea of The Netherlands: the practice

The Best Idea of The Netherlands Foundation cooperates with four partners (BIN International Ltd, television producer IdtV, commercial television channel SBS 6 and patent attorneys Vereenigde) and a group of independent industrial designers, product formulating companies, supply companies, knowledge institutes and other experts grouped under the name 'Creative Industry'. To increase the potential of ideas the Foundation collaborates with this 'Creative Industry', that support, advice, redesign and develop final product ideas during

the contest. This means that a team of experts are employed to support participants in improving and developing their ideas in more detail. In return, this group of people receive a lot of publicity during the television programme and gain experience as well. The foundation also has two sponsors; the company VacuVin Ltd and the Netherlands' patent Office. More detailed information about the Netherlands' patent Office can be found in endnote (2).

Goals

The Best Idea of the Netherlands makes a selection of concepts with the intention, independent of the outcome of the contest, to create production. If ideas flop early in the contest, it does not have to mean the end of a potential good idea. The Foundation nominates ideas for realisations, which are examined on opportunities for production. All ideas that succeeded in the first round are automatically scanned regarding opportunities for production. Ideas that did not pass the first round will be evaluated again and this evaluation determines if an idea makes a chance on nomination. One year after the nominations, a permanent selection of ideas is made. Then the Foundation will start to realise these ideas. If the idea is nominated but not chosen in the permanent selection, then the participant still regains the intellectual property right. All participants' ideas that have not been nominated regain their intellectual property rights.

Criteria for ideas

The idea needs to have an innovative character by fulfilling a new need or by satisfying existing needs in a new way. The idea should have added value compared to current products, services or technologies.

Selection of participants

Every person can participate in the contest, regardless their age. If participants are younger than 18 years old, one of the parents has to approve the participation. Representatives of a company may not participate, only if a person is idea-owner (and possesses the rights of the ideas) participation is allowed. Support by other individuals is allowed as long as the participant owns all the intellectual property rights (which will be transferred for an undetermined period to the foundation as soon as the idea is submitted). As long as the participant did not regain the intellectual property rights, it is not permitted to make the idea public, duplicate or modify the idea or being involved with exploitation of a similar invention or product idea.

In the first year of the TV- idea contest, in 2004, only students could participate. But the Foundation changed this participation criterion, allowing everyone with an idea to participate. The argumentation behind this change is that 'everyone has creative and innovative ideas, from children to elderly people, not only students'. As a consequence, the participation numbers increased with a factor 4.

People from the BIN-organisation provide presentations at various educational institutes (e.g. design schools, universities). Within these presentations examples of the contest are used as case studies, e.g. a master class about licensing. Several business education courses make use of the entered ideas as a start for writing business plans. These ideas are presented at kick-off meetings at various educational institutions all over the Netherlands both for Bachelor and Master curricula. In that way the innovation process is communicated to education with practical experiences.

Often small and medium sized enterprises (SME's) do not have enough resources to execute research in the area of product development. However SME's can help a contestant during the competition as a kind of sponsor. In this way, the assignment to search for interesting product ideas is outsourced as well as the research on existing patents and possible patent applications, because the BIN foundation will take care of this. In addition, the SME's get free publicity during the programme. In return they provide their skills to support the participants in the realisation of their idea.

Assignment

The assignment of the contest of The Best Idea of the Netherlands is rather open; an idea has to fulfil a new need or satisfy existing needs in a new way. The argument behind the free assignment is that the Foundation wants to keep all options open; they do not want to limit the creativity of participants. They also argue that it does not take a lot of time to filter out the less useful ideas.

Jury

A team of the Foundation, sponsors and the television production company IdtV composes the Jury.

The Jury consists today of four members that all have a lot of practical experience and who judge the ideas on the basis of their own profession. A criterion for being a 'good' member of the Jury is to be able to communicate

your expertise to the participants. Furthermore, the jurors have to communicate their expertise to each other as well in order to understand each other's expertise and come to unanimous decisions regarding the selection within the contest. Every member of the Jury has an equal voting right, but the chairman of the Jury (Bernd Schneider) is responsible for the final decision made. In practice, this means that if one person is openly very enthusiastic about a presented idea, the chairman cannot reject this idea even though he does not agree. The Jury can be overruled in its voting by the Dutch TV-audience. For example the "flower bag vase" presented in 2004 was rejected by the Jury, but the public voting gave the idea a wild card for the final. The idea was selected for realization and at this moment the product is generating the highest revenues from all the selected ideas of the competition 2004 (CV BIN 2004).

Selection criteria

The submitted ideas are being judged according to the following criteria: originality, feasible production, design (styling), environment and sustainability, and commercial feasibility (profitability). Within the contest no pre-selection has been made, but the Foundation conducts some pre-research on all submitted ideas and classifies every idea into one of the four focus areas of every juror.

In the first round participants present their ideas with a short presentation to only one member of the Jury. In case of doubt Jury members can consult a back-up expert team that is connected to all the members of the Jury. On the basis of this short presentation the Jury makes a first selection.

During the second round, participants present their idea to all members of the Jury. For the third round the surviving 40-50 ideas are developed in more detail. The "Creative Industry" is actively involved in this round to support the participants with professional assistance. In this round the Jury evaluates the selected ideas again, expecting improved models, new insights and more detailed concepts. In the final round, participants are required to present their "final product" (prototype, mock-up, 3d visualisation, market test etc.) in front of the audience and the Jury live on TV.

The innovation funnel of the "Best Idea of The Netherlands" television contest can be illustrated as follows:

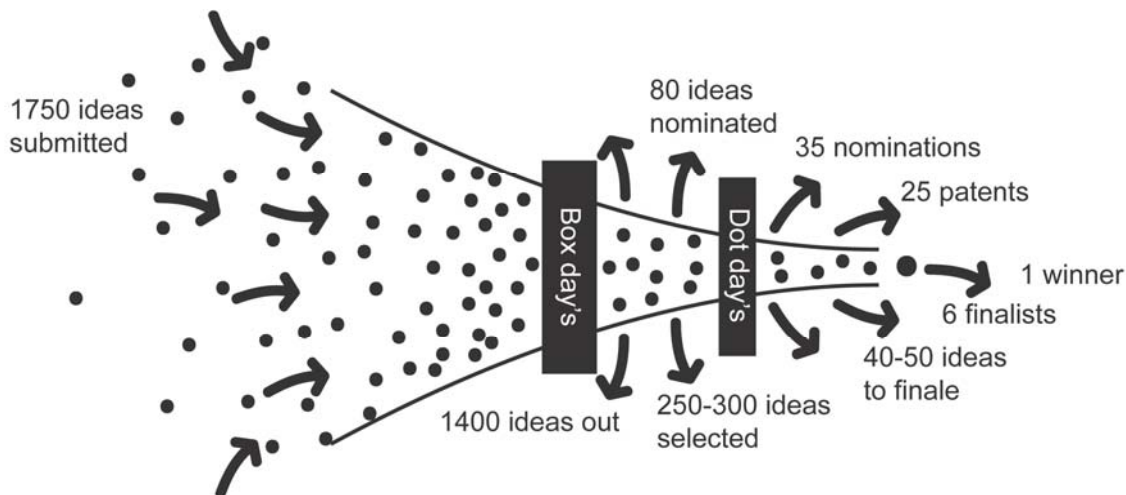


Figure 1 The BIN Innovation Funnel Model

80 ideas nominated (= ideas selected for further business market development).

250-300 ideas selected for presentation at Dot days (second round).

At the "Box days" the first selection takes place, while at the "Dot days" a second selection round happens. The television program shows one price winner; on the other hand almost 100 ideas are selected for further research and development.

A significant aspect of the competition is the radical metamorphose an idea might get going through the competition's funnel and after, in order to adjust the idea into a commercial and technically feasible product, materialized and ready for mass production.

Selected finalist's ideas are presented to the "Creative Industry". The ideas are described and explained with drawings, pre prototypes, visualisations, tests etc. The "Creative Industry" is actively involved in this phase of the design process. Both the public, attending the TV-broadcast show as the viewers at home can give their feedback on the ideas presented, via various media channels.

When selected as relevant for implementation, every idea is tested on commercial feasibility. This means that research needs to show whether investments can be earned back. In order to realise the latest edition (2008) of the contest a budget of approximately € 1,725,000 is invested by the foundation and the sponsors. From a total amount of 4150 product ideas submitted during the time period 2004-2008, the Foundation has realised 14 products (from 2004 till 2008) and 100 products are in progress for realization.

The Best Idea of the Netherlands Foundation measures the success of the contest in two separate ways: on the one hand the Foundation looks at the audience measurement, the television viewing rate of the programme. On the other hand, according to the BIN foundation, the success of the contest is indicated by the realisation of ideas into production.

5 An illustrative case study", from "Tjop Tjop" until "cutting board and tray.

During the 2004 competition a student joined the competition with the following idea: a cutting board on top of a container capable of receiving cutting debris or food cut. To show all advantages to the Jury, she presented several prototypes including a wooden frame carrying a Corian cutting board made by DuPont and a solid rectangular plastic container.



Figure 2 The original prototype entered in 2004 by F. Verwoord "the Tjop Tjop".

Although considered as a very good idea by the Jury, the concept was not yet ready for mass production and sales. The wooden parts looked very beautiful but appeared difficult to produce and would cost a lot of labour to make them applicable for kitchen use. The use of Corian for the cutting board is expensive and not easy to produce from bulk materials. The rectangular HDPE container can not be removed from a mould due to its vertical walls, or a very expensive mould will be needed. The total product dimensions including packaging are not pallet friendly chosen, so in bulk a lot of air will be transported on a pallet. Logistics are not included in the concept, etc.

Vacu Vin Ltd has taken a license on the idea and made all necessary steps to come up with a product that could be produced at reasonable cost and would be appealing to the demands of the potential customers. It's design team was able to address the remaining problems, as mentioned above.

The final result is shown below and has proven to be a success on the market.



Figure 3 The cutting board and tray from Vacu Vin Ltd

6 Findings and Conclusions

Two questions were addressed in this paper namely:

- 1) Is it possible to create and successfully implement a television and new media based product innovation model, via a popular design platform?
- 2) Does this new television formula indeed foster new product and business development, how is the innovation process organized and what are the outcomes so far?"

The findings in this –mainly descriptive and explorative- study indicate that it is possible to successfully develop a TV-based, popular industrial design competition. Both measured in terms of

- (1) input of creative ideas from students and “average Dutchmen”;
- (2) in terms of TV-viewer occupancy rate (ca. 20% of the target group at prime time); and
- (3) market and production success, the results look very promising. In the meantime other European countries, such as Belgium and Germany, are developing similar programs based upon the BIN-formula.

Several –largely- unexpected phenomena emerged during the pilot years:

- a) a successful design contribution from the Dutch “Creative Industry”
- b) an intensive process of co-creation, not only by the input and feedback of a million spectators every week, but a powerful push for creativity based entrepreneurship and new venturing among different stakeholders in the Netherlands
- c) an improved insight for the initiating company, Vacu Vin Ltd, in it’s future product portfolio potential, including an optimised time to market competence Endnote 4
- d) an increased attention for consumer products’ features, like sustainability (waste, energy, packaging, transport etc.), quality, manufacturability, aesthetics etc. among a broad Dutch audience.
- e) the promotion of VacuVin Ltd, with it’s partners as a leading European SME with respect to modern product innovation approaches
- f) an enormous increase, within regular Dutch households, families and companies in know-how on and popularity of new product creation, fostered by the weekly TV-program.

Further spin-offs are co-development of various new BIN oriented industrial design and business innovation curricula and courses, amongst others at the Twente University, The Rotterdam University of Applied Sciences, the InHolland Business School and the Frisjes Incubator Program in Fryslan. Even at several elementary, middle and secondary schools internal BIN- competitions are set up, before entering the TV-program.

From a financial perspective, for the Foundation the return –on-investment goals have not been met yet.

Further research and theoretical reflection are needed to understand and explain the BIN-formula more precisely. Particularly, the authors are interested in the relative importance of several factors and actors in the BIN-formula “mix”, such as:

- the role of the Dutch “Creative Industry” in supporting product innovation
- internet as a popular medium for both idea generation and idea killing
- the role of the consumer as expert in daily interaction with existing products, interfaces and situations.

-TV and advanced new media's potential as ubiquitous technologies and infrastructures for the support of product innovation.

It is envisaged that a next BIN-innovation model will be formulated, not only for further use in the national TV-program, but also as an enriched basis for SME's and educational institutes with respect to their product innovation oriented activities.

Endnotes

1 Vacu Vin Ltd

Vacu Vin Ltd is an international manufacturer and distributor of innovative food and wine related products for home and professional use, which are characterized by their practical applications in daily circumstances. The products are non electrical and operated by hand.

All products produced and developed by Vacu Vin Ltd are distinguished by their functionality, originality and quality. The originality of the product range is emphasized by the fact that most products are patented all over the world. Extensive in-house expertise (supplemented by students from the Technical University in Delft and other technical institutions) enables Vacu Vin Ltd to constantly improve the functionality of every day products.

From 1995, the company offers internships to students for their final exam.

Yearly twelve students are working on several projects. These projects start with an idea generated by the student during the first four weeks or with an idea from the R&D department of Vacu Vin Ltd.

2 The Netherlands' Patent Office

The Netherlands' Patent Office is responsible for granting patents in the Netherlands' and for disseminating technical knowledge that is stored in patent literature. The Netherlands' Patent Office focuses on increasing awareness of the patent system and encouraging its conscious use. The Netherlands' Patent Office - referred to in the Patent Act 1995 as Netherlands Industrial Property Office - was set up in 1893 and is an agency of the Ministry of Economic Affairs. It's 130 employees target their services at small and medium-sized enterprises, (starting) entrepreneurs, private inventors, intermediaries, scientists, teachers and students, and the government, who or which: - to require information or advice on the use of the patent system, - wish to submit a patent application, - wish to view information from the patent register, - wish to make use of the knowledge stored in the patent literature

3 The Rebasic Design Course

The origin of the BIN formula can be found in the concept and philosophy of the Rebasic Design Course.

The Rebasic Design course is given in the final year at The Hague University of Applied Sciences, Academy Technology Marketing and Design, Department Industrial Design. Students are free to propose their own idea to elaborate. During the course, students are stimulated to work on their own dream idea. There are no restrictions or limitations with respect these ideas. Students might work i.e. on pottery, or motorized vehicles for handicapped. Course input and feedback is given weekly, mainly to discuss progress or to inspire with lectures on all kind of subjects. The course is also offering lectures from or about inspiring artists.

Artists show often an own way of working and a tremendous energy to get things realized in an unconventional way.

Therefore this element is included in the curriculum. In addition, for the first time during their study, the industrial design students are free from the traditional linear design process and reporting.

The traditional linear industrial design process consists of several phases:

Preliminary investigation, Detailed investigation, Development, Testing and Validation, Production and market launch.

By contrast, students at the Rebasic Course are stimulated to build, test and realize the idea, so in the end at the exhibition a working prototype can be presented. At the public presentation, no PowerPoint or poster presentations but working prototypes and models presented in a public place, like the library or a popular bar in the centre of The Hague. The teachers examine the results at that presentation moment. Students are confronted with the public and the public opinion about their work. In this way, the work created and presented is protected by copyright (author published presentation date). Pictures taken at the exhibition/presentation are published on the intranet of the university.

4

According to literature, time to market serves two purposes. First all other things being equal, faster projects are more desirable - the notion of 'a bird in the hand' or that more distant economic returns are less desirable. Second and perhaps subtler, is the idea that lengthy projects are invariably fraught with development and execution risk. The longer something is planned to take, the higher the likelihood that something will go wrong (Cooper, Edgett & Kleinschmidt, 1998).

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BIOGRAPHY

David Marinus Harry was born in Scheveningen 1963, The Netherlands. He spent his childhood in The Netherlands and studied product design in Antwerp, Belgium, where he graduated in 1990. Since 1990, he occupies a professional lecturer chair at The Hague University of Applied Sciences, at the Department Industrial Design. Next to being an entrepreneur during 1993 – 2003, he served as an external project leader, at The Netherlands Patent Office, from 2007-2008. He is the co-founder of "*The Best Idea of The Netherlands*" television program. His educational activities consist of supporting graduates during their final exams, lecturing on Intellectual Property and supplying creativity courses and minors.

Dr. Saskia J.M. Harkema MBA is Associate Professor Innovation & Entrepreneurship at the The Hague University of Applied Sciences. In 2005 she set up the Center of Innovation & Entrepreneurship where applied driven research is carried out and educational programs are developed in which students, lecturers and companies participate. She is also Senior Consultant of BMC Management & Advice, one of the top-consultancy firms for the public sector. Her main area of attention is entrepreneurship in education.

Prof. Dr. Han Brezet since 1992 is heading the Design for Sustainability research program at the Faculty of Industrial Design Engineering at the Delft University of Technology in the Netherlands. In addition he is part-time professor at the International Institute for Industrial Environmental Economics (IIIEE) of the Lund University in Sweden. Besides he is a visiting lecturer at the University of Melbourne, Australia. Currently he is coordinating the collaborative Sustainability Research Program of Delft University of Technology and the 3TU Cartesius Institute in Leeuwarden. His current research is focused on Design for Sustainability, Sustainable Energy Technologies, Sustainable Regional Development and Sustainable Product Service Systems. He is actively involved in business networks and a wide range of national and international industries are involved in the Design for Sustainability research program. He is also part of several International commissions, expert panels, and working groups on Design for Sustainability. He is author of several Ecodesign standards and books.