

Roland Berger Focus

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Frugal: Simply a smart solution

Frugal innovation, when focused consistently on customers in emerging markets, can open up completely new markets for companies



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navigating
complexity

Management summary

Customers in emerging markets require a particular type of innovation: frugal products and services that have been redesigned from scratch, are cheap, easy to use, economical and robust, and yet as effective as their possible models in industrialized countries and high-tech segments. But it is not easy for companies to develop such simple solutions and bring them to market. For the purposes of this publication, consultants, academics and businesspeople have analyzed the key factors at stake.

Multinational companies that wish to conquer new markets have little prospect of long-term success in emerging economies unless they follow certain clear guidelines when developing frugal products. The methods, thought processes and product characteristics that have proven effective in their home markets are often of very limited use in this new context.

The basis for any successful market entry is a systematic examination of the requirements of the market, the wishes of customers and any possible obstacles.

The solution aimed for cannot focus exclusively on the core product. It must also take into account where the product will be used, and develop an appropriate business model to support it. In other words, it must be a complete frugal product offering. Before beginning the product development process, it is advisable for companies to establish a **burning platform**. This can help them identify the reasons, opportunities and potential risks associated with the intended change. Next, they should

formulate the strategic objectives for the frugal solution – its **strategic intent**. Only then should the company begin developing the product itself, gearing its features toward the insights generated in the first two steps and redesigning the product accordingly from scratch.

This publication provides a basis for market success by industrial companies. It proposes a systematic approach to frugal, developed jointly by Roland Berger and the Institute of Technology Management at the University of St. Gallen (ITEM–HSG).

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Section 1:

The basis for market success

Frugal products and services are convenient, easy to use and designed strictly with their potential users in mind. A recipe for good business, not just in emerging markets. If you do it right.

A German manufacturer of high-tech plastics – or, as it describes itself, "a solutions provider for polymer systems" – is making it possible for the families of Kenyan farmers to prepare a hot meal every day while not only protecting their own health and the environment, but also building the local economy. A Swiss startup is giving its customers in Tanzania flexible access to electricity even though they are not connected to the public grid. Both projects are the result of innovation processes that are becoming massively important for Western companies: the development of frugal product solutions in emerging markets as a way to develop new market segments and business models.

Over the last two years, a group of consultants, academics and businesspeople have worked together to develop a framework that can serve as a foundation for such initiatives. In this publication we present that framework. Roland Berger supports many projects in different industries that aim to develop frugal product solutions, from conception right through to final product strategy. The Institute of Technology Management at the University of St. Gallen (ITEM-HSG) investigates the theoretical foundations of successful innovation management, and has accompanied and collected many case studies from the industry. The requirements and structures outlined here build on the discussions and analysis that have appeared in other Roland Berger publications, including the Think:Act booklet "Frugal", published in 2015.

Frugal products and services are innovations that are redesigned from scratch. They are cheap, easy to use and designed with their potential users and application environment in mind. They are economical and robust, yet no less effective than their possible models in the West or in corresponding high-tech segments. Their development requires entirely new perspectives – and opens up new prospects – that are rarely comparable with those of traditional markets.

According to a study by Roland Berger, many companies expect to see frugal innovation grow massively in importance over the coming five years, both in terms of sales and profitability. While many top managers are aware of this potential, the implementation process often lacks the clear points of orientation that can help companies achieve long-term market success.

A FRAMEWORK FOR FRUGAL INNOVATION

In our experience, obstacles and resistance often arise within companies because of a lack of acceptance for new solutions and business models on the part of the company's own employees. A failure to understand the conditions prevailing in the target market is frequently one of the biggest hurdles. Those designing the product have little if any connection with local actors and the situation on the ground with regard to production and sales. Moreover, long product development cycles with no regular customer feedback make it difficult to target the new products accurately. Companies require a specific approach to avoid such errors and understand the mechanisms of often volatile markets. Experience at Roland Berger shows that this entails products and services being configured as individually as possible. → [A](#)

A CHALLENGE – EVEN FOR ESTABLISHED COMPANIES

Frugal innovation is no trivial matter. This is shown by the many examples of companies that are themselves from emerging markets, but still find it difficult to meet the requirements of their target market segment. In 2009, for instance, the Indian automotive group Tata launched the world's most affordable series-produced car. The Nano met the latest safety requirements, was ideal for city driving, low on fuel consumption and cost the equivalent of just USD 2,000. To keep the price as low as possible, Tata chose not to install air

A: Don't limit yourself to the product.

A frugal solution includes the periphery and a business model.



conditioning in the vehicle, plus there was just one windshield wiper and no radio. But in so doing Tata misjudged the needs of its target group. Middle-class Indians wanted a car that was cheap – but didn't look it. In 2013 Tata introduced a revised model, the Nano LX, with an updated design, a stereo sound system, sporty hubcaps and a marketing campaign aimed at buyers under the age of 35.

In the case of Chinese household electronics group Haier, it was a complaint from a farmer in Sichuan Province that led to changes being made. The customer had called out a technician because the drain on his new washing machine was constantly getting blocked. It turned out that he had not only been doing his regular laundry in the machine, but also washing his crop of sweet potatoes. He could sell the sweet potatoes at a higher price at the market if they were washed. The only problem was that the dirt was clogging up the thin drainage hose on his washing machine.

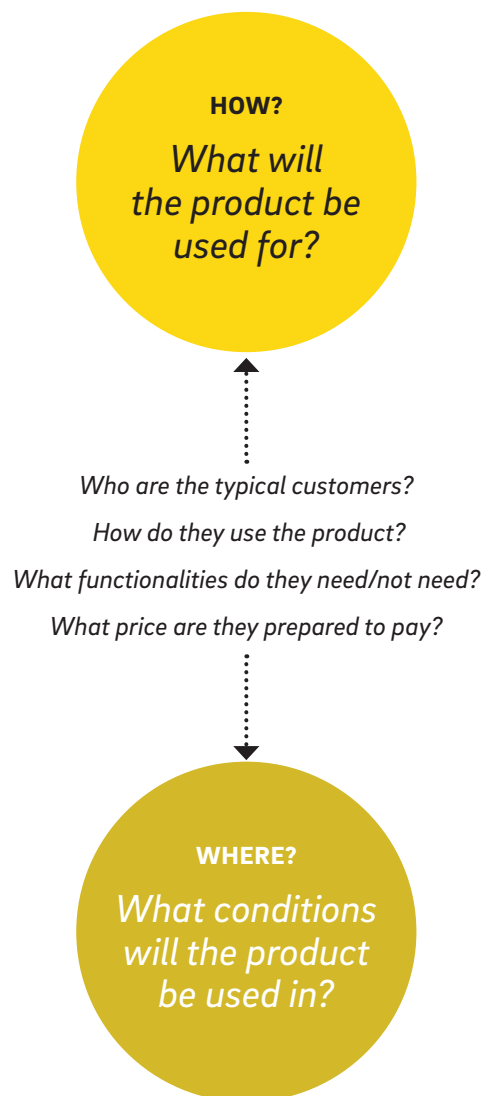
Instead of telling the customer how he should actually be using the washing machine, Haier decided to align themselves with the needs of their rural target group. They built a machine with a bigger drainage hose, a machine that was tough enough to wash sweet potatoes in, and even small squashes and clams.

A SYSTEMATIC APPROACH IS THE BASIS FOR SUCCESS

For Western companies hoping to gain a foothold in emerging markets, it is crucial to avoid misunderstandings and not to make mistakes in the first place. For cost reasons, if nothing else. When you are opening up a new market, even a single mistake can mean substantial delays, extra costs or the failure of a project. Dangers arise at many points along the development process. It is therefore crucial for companies to take a systematic approach to developing new markets and target groups.

B: Understand how and where the product will be used.

The target group is all that matters.



Source: Roland Berger

Section 2:

A successful start

Frugal innovations fall short if they only consider the product. Have you answered the strategic questions about the business? Is your company ready for a change of culture?

Companies that wish to add frugal innovations to their product portfolio must create the necessary foundations for this process within their own organization. In particular, they need to realize that the design process should not focus too much on the actual core product. Rather, they should strive for a holistic solution right from the outset: a complete *frugal product offering*. Experience shows that this can contribute significantly to market penetration later on. In addition to traditional product characteristics such as design, form, function and performance, companies should consider two further dimensions:

- 1. The periphery.** What extras are required? Is the size of the bottle important for customers? Or the type of packaging?
- 2. The business model.** Are any additional services needed for the product to be successful? Are other revenue models possible (e.g. rent rather than buy)?

Before beginning the actual product development process, it is also important to anchor the desired change process in the company. Ideally, this is done by creating a *"burning platform"*.

THE BURNING PLATFORM

In business language, a "burning platform" is where a company admits to itself that standing still is no longer an option. This may be because there is a threat to its business model or its position in the domestic market, the crisis has already come and the company's continued existence is at risk unless they draw the right conclusions and take appropriate steps. Or it may be because the company will otherwise miss out on the opportunities in emerging markets.

TRIGGERING CHANGE

A *"burning platform"* is where you are forced to act as a result of a crisis that is about to happen, or has already taken place.

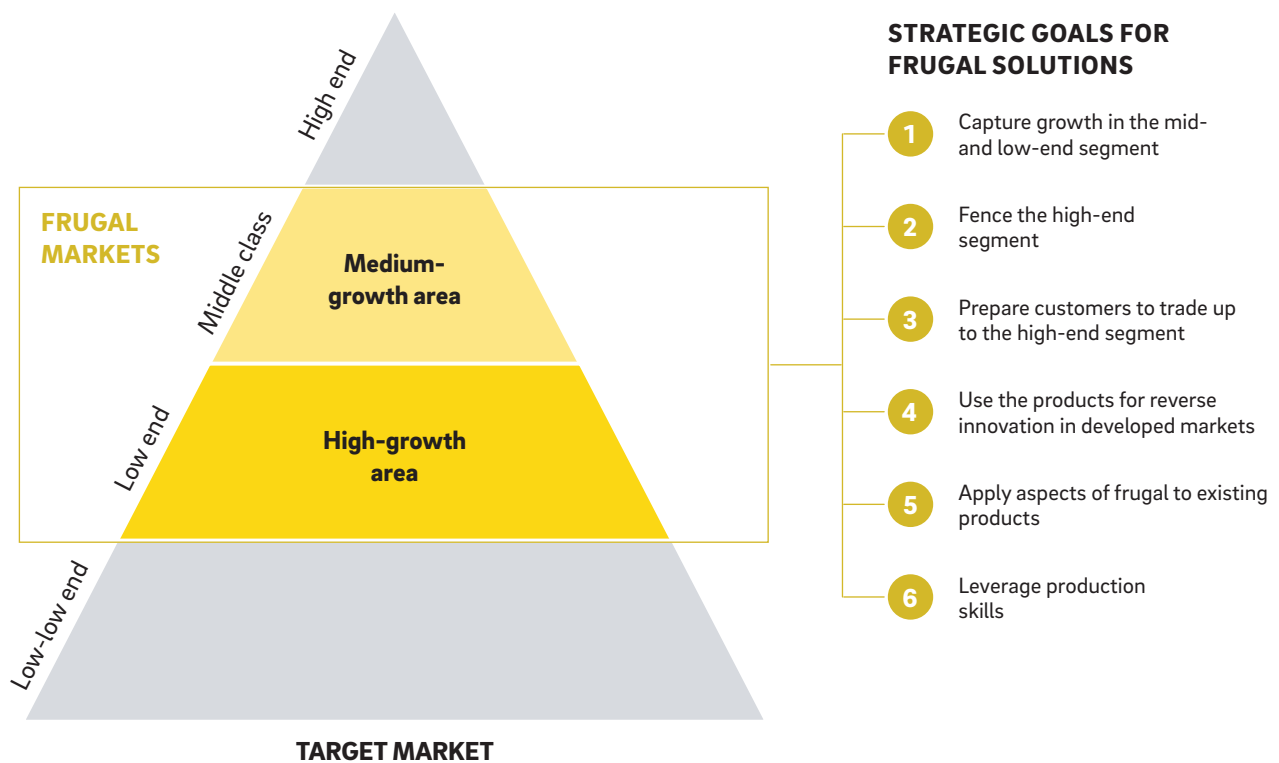
The term originates from a real incident. In the Piper Alpha disaster in 1988, workers were faced with the decision to either remain on the burning Piper Alpha oil platform, which was sure to explode, or risk jumping into the North Sea 30 meters below, in the hope of being saved. The men who decided to jump into the unknown ultimately survived.

Experience shows that an impetus for change is successful if it is supported by the company's top management, communicated transparently by top management to all employees and backed up with both rational and emotional arguments. That includes solid figures, market data, changing customer needs, competitors' advantages, new technology, and so on.

Companies should clearly identify the alternatives, and the reasons why they are undesirable. This is the only way to ensure that employees understand how everything fits together and are prepared to support and implement even difficult decisions. Companies that create a burning platform for themselves early enough still have the chance to decide what action to take. Those that hesitate are ultimately forced to act, and run the risk of finding it hard to catch up, or missing the boat entirely.

C: Strategic intent.

Clarity is needed over the management's strategic goal. This is what determines the first steps.



ROLAND BERGER PERSPECTIVE

- Understand the strategic intent**
- Derive implications on priorities**
- > Price
 - > Volumes
 - > Profitability expectations
 - > Management support

STRATEGIC INTENT

Once the company has identified and named the challenges, the next step is for it to formulate the strategic objectives for the frugal solution – its strategic intent. →  The key question here is what exactly the management is hoping to achieve with the changes that it makes, and which direction the company plans to develop in. Is the aim of the initiative:

- > To develop new business segments, in other words, to capture growth in the mid- and low-end segments?
- > To protect its product portfolio in the high-end segment by occupying the segment directly below (fencing)?
- > To counter or stay a step ahead of initiatives by the competition in emerging markets?
- > To lower the entry bar for new customers in order to lead them to higher-quality products later on (trading up)?
- > To introduce the newly developed solutions in the home market too, in order to capture new target groups (reverse innovation)?

In short, what makes developing the frugal solution meaningful or necessary even? Above all, what will happen if the opportunity is missed? It is also essential to understand how the decision will affect the company, in other words, what are the implications for employees and workflows?

To answer these questions, you need to be aware of what your fundamental priorities are for the project. Should the project turn a profit as soon as possible? Or is it a long-term strategic investment?

DEFINING YOUR TARGET MARKET

Defining your target market is important because it limits the complexity of the project. This process involves two steps:

1. Choose a single regional market. This allows you to shape the requirements of the market and customers as homogeneously as possible, and to avoid too many trade-offs in your proposed solution. Unlike in the premium segment, where the same product can be sold successfully across borders with only minor alterations (for example, the Mercedes-Benz S-Class), in the lower and middle market segments, customers' needs vary significantly between markets. Sometimes variations also arise within a single market, as these markets are not as homogeneous as their Western counterparts. Choosing a single regional market enables you to make plans with a manageable number of stakeholders in mind.

2. Understand the market mechanisms. This includes price thresholds, growth rates, brand relevance and customers' key criteria for product selection. It is also advisable to identify the main competitors in your selected segment and find out what their strategies are – and how those strategies are likely to change in the future.

Clear strategic objectives that define the target market have a significant impact on implementation. They set a direction that all the company's employees can then orient themselves toward.

BEST PRACTICE (1)

The family-owned company **REHAU** from Upper Franconia in Germany and the Swiss startup **Power-Blox** followed the principles described to successfully open up new markets with innovative product solutions.

REHAU has developed a cost-effective, scalable solution that enables the families of Kenyan farmers to prepare a hot meal every day. Their micro biogas plant, marketed under the name REHAU HomeGas, provides a steady gas flame for cooking, without the use of firewood. Twenty-five liters of water a day and the same amount of cow dung are used to ferment the micro-organisms into biogas. The resulting material can also be used as an organic fertilizer to boost crop yields. In 2014 REHAU received the German Ideas Award for its innovative product.

Swiss startup **Power-Blox** has come up with a solution to a fundamental problem in Tanzania. In many parts of the country, shopkeepers, service providers and non-profit organizations have to cope with the lack of a public electricity grid. In the past, the solution was to use generators, which are costly to operate in terms of fuel and also damaging to the environment. Alternatively, they could use unreliable systems that frequently broke down. Power-Box's solution is a compact, environmentally friendly system that can be used even by people with no technical experience. A single Power-Blox energy cube with a solar panel generates enough energy to run a small refrigerator, three LED lamps and a cell-phone charger. In 2014, Power-Blox won the Axpo Energy Award. In 2015, for an earlier version of the product, the company received the UN National Energy Globe Award of Tanzania.





Section 3:

Product development, market and customers

Companies have many methods at their disposal to come up with a frugal solution – in theory. In reality, some of those methods are simply too complex. The main thing is not to lose sight of your customers.

The key components of successfully developing a frugal product are fundamentally understanding your customers, clearly defining the product benefits, and calculating the optimum price point. Companies can only create solutions for new target groups when they understand how their customers in emerging markets live, how and in what situation they use the products, and what the reasons for this are.

ANALYZE YOUR MARKET AND TARGET GROUP

Who are your typical customers? Will they use the product for personal or professional reasons? How will they use it – carefully, or in such a way that you need to make it highly robust? In what situation and environment will the product be used? Inside or outside? Where there is a high level of humidity, a lot of dust or an intermittent power supply? Which product characteristics are essential and which are not? What price are customers prepared to pay for the product? In what volume will the product be needed?

The more accurately these questions can be answered before the start of development, the greater the chances of success later on. The solution that the company develops will be tailored to the market and target group. At the same time, it will stand out from existing products from competitors, and the functions, features and performance that those products offer.

To be successful here, simply relying on market analysis is not enough. Rather than offering standard solutions, product managers and developers need to develop their own vision of the target market, interacting directly with potential customers, observing their daily routines and asking them what they really want in a product. Ideally, basic market research should be backed up by project teams who observe customers in their home environment, learn to recognize their pain points and can accurately assess the requirements that a new product specifically designed for these user groups need to meet.

In our experience, getting the positioning right is also important for another reason: It takes into account the possible impact on the company's home market in the case of reverse innovation. This is where a similar product, especially developed for emerging markets, is introduced on the domestic market later on. Here, the latter product will need to be properly separated from the rest of the portfolio in order to avoid a cannibalization effect.

PRODUCT DEVELOPMENT

The actual product development process follows a number of basic principles. Companies should adhere to these principles closely so as to maintain the right focus.

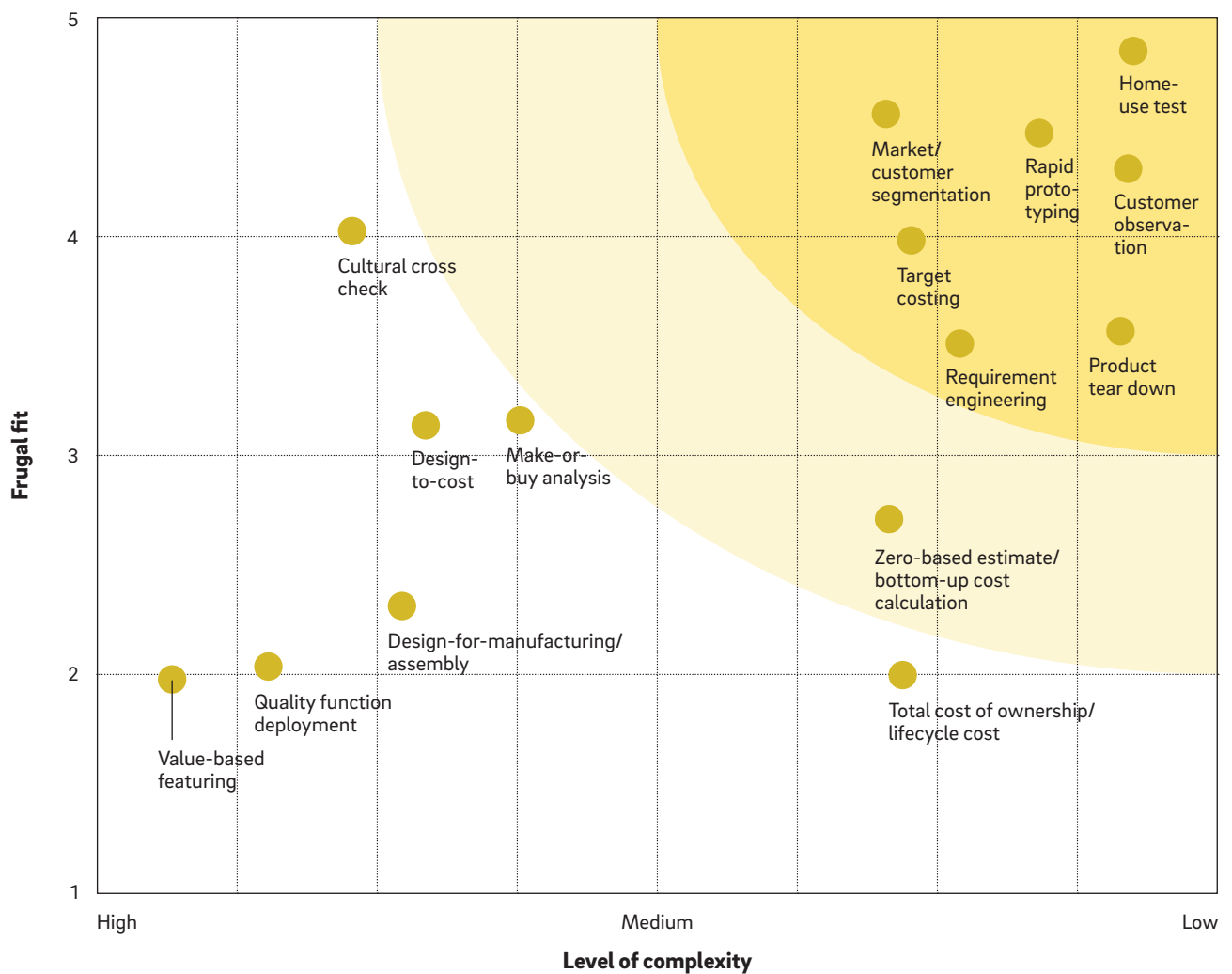
Don't reduce, innovate: Simply taking your existing products and reducing their scope or performance so you can sell them at a lower price is not a recipe for success. Frugal products need to be specially developed from scratch for the customers in your new target market. The basis for this should be a careful consideration of the total cost of ownership and an understanding of the key cost drivers. Ambitious price targets generally require radically new product designs and a completely new product architecture.

Be open to new approaches: A creative approach and the courage to fundamentally rethink existing ideas are essential. In a Scrum model, the approach is continuously adapted while in process, in line with unforeseeable challenges. Design-driven product development can help keep subsequent costs during installation as low as possible. If you know what hurdles you need to overcome – and they may be hurdles that you yourself have set – it will be easier to overcome them and set new standards.

Find the right team: Employees who can lead a project to success not only need the necessary technical expertise,

D: The best methods of frugal product development.

Sometimes traditional methods are better. A joint assessment by Roland Berger, the University of St. Gallen and industry experts.

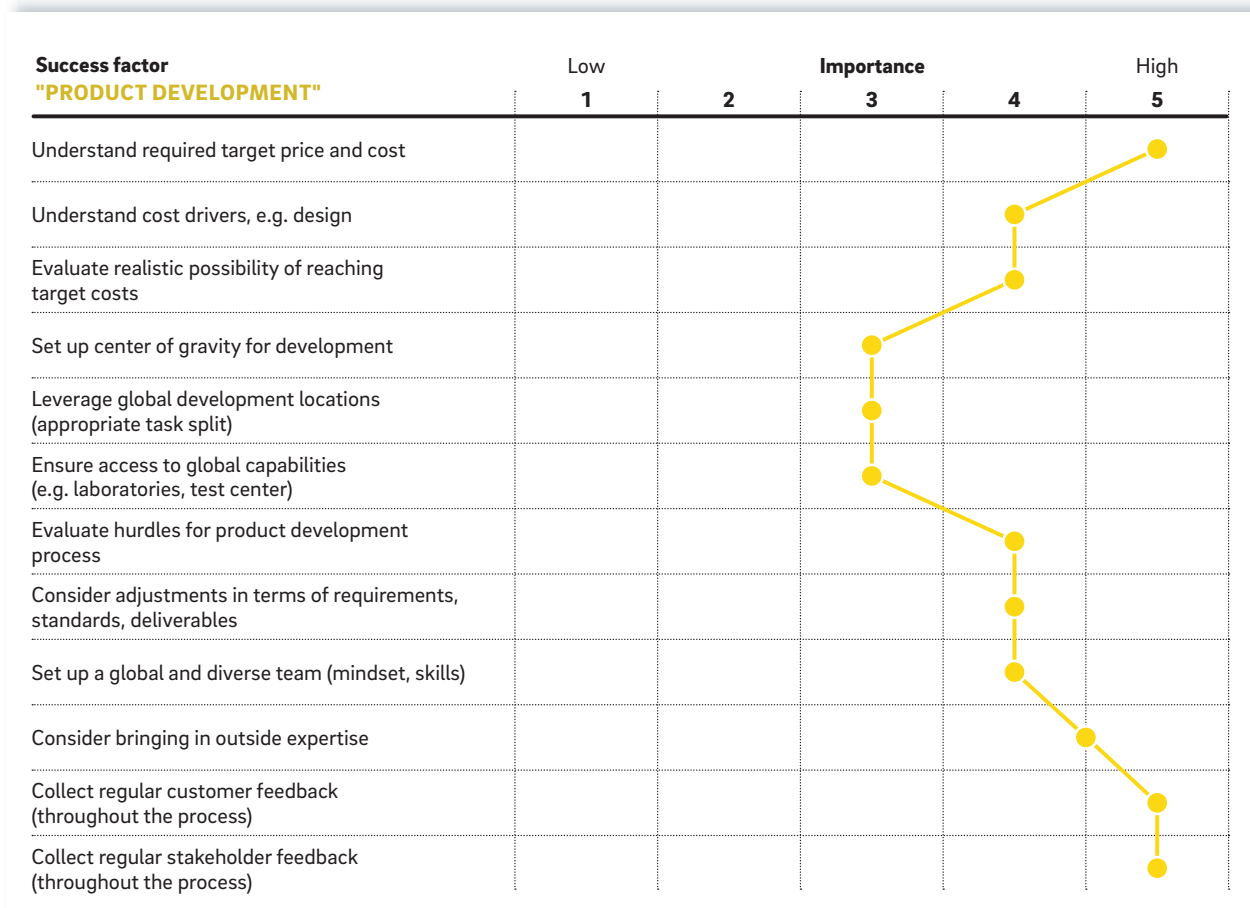


■ First-priority methods for frugal product development ■ Second-priority methods for frugal product development

Source: Assessment by participants in the research project "Frugal Innovation"; Roland Berger and ITEM

E: Our product assessment framework "Value creation for frugal solutions" demonstrated for the product development process.

"Product development" is one of the 16 pillars of our approach, which includes 80 success factors.



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BEST PRACTICE (2)

When developing its micro biogas plant, REHAU looked closely at the **everyday life** of its target group in Kenya, namely households of five to six people from a single family, living in the countryside and raising cattle. This group represents well over half of the country's population. From **interviews**, the company learned that many of these families mainly use firewood for cooking, which produces a lot of smoke inside the house, leading to respiratory problems. In addition, the firewood has to be collected first, which leaves children and young people with less time for schoolwork.

The REHAU HomeGas eliminates these problems. The families live more healthily, have more time and an additional incentive to buy more cows. Selling surplus milk and the gas that they do not use themselves opens up a new source of income for them, and can improve their livelihood in the medium term. The REHAU HomeGas is also good for the environment, because less CO₂ and methane are released into the atmosphere and less clearing for firewood takes place.

The **product design** is fully aligned with users' requirements. It uses robust materials that are heat resistant. The system is designed to be transportable and can be moved about by motorbike. It is priced at appr. EUR 500, an affordable level for Kenyan farmers, equivalent to the price of two or three cows. The investment pays for itself in two to three years.

Power-Blox is also geared closely to the **needs of the market**. The Swiss startup partly achieved this by involving experts in local culture, in order to achieve the best possible customer understanding. The product idea came from engineers who

had seen the disadvantages of established solutions first hand while working on energy projects in Tanzania and Kenya. This led to an initiative to construct a modular system, for which all the electronic parts were specially developed. The energy cube can use lead-acid or lithium-ion batteries depending on requirements and the **economic context**.

The system can be scaled up as necessary. This means that investments already made by customers do not go to waste if their energy needs increase: Instead of buying a new system, they can simply plug several cubes together, each cube adding a further 200 W and 1.2 KWh of storage capacity to their grid. If necessary, third parties can hook themselves up to the grid and draw power from it too. Unlike current systems, Power-Blox is self-regulating. Each new cube makes the network more stable. Setup only takes a few minutes, and the system itself is straightforward to take apart and move to a different location.



Image: Rehau AG

they must also be open to new ideas and have the right mindset. Companies are well advised to put together as diverse a team as possible, using employees from different backgrounds, in order to promote innovation. They should identify what knowledge already exists within the company, and involve the local branches, if there are any, in the product development process. If necessary, they can also call in experts from outside the company.

Think locally: In many cases, it makes sense to locate parts of the development process in the target market itself, provided that this does not restrict access to employees with the necessary specialist skills, or access to technical facilities such as laboratories and test centers. It is also important to allow employees to make autonomous decisions at key points along the development process, so that the agility of the process is not compromised.

Ensure constant feedback: The company should evaluate the work steps on the basis of feedback from the target group, not only at the beginning of development but constantly throughout the process, making use of agile methods. Regular tests by users and customer feedback are the only way to avoid developing the product in the wrong direction. Equally important are assessments by other stakeholders, such as retail partners, official bodies or other sections of the company.

Section 4:

Production, supply chain management, logistics

From purchasing to logistics: Business processes must be simplified to make the company as flexible as possible and use resources optimally. Quality must also be redefined.

Successful product launches require a functioning value and supply chain. In the case of frugal innovations, these need to be adapted.

Companies must test and adjust their **quality standards** as necessary, otherwise there is a risk of blindly transferring experience gained in the West. It is a good idea to establish a company-wide minimum standard to protect the brand and meet customer expectations. Reducing existing quality standards saves on costs, but other factors in the local environment must always be taken into account.

In the area of **procurement**, companies should identify potential local suppliers as early on as possible and, if necessary, use local people to help with acquisition. Experience shows that the criteria for selecting suppliers often have to be more flexible than in the home market. Care should be taken to ensure that partners can rapidly expand their delivery capacity so that the project can be scaled up if necessary. It is also advisable to involve partners in developing potential solutions right from the outset. However, it is important that these partners understand the target costs for the product. It may also be worth trying out new models of cooperation, for example, giving suppliers investment guarantees.

Assembly of components should generally take place as close to the target market as possible. However, it may be necessary to use a global production network, for instance, where the necessary specialist know-how or IT structures are not yet sufficiently developed in the target market.

Efficient production is more important than lean production. With this in mind, it may be advisable for companies to simplify standards, not set too high an automation level, and allow manual work. It may also be worth using older, reconditioned machinery to quickly achieve the desired production capacity. To keep the investment at a manageable level, individual work steps can be outsourced.

Frugal products also need smooth value and supply chains. But these have their own rules.

Efficiency is critically important for **logistics**, too. Cooperating with local partners is a good way to make use of existing structures. Modern technology can also help save costs through targeted planning (e.g. real-time demand signals, digital inventory control, and increased connectivity with partners and suppliers).

Section 5:

Branding, go-to-market and service

A frugal product solution must include an overall concept in which a detailed brand strategy creates the basis for successful market entry. In this way it is possible to reinvent the brand.

A frugal product solution must include an overall concept in which a detailed brand strategy creates the basis for successful market entry. This is borne out by our experience supporting projects for clients. Time and again, we find that the right strategy depends critically on the specific business objectives and the level of brand awareness in the targeted culture or customer segment.

THE RIGHT BRANDING STRATEGY

To identify the right branding strategy, you first need to understand your future customers' criteria when it comes to purchase decisions. How do they perceive brands? What specific advantages do they attribute to them? And what potential hurdles exist for branding?

Chinese consumers, for example, when buying products whose technical performance is difficult for ordinary people to assess, are strongly influenced by established brands. The brand functions as a lighthouse. Established brands are also a status symbol in China. By contrast, where products from many different manufacturers coexist that are very similar to each other or in close price competition, the relevance of brands for the purchase decision drops significantly.

Companies that understand this can reinvent their brands for each new target group. But there are risks. In markets where Western brands have only been available for a few years, a product benefit that is firmly established in the home market, such as the longevity of the branded product, may be significantly undervalued in the local market. In this case, the company will need to re-communicate this aspect of the branded product.

TARGET-DEPENDENT BRAND ARCHITECTURE

Companies have a number of options available when it comes to choosing a suitable brand architecture.

Single-brand strategy: Concentrating on a single brand is the recommended strategy where the company plans to

address different customer segments with different products. In this case, the company uses different product lines for different markets, but all its products bear the same brand name (blue line, yellow line... for example, Georg Fischer).

Two-brand strategy: Alternatively, companies can use two different brand names, each targeted at a different market and functioning independently of the original brand, to avoid the risk of cannibalization. The reverse is also possible, with the company actively drawing attention to the fact that the different brands are part of a bigger brand family – "X is a Y-company brand", as with Caterpillar/SEM, for example. In this case, the independent brands benefit from the values attributed to the original brand.

Brand cooperation: In markets where trust and familiarity play a major part in purchasing decisions, it may be useful for the company to cooperate with an established brand, leveraging its positive image. This is possible, for example, where the company offers a complementary product, such as with gas cookers and gas cartridges.

Whether it makes sense to establish a standalone brand depends on the company's objective. If it is aiming for immediate profitability in the new market segment, this is a suitable strategy. However, it may be aiming to position the product as an entry point into its brand world. Here, the long-term goal is to build up a broad customer base that is then directed toward higher-quality products (up-selling). In this case, the company should establish a brand with the lowest possible entry threshold, in other words an "escalator" brand.

MARKET ENTRY AND SERVICE

Who are you selling to? Which are the best channels for reaching your customers? How can you promote the new product? A clearly formulated go-to-market strategy is a prerequisite for successful market entry. This strategy must take into account all aspects that are critical.

That means not simply relying on known distribution channels, but exploring new avenues for putting the product where customers will find and buy it. Cooperating with local partners generally plays an important part in this process. By working together with such partners, the company can access whatever distribution channels already exist among the population.

In some cases, this can even mean companies abandoning their usual sales channels and considering replacing them with entirely new ones (e.g. door-to-door sales). Alternatively, companies may choose to work together with organizations that have not been traditional business partners in the past, but are strongly anchored in a particular region, offer valuable knowledge of its social infrastructure or are in regular contact with potential customers.

Last but not least, companies need to ensure the long-term success of their product by supporting it with intelligent services. To do this, they must know what customers expect the lifespan of the product to be, and whether customers are willing to have the product repaired if it breaks down or would prefer to buy a new one – something we often find to be the case in emerging markets. Thus, for many customers, the cost of buying a new product is more important than its average lifespan.

Instructions for assembling or repairing the product should be as simple as possible. Pictograms, for example, are universally understandable. The company must also pay attention to environmental factors (e.g. high levels of humidity, prevalence of insects) to ensure that enough of the right spare parts are available.

Outsourcing sales or services to local service providers in a carefully controlled manner can also be useful. If the company chooses to go down this avenue, it must make sure that its partners receive appropriate training and are brought up to the company's standards.

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BEST PRACTICE (3)

As a startup, **Power-Blox** is initially focusing on establishing its new brand with a single-brand strategy, developed with the help of an intercultural team. In the medium term, the company plans to launch several different product lines, each with a different look, serving different customer groups. During the market entry phase, the focus was on working closely with local partners in the target countries. These partners were chosen through a clearly defined due diligence process. Products are sold via wholesalers, resellers, project partners, non-governmental organizations and others. In Europe, Power-Blox also has a direct sales force, but it rejected this solution for developing countries because building up the necessary knowledge about local market conditions and regulations would have been too complex. The firm also leaves most of its services to its trained partners so as not to enter into direct competition with them. Today, more than 1.5 billion people around the world have no access to electricity. "Our goal is to change that," says the company.

At **REHAU**, branding, go-to-market and service played an equally important role in the development process. The company works with Jomo Kenyatta University of Agriculture and Technology (JKUAT) near Nairobi for the purposes of local marketing and quality control. Since early 2016, the micro biogas plants have been manufactured directly in Kenya ("Designed in Germany, Built in Kenya, Made for Africa"). The REHAU HomeGas is sold via local supply centers and workshops, which also employ JKUAT-trained installers. The REHAU brand, featured in the company name, stands for the technical know-how of the developer and functions as a kind of quality seal. The company estimates that the solution is suitable for around three million households in Kenya alone.

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Section 6:

Requirements and structures

Are frugal innovations most successful within the traditional company or outside of it? It depends. Both paths can lead to success.

To gain a foothold in new markets and acquire customers, companies have to identify the opportunities and risks, and launch a systematic product development process. This will only be successful if the change is firmly anchored within the company.

What does this mean for the company's organizational structure and governance?

Option 1: Create a separate organization. In this approach, development work on the frugal product is carried out independently, away from the main business, in order to avoid potential (structural or political) conflicts with the established business segments. This means locating the work in a separate business unit within the corporation, or forming a new startup, as in the case of Power-Blox. Following the successful market launch of the product, the company can gradually integrate the unit or separate company into its existing structures in order to exploit synergies. For example, Indian automotive company Tata had the Nano developed by a young team acting independently of the group, without the "ballast of decades". When production began, Tata then brought the project into the group.

Option 2: Develop the product within an existing organization. A close connection with the parent company has the advantage of allowing newly developed business segments to profit directly from existing know-how within the company. This was the approach taken by Danish pump manufacturer Grundfos in countries such as Kenya with its Lifelink water solutions, which dispense water automatically depending on the amount of credit on the user's smartcard. The solutions were designed by a separate team within the company, supported by the company's existing departments. REHAU also developed its micro biogas plant for the Kenyan market within its existing structures. As

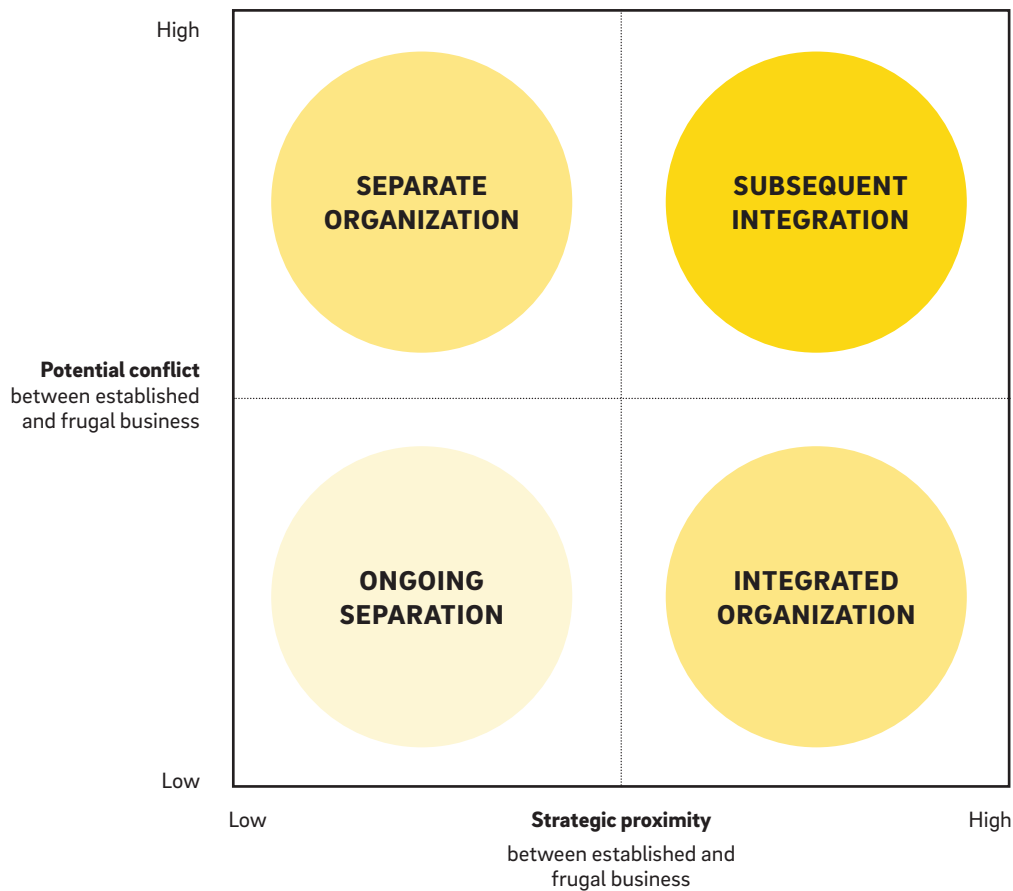
Sometimes employees see frugal innovations as inferior products that harm the company's reputation.

This misunderstanding must be avoided.

soon as a certain level of market penetration is achieved, the company can consider making the unit independent. In addition to the question of formal implementation, various models are possible for organizing the innovation process internally. These models depend greatly on the company's specific culture. The model can be used to steer where the main impetus for renewal comes from, and who ultimately is the driving force behind it: top management and the owners (top-down)? Employees and middle management (bottom-up)? Or external actors such as market researchers, customers and suppliers? In a pyramid model, the development of new products and services is carried out in very small teams. In a senior management model, the changes are initiated by the top level of management. In a collaboration model, all the employees in a company are involved in the innovation process.

F: A separate unit or integrated into the organization?

Anchoring frugal development within the company.



► **Frugal businesses...**

... can be started in a separate unit and then gradually integrated when they achieve a certain level of maturity, to exploit synergies

... can be started within an existing organization and then gradually separated off when they achieve critical mass, to avoid potential conflicts.

CHANGE MANAGEMENT

Frugal innovation presents companies with a multitude of challenges, calling into question their fundamental assumptions and established structures and processes. Having a clearly structured change management process is therefore extremely important. Effective change management begins with creating a burning platform, as we saw above, and identifying everyone participating in the planned process who should be involved in the development process. The basis for the subsequent project start is then provided in a detailed roadmap, which covers all the different steps.

What's equally important is to take into consideration right from the beginning any concerns from the workforce, such as worries about possible job losses, respond to them and communicate internally any decisions made on an ongoing basis. Companies must pay attention to both hard factors (e.g. KPIs) and soft factors (e.g. employees' fears).

Conflicts can arise if the workforce see frugal innovation as inferior products that could harm the company's reputation as market leader or a high-tech company. The company must take steps to avoid this misunderstanding. It must clearly communicate that the objective is to develop product solutions at affordable prices, for which there is demand from clearly defined target groups, thereby opening up new markets for the company.

Companies need to create a climate in which their best employees are motivated to use their energy to drive the innovation that the firm aspires to. They can do this best by ensuring that the project is perceived correctly. Their focus must be not lower costs, but the idea of a clever, well-thought-out solution that requires sophisticated engineering ("*simply a smart solution*"). Ideally, the workforce should see it as a challenge to put themselves in their new customers' shoes and design a product that meets their requirements exactly. In this

way, the lower price tag becomes a pleasant side effect rather than the main objective.

Tailored to the objectives and competencies of the company, this framework is suitable for identifying the key steps for developing a frugal product solution and translating them into a structured process. Successful frugal product solutions deliver sales growth. They enable companies to venture into new market segments and help ward off potential competitors – even in their home markets.

Imprint

WE WELCOME YOUR QUESTIONS, COMMENTS AND SUGGESTIONS

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For half a century, Roland Berger has helped its clients manage change. Looking at the next 50 years, we are committed to supporting our clients conquer the next frontier. To us, this means navigating the complexities that define our times. We help our clients draft and implement responsive strategies essential to success that lasts.

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