



Frugal Innovation – a manual

**Can you create
new value for users
– without increasing
costs?**

**Can you expand your
market by offering
solutions that are
affordable to far more
customers?**

FACTS

Companies are increasingly challenged by demands for greater value and lower costs. If companies can develop more frugal solutions, they can renew their relevance to the many customers who have become more concerned with prices – and they will be better equipped to thrive in the market segments that are set to drive the global economy over the coming years.

Price pressure

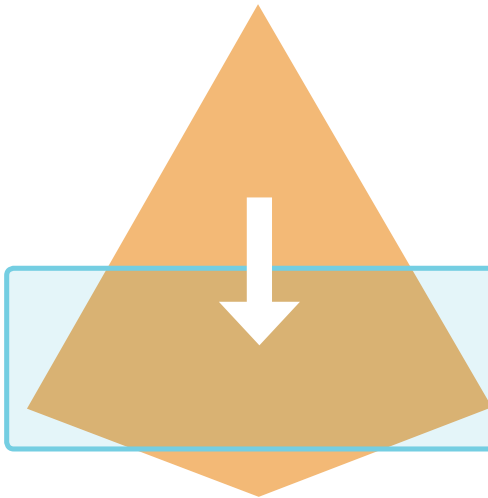
Many established companies have succeeded by developing increasingly sophisticated and high quality solutions. As prosperity increased, consumers raised their demands for quality, functionality, convenience and experiences – and companies competed by developing ever new functions and entirely new categories of consumption. Prices increased, but the customers could afford it.

Now, there are clear indications that many companies will need to rethink and develop their offerings in an entirely different direction, if they wish to remain relevant to the future growth markets.

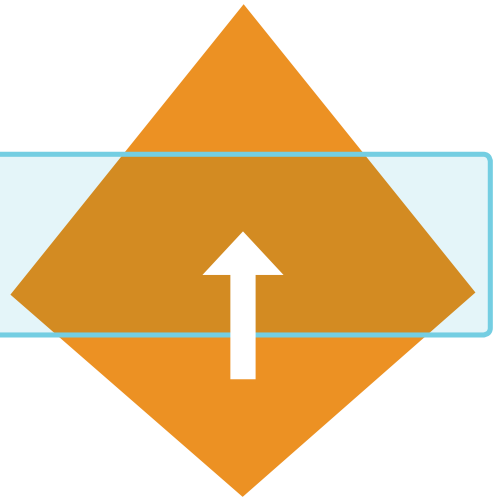
Economic growth in Western countries has stagnated and in many regions, the economy is in serious crisis. Consumers are under pressure and reluctant to spend, and public budgets have been reduced. The result is that the middle segment of the market is increasingly squeezed as more customers are buying cheaper solutions than before.

The emerging markets, meanwhile, are growing rapidly and hundreds of millions of people are moving up into the booming urban middle class. The demands of these consumers, however, are for much lower priced solutions than what Western companies can typically provide.

In mature markets there is increasing demand for low cost solutions



In emerging markets consumers can afford to buy more products – but at low price points



Financially strapped consumers want solutions that offer “need to have” functionality at an affordable price.

The problem is that many established companies are used to competing by offering “nice to

have” features. A company which normally sells to the high-end or mid-market may discover that for a large portion of the customers the product features and qualities that usually make these products stand out are not strictly necessary or worth paying extra for.

When growth is driven by sales in the lower priced segments of the market, it puts pressure on many companies in two important ways:

1. Revenues in the high end of the market will fall or stagnate, but the companies have difficulties developing new solutions that are more attractive to the low end of the market.
2. At the same time, the biggest and best companies from emerging markets will continue to spread to the Western markets. We will see many more global brands from China, India and Brazil, and the products they sell will be developed from the perspective of countries, where it is quite natural for customers to look very closely at the price.

All in all, it is urgent to find ways for western companies to adapt their offerings to what is demanded in the markets now and in the future:

Frugal solutions that meet the needs of users at a much lower price.

Doing the same, but in a cheaper way, is not enough

Creating frugal solutions is not about producing the usual items in the cheapest quality you can get away with. Companies in the developed countries with high labor costs cannot compete on making things poorly.

To produce inexpensively and effectively is obviously an important precondition for achieving attractive prices, but it is not sufficient. Rather, companies must compete by adding value for the end user in new ways that do not increase costs.

It is an important point that the goal is to create frugal solutions – not individual products. The value for the user lies not only in the individual physical product, but also increasingly in the services and systems, which the product is part of. This implies that companies should explore how to deliver additional value for customers through better services and new business models.

Boliga – Sell your house online

The Danish website, Boliga, has spent years systematically developing modules that make it easy and safe for individuals themselves to carry out the various tasks that real estate agents usually take care of, such as taking presentation photos, providing a technical status report, preparing a purchase contract, writing deeds and showing the house to prospective customers. Normally, the fee of the real estate agent would be in the range of 7-12,000 Euros. By involving users, Boliga has reduced the price of a house sale to about a tenth of that cost.



Use the toolkit of concrete methods and examples



The Universe Foundation has assembled a toolkit with ten methods and approaches that can challenge and inspire businesses that consider developing products and solutions, which are cheaper and aimed at a broader market than usual.

The ten tools are not a *one-size-fits-all* method, but rather a collection of quite different approaches that can be combined and used depending on the type of business involved

The toolkit consists of 10 methods:

- **Lower the cost threshold for acquisition**

- for example, by dividing the solution into smaller units. This allows customers to start small and expand as needed.

- **Economies of scale to achieve low unit prices**

- Distribute the costs for production equipment, development, design and marketing over a larger customer base. Opt for low profits per customer – but in large numbers.

- **From sales price to total cost of ownership**

- Use business models that make lifetime savings on operation and maintenance visible to the buyer. Sell services and access to functionality, rather than ownership of products.

- **Match idle capacity and needs**

- Often there is unused equipment or skills available that could be exploited inexpensively if only the parties could find one another. One man's waste can be another's resource.

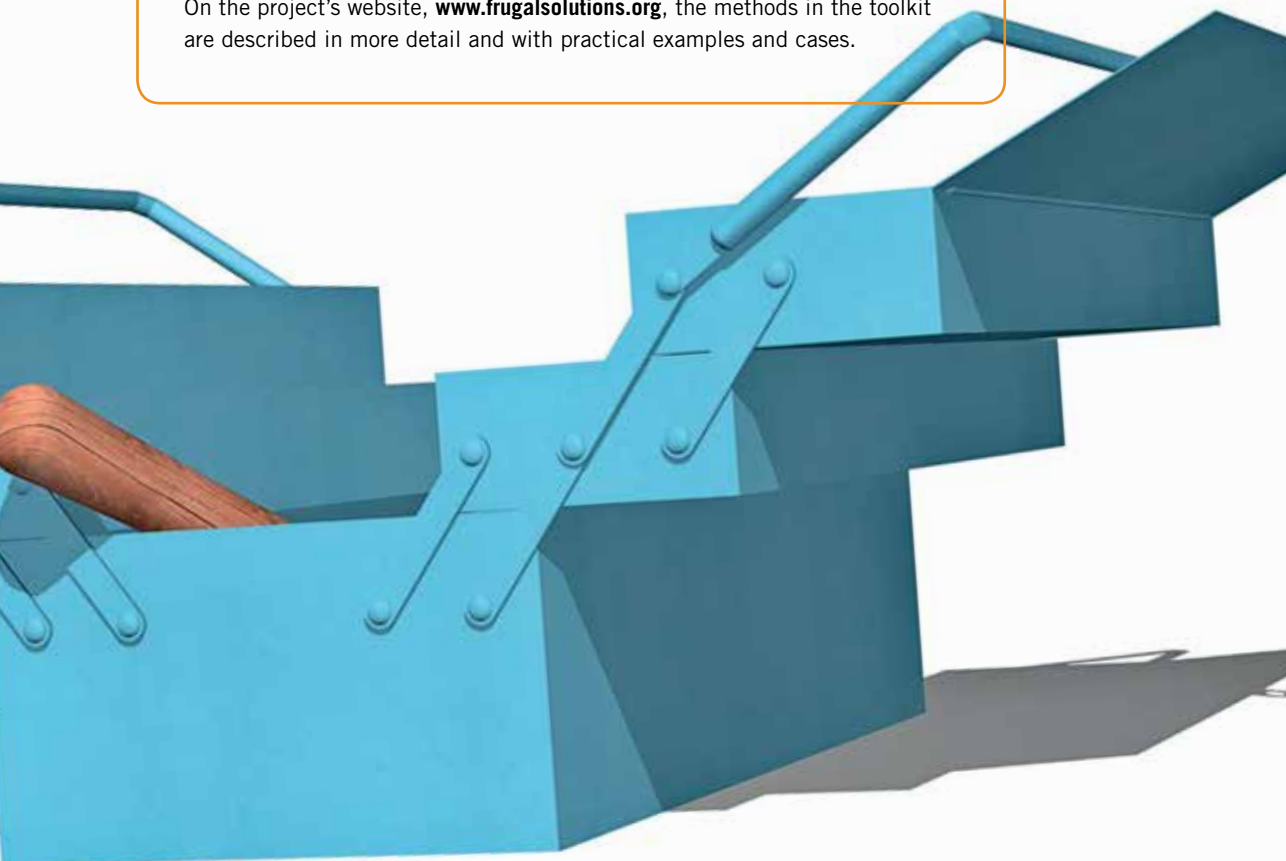
- **The best brains are outside the company**

- Take advantage of external knowledge. Often users are experts themselves and would like to participate in designing the solution. It is expensive and risky to develop everything yourself.

Need for a different mindset

What's these approaches have in common is that they all involve changing the mindset. If a company really wants to offer frugal solutions, it will typically require quite fundamental changes. The usual business model, the interaction with other companies and the relations to end-users may have to change. Not least, it will require a new understanding of how to deliver quality and utilities based directly on the users' real and basic needs.

On the project's website, www.frugalsolutions.org, the methods in the toolkit are described in more detail and with practical examples and cases.



- **Simplification of products**

- Fewer parts, fewer different materials, fewer redundant functions, fewer sources of error.

- **Allow consumers to do some of the work**

- Many would spend a little more time if they can save on the price. Create processes that make it easy and safe for customers to participate in value creation.

- **Start with market needs**

- Companies often develop technology and new features before users have requested it. When price is important, one should focus on meeting existing needs in a less expensive way
 - not on developing additional, more expensive features.

- **Create synergy and connected systems**

- Integration and interaction with other products and the use of existing infrastructure can create greater value than individual products. Choose the most widely used standards and technologies.

- **Use bits to save atoms**

- Do not sell hardware, if you can make do with software. Sensors and analysis of data provide greater accuracy and efficiency. Sales and service can be automated online.

GE – only the essentials

Thanks to a thorough understanding of their clients' circumstances, GE Healthcare in Bangalore, India has managed to simplify the company's expensive medical equipment, which was originally developed for the Western market. Removing everything, but the essential has allowed GE to cut prices to a level that makes it accessible to customers in India; and at the same time, the equipment continues to meet all international standards for medical devices. GE's approach is an example of Jugaad, the Indian approach to innovation that is driven by the need to overcome scarcity.



It's obvious – but hard to do

Thinking in terms of frugal solutions does not come naturally for most Western companies. So far, there are very few examples to learn from.

It's hard to see the Western economies returning to the same kind of growth and demand that we came to expect in the years before 2008. There are a number of long-term challenges for the economy: an aging population, high debts, rising prices of resources and energy, and an overall shift of economic activity towards the emerging markets, especially in Asia.

Apparently, Western companies find it difficult to react offensively to this development, although it is likely to have significant consequences. Creating frugal solutions could lead to new opportunities in relation to the fastest growing markets – while staying with business development as usual threatens to leave companies in a stagnant niche position.



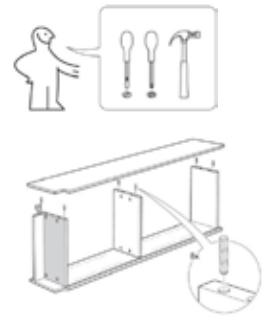
Car sharing – greater flexibility, lower cost

Car sharing solves users' transportation needs by selling users access to a pool of cars, parking lots, discounts on fuel, etc. In large cities, users can save money, avoid a large initial investment, get rid of the hassle of maintenance and have access to different types of cars.

Car sharing is one of a number of examples of online services that make it easier and more efficient to match available resources and needs, and also replaces the sale of products with the sale of access to services.

IKEA – democratic design in flat packages

In contrast to the traditional furniture industry which delivers fully finished furniture to customers, IKEA has made good design accessible to far more customers by systematically removing the labor intensive elements of assembly and delivery, and leaving it to the end users to create value. Customers pick up the product in the stockroom, they check out at the register, transport the boxes home and even assemble the furniture themselves.



Frugal solutions for elderly

Financially squeezed elderly are probably the group with the greatest need for frugal solutions. Elderly people typically need more service and special solutions. In particular, there are large requirements for care and medical treatment, but transportation, housing and access to IT are also areas that can require additional resources to meet the needs of elderly.

Often, elderly people have only saved enough for the bare necessities in their retirement and unless they can find new solutions for meeting their

needs, many will suffer deprivation in a difficult period of life.

The current standard of social coverage in welfare states such as Denmark will be difficult to maintain in the future – unless new ways of delivering value at a lower cost are developed. For companies, which are able to develop such frugal solutions for the elderly, the market is global and rapidly growing as the proportion of elderly in the population is increasing in virtually every country.

4 potential growth markets for Danish companies

In particular, there are four areas in which Western companies could consider developing frugal solutions:

Welfare and health services.

The aging population will put tremendous pressure on public finances, and both public and private providers of services will need to develop much less expensive ways of solving the needs of elderly people in the coming years.

Neighboring export markets.

Western companies typically export mostly to neighboring markets – which also have very low growth and where an increasing proportion of the population is economically squeezed. Western consumers are seeking cheaper solutions.

Eco-friendly and resource saving solutions.

Rising prices for energy and raw materials and an ever-tighter regulation of environmental impacts will mean that solutions that are frugal in their impact on nature have fewer costs.

The urban middle class of the developing countries

is the fastest growing part of the global economy. They have a great desire to acquire products that make their lives more comfortable, but they have far less money available than the customers that Western companies normally sell to.

Read more about frugal solutions at www.frugalsolutions.dk

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