FRUGAL products

Study results

Stuttgart, February 2013
Management summary

> **FRUGAL** products are low- to mid-end products sold mainly in emerging markets. They can be defined in terms of the attributes Functional, Robust, User-friendly, Growing, Affordable and Local and can be found in most industries.

> Based on a study of over 60 top managers, we identified key characteristics and success factors along the FRUGAL product value chain:

– Today, **FRUGAL** products make up 12% of the sales of the companies surveyed. Participants expect this share to almost double within the next five years.

– Less than half of all companies are satisfied with the current sales and profit success of their **FRUGAL** products – Room for improvement throughout the entire value chain.

– To successfully develop **FRUGAL** products, a tailored development and value chain concept is required – No "process as usual".

– Clear understanding of customer requirements is the most important success factor.
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<td><strong>B</strong></td>
<td><strong>The results:</strong> Companies expect the importance of FRUGAL products to increase further. Several success factors along the value chain need to be considered</td>
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<td><strong>D</strong></td>
<td><strong>The study:</strong> This study is based on a web survey as well as personal interviews with over 60 top managers from several industries</td>
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</table>
The background
FRUGAL products can be defined in terms of six basic attributes – Focus mainly on emerging markets

There is a rapidly growing market for low-/mid-end products, mainly in emerging markets.

Requirements differ from the more high-tech products of developed countries.

Source: Roland Berger
**FRUGAL** products typically exhibit characteristics that can be classified under a total of six attributes

### Definition of FRUGAL products

<table>
<thead>
<tr>
<th>ATTRIBUTES</th>
<th>DESCRIPTION</th>
<th>CHARACTERISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>F</strong> Functional</td>
<td>Product performance is mid to low, i.e. focused on key features</td>
<td>Low-low-end</td>
</tr>
<tr>
<td><strong>R</strong> Robust</td>
<td>Products are robust and maintenance-friendly</td>
<td>Robust/maintenance-friendly</td>
</tr>
<tr>
<td><strong>U</strong> User-friendly</td>
<td>Products are simple and easy-to-use (also regarding first-time usage)</td>
<td>Simple</td>
</tr>
<tr>
<td><strong>G</strong> Growing</td>
<td>Markets are growing and large production volumes enable economies of scale</td>
<td>High volume</td>
</tr>
<tr>
<td><strong>A</strong> Affordable</td>
<td>Products are low-priced and offer good &quot;value for the money&quot;</td>
<td>Low price</td>
</tr>
<tr>
<td><strong>L</strong> Local</td>
<td>Products are mainly sold in emerging markets and tailored to local requirements</td>
<td>Emerging markets</td>
</tr>
</tbody>
</table>

Source: Roland Berger
There are many examples for FRUGAL products – Relevance e.g. in engineered products, high-tech industry…

Examples for FRUGAL products (1/2)

**A** Ultrasound machine
- Small, portable, PC-based ultrasound machine for rural China, where it is sold for only USD 15,000
- Machine developed and produced locally in China
- By now, machine is also marketed in the United States pioneering new uses for such a machine and lowering health care cost

**B** X-ray apparatus
- Siemens entered Emerging Markets with cheap X-ray apparatuses
- Mass market with significantly higher volumes (> 1,000 pcs. p.a.) than established markets (approx. 100 pcs. for mid-price segment)
- Customized for local requirements (heat, humidity, power blackouts)

**C** Solar radio
- Mobile and robust solar radio
- Hand crank for charging radio if solar power is missing (1 minute of cranking suffices for 20 minute of listening)
- Thus, user is independent of electricity or batteries
- AM and FM reception
- Radio sold for EUR 12.50 to 18.50

**D** Chip X-Gold 101
- Mobile phone chip enabling "ultra low cost mobile phones" for Emerging Markets
- Improvement as compared to conventional chips is a single chip integration
- All functions embedded in one silicon piece
- Material cost reduction
- Reduced phone design effort

Source: Roland Berger
**Examples for FRUGAL products (2/2)**

<table>
<thead>
<tr>
<th></th>
<th>Knitting machine</th>
<th>Tata Nano</th>
<th>Danimal yoghurt</th>
<th>Annapurna salt</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>E</strong></td>
<td><img src="image" alt="Knitting machine" /></td>
<td><img src="image" alt="Tata Nano" /></td>
<td><img src="image" alt="Danimal yoghurt" /></td>
<td><img src="image" alt="Annapurna salt" /></td>
</tr>
<tr>
<td><strong>F</strong></td>
<td>Inexpensive, robust semi-automatic knitting machines produced locally in China for Chinese market</td>
<td><strong>Family transportation</strong> for Indian mass market as alternative to two-wheelers</td>
<td><strong>Yogurt enriched</strong> with vitamin A, iron and zinc</td>
<td><strong>Refined iodized salt sold in small, affordable sachets</strong> that would not last long enough to degrade in the sun</td>
</tr>
<tr>
<td></td>
<td><strong>Limited functionality</strong> in comparison to computerized machines, e.g. in terms of</td>
<td><strong>Improvements</strong> as compared to two-wheelers</td>
<td><strong>Launched in 2005 in South Africa</strong>, Danimal helps to fight malnutrition and to create jobs</td>
<td><strong>Improvement</strong> as compared to normal salt: <strong>iodine is only released when</strong> salted food is ingested</td>
</tr>
<tr>
<td></td>
<td>– <strong>Fineness</strong> (number of stitches per inch)</td>
<td>– <strong>Safe</strong></td>
<td>– 10% of sales are made by <strong>Daniladies</strong> who sell door-to-door in the townships, supervised by Danigrandmas, women with high level of education</td>
<td><strong>Special sachets</strong> are offered in 100 gram portions</td>
</tr>
<tr>
<td></td>
<td>– <strong>Speed and productivity</strong></td>
<td>– <strong>All weather</strong></td>
<td>– <strong>Yoghurt sold for EUR ~0.20</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>– Knitting range</td>
<td>– <strong>Affordable</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Roland Berger
**FRUGAL** products are positioned in the low- and mid-end segments where Western companies typically take weaker positions.

Key growth areas and positioning of Western companies

![Market Structure and Size Diagram]

**MARKET SEGMENT**
- High-end
- Mid-end
- Low-end
- Low-low-end

**MARKET STRUCTURE AND SIZE**
- DEVELOPED MARKETS
- EMERGING MARKETS

**TYPICAL POSITIONING OF WESTERN COMPANIES**
- High growth area: High
- Medium growth area: Medium

Source: Roland Berger
For instance, low- and mid-end segments of the global engineered products market are growing well above the world market average.

Global engineered products market[^1] [EUR bn]

<table>
<thead>
<tr>
<th>Segment</th>
<th>2010</th>
<th>2015e</th>
<th>CAGR 2010-2015e</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>High-end</td>
<td>152</td>
<td>199</td>
<td>+6%</td>
<td>&gt; High-end technologies are growing below world market average</td>
</tr>
<tr>
<td>Mid-end</td>
<td>183</td>
<td>298</td>
<td>+10%</td>
<td>&gt; Mid- and low-end technologies are growing above world market average – Driven by emerging markets as well as developed countries</td>
</tr>
<tr>
<td>Low-end</td>
<td>89</td>
<td>151</td>
<td>+11%</td>
<td></td>
</tr>
<tr>
<td>Low-low-end</td>
<td>64</td>
<td>61</td>
<td>-1%</td>
<td>&gt; Low-low-end technologies are drying up in the long run</td>
</tr>
</tbody>
</table>

[^1]: Stationary machines for discrete manufacturing without commercial HVAC; production volumes

Source: Roland Berger
**FRUGAL** products help boost product sales and increase contribution to EBIT

### Effects of FRUGAL products

#### Typical effects of FRUGAL products vs. "normal" products

<table>
<thead>
<tr>
<th>Effect</th>
<th>Product sales</th>
<th>Product EBIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-5 times</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5-2.5 times</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Examples

**X-ray apparatus**
- Estimated annual market volume in India
  - At a price of USD 100,000: ~10
  - At USD 50-65,000: ~100
  - At less than USD 20,000: ~1,000

**Mobile phone chip**
- Approx. 30% of the cost of a mobile phone is saved with this simple, single-chip solution
- Substantial market success with customers, e.g. LG, Nokia or ZTE (manufacturer for Vodafone)

Source: Roland Berger Research
B  The results
Respondents expect the share of FRUGAL products to almost double for their own companies within the next five years.

For their own companies, respondents expect the importance of FRUGAL products to almost double within the next five years, in terms of both sales and profit.

Importance of FRUGAL products within the industry of the companies surveyed is perceived to be already substantial, with an average 22% of sales. This share is expected to grow further over the next five years.

Source: Roland Berger study
Producers of FRUGAL products rate their own sales/profit performance below those of competitors – Less than half are satisfied

Today's success of FRUGAL products

<table>
<thead>
<tr>
<th>OWN COMPANY</th>
<th>INDUSTRY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales success</td>
<td>35%</td>
</tr>
<tr>
<td>Profit success</td>
<td>26%</td>
</tr>
</tbody>
</table>

> Less than half of the companies surveyed rate the sales success of their own FRUGAL products as high or very high
> When asked about the profit success of FRUGAL products, the percentage is even lower: under 30%
> Industry competitors are perceived as being very successful regarding sales of FRUGAL products (>70% rated high or very high)
> Profitability of FRUGAL products made by industry competitors is perceived as being significantly higher than companies' own products

Source: Roland Berger study
All attributes of FRUGAL products are confirmed as being important – However, affordability has the most room for improvement

Attributes of FRUGAL products

<table>
<thead>
<tr>
<th>ATTRIBUTE</th>
<th>IMPORTANCE AND FULFILLMENT</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not important</td>
<td>Importance</td>
</tr>
<tr>
<td>Functional</td>
<td></td>
<td>3.1</td>
</tr>
<tr>
<td>Robust</td>
<td></td>
<td>3.7</td>
</tr>
<tr>
<td>User-friendly</td>
<td></td>
<td>3.3</td>
</tr>
<tr>
<td>Growing</td>
<td></td>
<td>3.3</td>
</tr>
<tr>
<td>Affordable</td>
<td></td>
<td>2.8</td>
</tr>
<tr>
<td>Local</td>
<td></td>
<td>2.9</td>
</tr>
</tbody>
</table>

> All attributes of FRUGAL products are important
> All areas require action (gap between importance and extent of fulfillment)
> Biggest gap between importance and fulfillment is in affordability – Strong link to product cost and customer requirements exists

Source: Roland Berger study
Success factors related to earlier value chain steps are most important on average – Main room for improvement in market analysis

Average importance/fulfillment of success factors for FRUGAL products

- **MARKET ANALYSIS**
  - Average values: 4.4
  - Importance: 1 = Not important; 5 = Very important

- **DEVELOPMENT**
  - Average values: 3.6

- **PURCHASING & SCM**
  - Average values: 3.6

- **PRODUCTION**
  - Average values: 3.4

- **MARKETING & SALES**
  - Average values: 3.0

- **Importance** decreases along the value chain
- **Extent of fulfillment** at medium level for most steps – Exception Marketing & Sales
- **Largest gap** between importance and extent of fulfillment is in the **market analysis phase**

Source: Roland Berger study
An analysis of the top 2 success factors of each value chain step would suggest working closely with focus customers and markets.

Top 2 success factors for FRUGAL products in each value chain step:

1. **MARKET ANALYSIS**
   - **#1**: Understanding of customer requirements incl. target price
   - **#2**: Transparency regarding what the customer is NOT willing to pay for

2. **DEVELOPMENT**
   - **#1**: R&D department in or close to key markets
   - **#2**: Cross-functional development team

3. **PURCHASING & SCM**
   - **#1**: Focus on local sourcing/local supply base
   - **#2**: Option to challenge existing specs, e.g. tolerances

4. **PRODUCTION**
   - **#1**: Production in or close to key markets
   - **#2**: Focus on production efficiency (rather than flexibility)

5. **MARKETING & SALES**
   - **#1**: Strong cooperation with local sales players
   - **#2**: Use of innovative sales channels

1) Several factors were evaluated per step of the value chain. Only the top 2 are shown on the slide.

Source: Roland Berger study
Success factors in market analysis are rated as most important – Most factors have a clear gap between importance and fulfillment

Success factors for FRUGAL products per value chain step (1/2)

1. MARKET ANALYSIS
   - Understanding of customer requirements incl. target price
     - Importance: 4.7
     - Extent of fulfillment: 3.3
   - Early evaluation of competitor products
     - Importance: 4.5
     - Extent of fulfillment: 4.0

2. DEVELOPMENT
   - R&D department in or close to key markets
     - Importance: 4.1
     - Extent of fulfillment: 2.9
   - Small, decentralized R&D department
     - Importance: 4.0
     - Extent of fulfillment: 3.1
   - Modularization as basic rule for development
     - Importance: 3.5
     - Extent of fulfillment: 2.8

3. PURCHASING & SCM
   - Focus on local sourcing/local supply base
     - Importance: 4.0
     - Extent of fulfillment: 3.3
   - Focus on supply chain efficiency
     - Importance: 4.0
     - Extent of fulfillment: 2.9
   - Acceptance of lower SC performance (vs. "normal" products)
     - Importance: 2.7
     - Extent of fulfillment: 2.6

Note: Transparency regarding what the customer is NOT willing to pay for

Cross-functional development team

Re-using components from other products

Development "from scratch" (i.e. no down-stripping)

Option to challenge existing specs, e.g. tolerances

Option to challenge existing purchasing approach

Source: Roland Berger study
Success factors related to marketing/sales are generally seen as less critical – But importance/fulfillment gap still somewhat significant

Success factors for FRUGAL products per value chain step (2/2)

> For FRUGAL products, early value chain steps are more critical than later stages, as shown by absolute importance of success factors

> Gaps between importance and extent of fulfillment of factors are especially large in the first step: "Market analysis"

> However, a clear gap also exists between extent of fulfillment and importance for most other success factors

Source: Roland Berger study
Production and logistics of FRUGAL products should be outsourced more frequently

Share of make-or-buy for key functions of FRUGAL products

> For production and logistics, the ideal share of outsourcing is suggested to be higher than for standard products

> For development and sales, the ideal share of outsourcing is seen as equal/almost equal to standard products

> The companies interviewed have not yet reached the ideal share of outsourcing for production and logistics

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**SHARE OF OUTSOURCING COMPARED TO STANDARD PRODUCTS**

- **Development**
  - Actual share
  - Ideal share
  - Gap

- **Production**
  - Actual share
  - Ideal share
  - Gap

- **Logistics**
  - Actual share
  - Ideal share
  - Gap

- **Sales**
  - Actual share
  - Ideal share
  - Gap

Source: Roland Berger study
The approach
FRUGAL products require a specific development approach – Roland Berger offers a proven and systematic framework

Advantages of our FRUGAL products development framework

**KEY STUDY RESULTS**

> FRUGAL products are highly relevant for profitable growth in most industries
> However, the majority of companies are currently not satisfied with sales/profit of their own FRUGAL products
> Specific success factors have to be considered when developing FRUGAL products – Thus, a tailored approach is required

**COMPREHENSIVE**

> Our framework covers all steps from identifying the best development approach to rolling out the FRUGAL concept
> It includes not only designing the product but also defining the appropriate value chain configuration and accompanying change management

**SYSTEMATIC**

> Our framework links all important steps in the right sequence to enable effective and efficient development
> We put special focus on the early steps in the development process to address key questions early on
> In addition, we systematically use methods as appropriate

**PROVEN**

> We have successfully supported numerous clients in the engineered products sector as well as other industries

Source: Roland Berger
The Roland Berger framework to develop FRUGAL products comprises six elements

Roland Berger's FRUGAL products framework

1. **FRUGAL readiness assessment**
   - Roughly define target markets/customer segments and development strategy
   - What are the customer's (general) requirements?
   - What development alternatives do we have?
   - Which alternative is best (adapt an existing product vs. develop from scratch)?

2. **FRUGAL market analysis**
   - Detail target markets/customer segments
   - What is the market volume/expected growth?
   - What are the customer's requirements (in detail)?
   - What is the target price/value range and the revenue model?

3. **FRUGAL product design**
   - Systematically develop the concept for the technical solution
   - What product features are required?
   - What product features are NOT required?
   - What are the product costs?

4. **FRUGAL value chain configuration**
   - Systematically develop the value chain concept
   - Development: Make-or-buy? Partnerships?
   - Procurement: Make-or-buy? Share of best-cost-country sourcing?
   - Production/logistics: Footprint?
   - Marketing/sales: Channels?

5. **FRUGAL roadmap**
   - Summarize concept and define next steps
   - Technical concept and value chain concept
   - Business case
   - Risk management
   - Implementation planning and monitoring

6. **FRUGAL Change Management**

Source: Roland Berger
"FRUGAL-readiness" is roughly assessed using three key questions

FRUGAL readiness assessment – Key questions

**CUSTOMER PERSPECTIVE**

- What are target markets/customer segments?
- What are the customer's requirements (in general)?

**COMPANY PERSPECTIVE**

- Are our existing/planned products "FRUGAL-ready"?
- Can they be adapted to meet customer requirements?

**Development alternative**

- Which development alternative fits best with target markets/customer requirements?

1) Adapt an existing product vs. develop from scratch

Source: Roland Berger
During the FRUGAL market analysis, target markets/customer segments and their requirements are detailed

FRUGAL market analysis – Approach

**Identify customer segments and quantify volumes/growth**

- Clearly define relevant customer segments based on key criteria (e.g. related to type of customer and performance requirements)
- Assess market volume and growth for these segments in the relevant target markets
- Quantify total potential based on scenarios

**Detail customer requirements**

- Assess and detail customer requirements regarding all product dimensions (performance, simplicity, robustness)
- Clearly define relevant "non-requirements"
- Prioritize customer requirements/non-requirements

**Define revenue model and target price**

- Define the revenue model for the product
  - Revenue type (transaction vs. usage rights)
  - Beneficiary type (direct beneficiary vs. third party)
- Define target price, e.g. based on competitor prices, price-volume curve, income levels, etc.

Source: Roland Berger
In **FRUGAL** product design, required features and a high-level bill of materials (BoM) are defined and target costs calculated.

**FRUGAL** product design – Approach

- **Define (non-)features and alternatives for feature realization**
  - Consciously **define features** that are **required** as well as features that are **not required** to fulfill market requirements and customer needs
  - **Prioritize features**
  - **Define alternatives** for feature realization

- **Define relationship between required features and components**
  - **Define the relationship** between features (market view) and components (technical view)
  - **Make sure** that each **feature is covered** by at least one component
  - **Estimate** range for component cost

- **Define target specification (high-level BoM) and calculate target cost**
  - **Derive target specification** from rough component cost and competitor benchmarks
  - **Calculate target costs** for every component based on target specification
  - **Calculate** total **product cost** and adjust target specification cost if necessary

**Selectively use supporting methods, e.g. cost driver analysis, product tear down**

Source: Roland Berger
During the **FRUGAL** value chain configuration, the optimal solution for each value chain step is defined

### FRUGAL value chain configuration – Key questions and levers

<table>
<thead>
<tr>
<th>KEY QUESTIONS</th>
<th>KEY LEVERS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Develop</strong>ment**</td>
<td>1. Customer-oriented engineering</td>
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<tr>
<td></td>
<td>2. Product architecture</td>
</tr>
<tr>
<td></td>
<td>3. Value creation mgmt.</td>
</tr>
<tr>
<td><strong>Procurement</strong></td>
<td>4. Engineering footprint</td>
</tr>
<tr>
<td></td>
<td>5. Product roadmap and portfolio management</td>
</tr>
<tr>
<td><strong>Make-or-buy decision</strong></td>
<td>6. Development process/management systems</td>
</tr>
<tr>
<td><strong>Procure</strong>ment</td>
<td>1. Price optimization</td>
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<tr>
<td></td>
<td>2. Quantity leverage</td>
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<tr>
<td></td>
<td>3. Process re-design</td>
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<td>4. Technical improvement</td>
</tr>
<tr>
<td></td>
<td>5. Supplier integration</td>
</tr>
<tr>
<td><strong>Production footprint and logistics</strong></td>
<td>1. Production process reengineering</td>
</tr>
<tr>
<td></td>
<td>2. Planning and controlling</td>
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<tr>
<td></td>
<td>3. Production logistics</td>
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<td></td>
<td>4. Quality improvement</td>
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<td>5. Product architecture</td>
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<td></td>
<td>6. Planning and forecasting</td>
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<td>7. Material flow optimization</td>
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<td>8. Supply chain standards</td>
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<td></td>
<td>9. Organizational alignment</td>
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<td></td>
<td>10. Transport optimization</td>
</tr>
<tr>
<td></td>
<td>11. Warehouse streamlining</td>
</tr>
<tr>
<td><strong>Marketing and sales</strong></td>
<td>1. Marketing organization and interfaces</td>
</tr>
<tr>
<td></td>
<td>2. Sponsoring and client</td>
</tr>
<tr>
<td></td>
<td>communication</td>
</tr>
<tr>
<td></td>
<td>3. Sales organization and sales</td>
</tr>
<tr>
<td></td>
<td>force management</td>
</tr>
<tr>
<td><strong>Which marketing &amp; sales strategy to apply?</strong></td>
<td>4. Channel and portfolio management</td>
</tr>
<tr>
<td></td>
<td>5. Customer management</td>
</tr>
</tbody>
</table>

Source: Roland Berger
The FRUGAL roadmap describes an integrated implementation approach

**FRUGAL roadmap – Approach**

**COMMENTS**

> The FRUGAL roadmap makes it possible to systematically implement the developed product/value chain concept.

> Results and requirements of the previous elements of the FRUGAL products framework are integrated into an overall roadmap, including:

  - Business case
  - Risk management
  - Implementation plan
  - Implementation monitoring

> Tools & templates are ready-to-use and have been proven in several projects.
To inform and involve the organization, FRUGAL change management is rigorously applied from Day 1

**FRUGAL change management – The idea**

1. **Where do we stand today?**
2. **Where do we want to go?**
3. **What is the right track?**
4. **Who are the key stakeholders?**
5. **What motivates the different stakeholders?**
6. **What are the barriers from the stakeholder perspective?**

Change management should be launched even before project start

*Source: Roland Berger project*
Seven key factors are relevant for the success of your **FRUGAL** products

**FRUGAL** products key success factors

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Understand</strong> your customers' requirements regarding your <strong>FRUGAL</strong> products, incl. target price, right from the beginning</td>
</tr>
<tr>
<td>2</td>
<td>Create <strong>transparency regarding what customers are not willing to pay for</strong> – And rigorously exclude these features from your <strong>FRUGAL</strong> products</td>
</tr>
<tr>
<td>3</td>
<td>Don't just &quot;strip down&quot; existing, more complex products – <strong>Follow a tailored approach to develop</strong> your <strong>FRUGAL</strong> products</td>
</tr>
<tr>
<td>4</td>
<td>Set clear cost targets, apply design-to-cost measures and closely follow up on execution – <strong>Affordability</strong> is the single most important attribute of <strong>FRUGAL</strong> products</td>
</tr>
<tr>
<td>5</td>
<td>Leverage <strong>local knowledge and resources</strong> of the sales region for your <strong>FRUGAL</strong> products – Such as by <strong>local R&amp;D</strong>, a <strong>local sourcing base</strong> and <strong>local production</strong></td>
</tr>
<tr>
<td>6</td>
<td><strong>Cooperate</strong> with <strong>local sales players</strong> and use <strong>innovative channels</strong> to market your <strong>FRUGAL</strong> products</td>
</tr>
<tr>
<td>7</td>
<td><strong>Implement change management</strong> from Day 1 to inform and involve the <strong>organization</strong> over the entire <strong>FRUGAL</strong> products framework</td>
</tr>
</tbody>
</table>

Source: Roland Berger
The study
The "FRUGAL products" study is based on more than 60 high-ranking participants in multiple industries.

Study parameters:

- More than 60 participants
- More than half were CEOs/CFOs, VPs or Directors
- More than 60% of companies have revenues of over EUR 1 bn (40% over EUR 5 bn)
- Responses were collected from May to July 2012

Source: Roland Berger
Most participants are in the engineered products and high-tech sector – More than 60% have revenues over EUR 1 bn

Participants' information

**INDUSTRY**

- Pharma, medtech: 16%
- Services: 9%
- Consumer goods: 11%
- Automotive: 14%
- Other: 5%
- **EPHT** 1)
  - 45%

**REVENUE [EUR m]**

- 200-1,000: 11%
- <200: 27%
- 1,000-5,000: 23%
- >5,000: 39%

**POSITION OF PARTICIPANTS**

- CEO/CFO: 15%
- Director: 15%
- General mgmt.: 24%
- VP: 9%
- Other: 36%

1) EPHT = Engineered products and high-tech

> Majority of participants from engineered products, high tech and automotive industries

> More than 60% of participants work for companies generating more than EUR 1 bn in revenues

> A majority (over 60%) of participants hold top executive positions

Source: Roland Berger
It's character that creates impact