

Forum “Junge Spitzenforscher und Mittelstand”

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Erfolgreiche Neuproduktentwicklung für Emerging Markets

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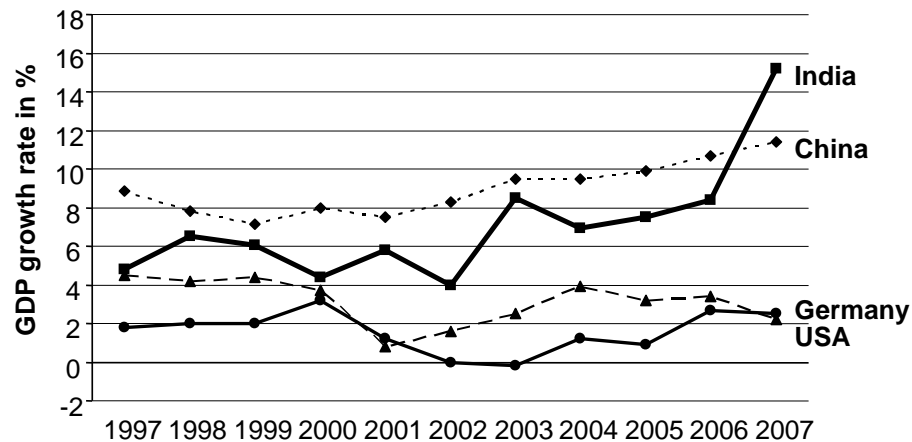
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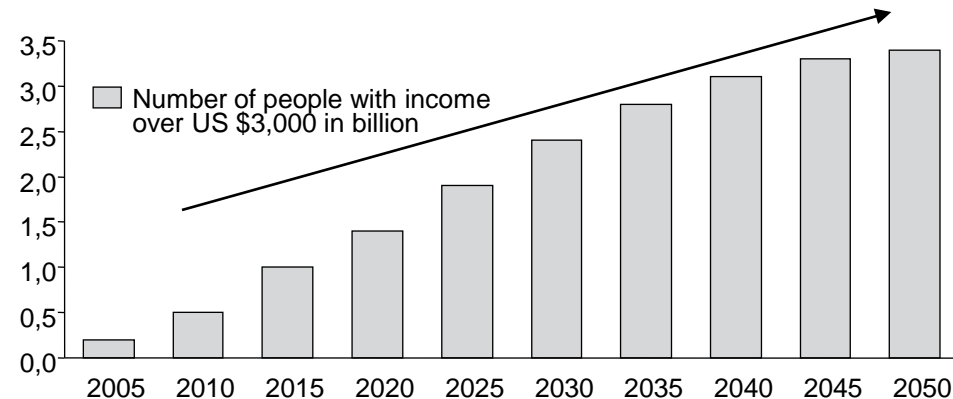
- **The rise of emerging markets**
- Innovation challenges in emerging markets
- How to successfully innovate for emerging markets
- How to profit from emerging market products at home
- Summary

Emerging markets are becoming solvent customers for Western MNCs

Countries



Households



The demand for consumer and industrial goods will increase substantially in these countries in the next decades making them an attractive market.

Sources: Eurostat, Goldman Sachs 2004, OECD.

Note: GDP = Gross Domestic Product, MNC = multinational corporation..

Emerging markets usually encompass different market segments with different consumer needs and purchasing power

Market segment Criteria	Premium Market	Middle Market („Good-enough- market“)	Commodity Market (“Lower-end Market”)
Product functionality	High-end (many state-of-the-art features)	Key/decisive user features only	Low-end (basic standard user features to meet basic needs; undifferentiated products)
Product price	High (according to status as international brand)	Significantly (ca. 25–40%) below premium segment	Low (typically 40–90% of premium price)
Customers	High purchasing power	Value-seeking with mid-level incomes	Low income
Players/Competitors	Multinationals	Local companies with global ambition and multinationals	Local companies
Market share (% revenues)	Ca. 10–15%	Ca. 60–65%	Ca. 25%
Importance MNCs / MNCs competitive position	Very high / traditionally strong position	Very high / rather weak position	Low / (very) weak position

Source: Adapted and extended from Gadiesh et al. (2007).

Note: MNC = multinational corporation. The segmentation was first developed for consumer markets but it can also be applied to B2B markets. The exemplary market share calculated with regard to the market for televisions in China.

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There are numerous challenges for MNCs in emerging markets

1. Most MNCs have built their **capabilities** and products on understanding the preferences, technical requirements, and acceptable pricing for consumers/businesses in developed markets.
2. Domestic and regional **competitors** are less familiar (e.g. Lenovo, Haier, Huawei) and aggressively competing in these markets.
3. Selling home-developed **products with minor adjustments** in emerging markets does not lead to significant and long-term value creation.
4. **High cost** driven by highly featured products and global overheads.
5. Weak local **distribution** and service networks.

MNCs must often “unlearn” much of what has made them successful in developed markets to successfully develop far less expensive products that meet the needs of consumers in EMs.

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1. **Change the innovation strategy towards emerging markets**
2. Acquire deeper customer/market knowledge
3. Define appropriate price-performance ratio
4. Apply smart technological solutions
5. Localize R&D
6. Adapt marketing and sales

Sources: Workshop with industry experts at the WHU, qualitative semi-structured interviews with representatives of German and US-American companies, Deloitte (2006).

Note: The list does not claim to encompass all possible success factors.

Siemens entered a new era by introducing its S.M.A.R.T. innovation strategy

S.M.A.R.T. innovation strategy:

- **S**imple
- **M**aintenance friendly
- **A**ffordable
- **R**eliable
- **T**imely to market products



SMART innovations help to succeed both locally and globally.

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Nokia practices customer orientation through extensive ethnographic and user research in emerging markets

Aim: Make low-cost phones for emerging markets

Situation:

A Finnish engineer trying to design a phone for a illiterate customer on the Indian subcontinent.



Solution:

- | | | | | |
|---|---|---|---|---|
| ▪ Listening to customers in China, India and Nepal | ▶ | Understanding how illiterate people live in a world full of numbers and letters | ▶ | “Iconic” menu and address book |
| ▪ Visits of Nokia’s executives in customer’s homes in India | ▶ | Mobiles often the most expensive item customers buy | ▶ | Phones have to be more durable |
| ▪ Experience tropical weather conditions | ▶ | Moisture resistance, dustproof keypads, special screens more legible in bright sunlight | | |
| ▪ Visits to outskirts of Nairobi | ▶ | Learned that people form buying clubs | ▶ | Look for new ways of encouraging self-financing |

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Renault designed from scratch a car for emerging markets for US\$ 6,000 by a rigid design-to-cost approach

- Focus on what customers really want (e.g. space, robustness), need (e.g. fuel filter, increased ground clearance) and are able to pay: “Designed to comfortably accommodate four adults, a pig, 220 pounds of potatoes and a kitchen sink” and
- Stringent design-to-cost approach: no-frills, fewer components, basic safety features, traditional steel sourced locally (originally designed in France, now responsibility in Romania and new design centers e.g. in India)
- The challenge was to design the car from scratch not to strip features off (higher complexity and higher costs are designed into most Western cars)



Dacia sold about 1.8 million cars since 2004 worldwide making it one of the key model families of the Renault group



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Bosch successfully developed parts for the Tata Nano by applying smart technological solutions

The challenge

Deliver parts for the Tata Nano selling for 1.700 EUR – the price of an air-conditioning or navigation system in a modern German car. The delivered parts have to enable the five-seater to meet emissions standards comparable with the Euro-IV norm expected to take effect in India in 2010 and have the usual „Bosch quality“.

The solution

- Local development at Bosch's R&D site in Bangalore
- Close interaction with the customer
- Clearly define part specifications
- No outdated technological solutions
- Application of smart technological solutions
 - For the gasoline injection system, the injection technology for two-wheelers was honed and adapted for use in a car
 - For the diesel engine a tried-and-tested product was simplified
 - The injection pressure is not generated by a high-pressure pump but by a more cost-effective plug-in pump



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John F. Welch Technology Center in Bangalore is a best-in-class example of an R&D site located in an emerging market

Introduction

- GE's first R&D center abroad
- Opened in 2000 this US\$120 m investment is home to about 4,200 scientists and engineers
- Beautiful campus spread over 70,000 m² of land
- All business units are present at the campus (multidisciplinary) – it is a „mini GE“
- Started as a BOP-operation (business process outsourcing)



Reasons for its establishment

- Talent, talent, talent! – to secure GE's innovation leadership for the next decades
- Better market orientation for future growth markets like India and China
- Opportunity to save some costs (however not the main long-term reason!)



The JFWTC is a full-fledged R&D facility and an equal partner in GE's R&D network helping to maintain GE's competitive position in all markets.

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Distribution systems that reach new consumer segments are critical for developing these markets

Dells changes sales strategy and offers PCs in retail shops

“Dell’s reliance on Internet and phone sales has been **particularly troublesome in China**, where people tend to **prefer to pay cash and see products before they buy**. Last year, sales to individual consumers accounted for only 10% of Dell’s China business. Dells has taken steps to make its computers more visible, **setting up product-display centers in China** so people can try them out before buying. Starting Oct. 2007 Dell also **sells its PCs through the electronic retailer Gome.**”



Nokia teaches locals about mobile phones with a fleet of vans

“To get a grip of rural India Nokia **outfitted a fleet of distinctive blue Nokia-branded vans** that prowl the rutted country roads. Staffers park these **advertisements-on-wheels in villages**, often on market or festival days. There, with crowds clustering around, Nokia reps **explain the basics of how the phones work** and how to buy them. Nokia has extended the concept to minivans, which can reach even more remote places.”



GE builds up a new sales system to penetrate the middle market

“GE Healthcare already had a successful business selling high-end medical equipment in China. However this **existing sales, distribution, and service systems were not geared to the middle market consumers**. The company had to **reconfigure its network of existing representatives and recruit new ones**. GE Healthcare has taken an enormous first step in establishing itself in this new market.”



Innovations in distribution are as critical as product innovations.

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GE Healthcare recently introduced its portable ECG device originally developed for India and China in the USA

Origin

- Developed in India for the Indian and Chinese market
- Designed to reach remote rural areas
- First time buyers

Typical emerging market „good-enough“ approach

- Easy to operate even for a nurse
- Easy portable
- Efficient
- Cost effective
- Robust against dusty environment

Advantageous also in the USA (especially for new market segments e.g. nurses)

- Lightest GE ECG device offered
- Attractive price



imagination at work

A new way of thinking called “reverse innovation”: create entry-level goods for emerging markets and then quickly and cheaply repackage them for sale in rich nations?

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- Change the **innovation strategy with top-management support** to fully leverage the opportunities in emerging markets
- Be **market/customer oriented** in new product development
- Design new products from scratch with an appropriate **price-performance ratio**
- Apply **smart technological solutions**
- **Strengthen the local content** along the entire value chain (esp. R&D, marketing, production and management)
- Adapt **marketing** and **sales**

Thank you very much for your attention!

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