WIN – Lokalisierungstrends der Automobilindustrie in China und Indien

WIN – Winning the Automotive Localization Game in China and India

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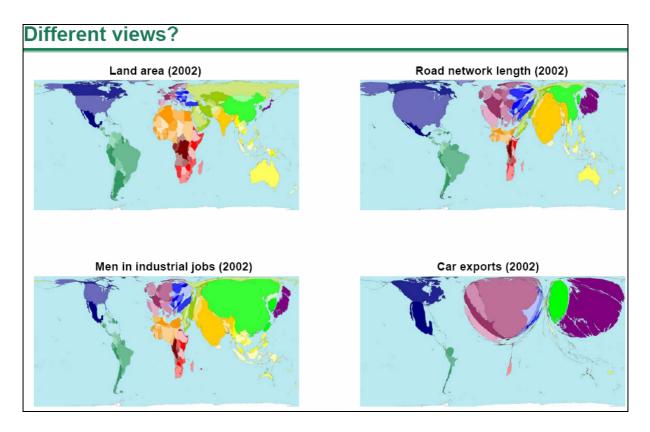


Fig. 1

1 Introduction to BCG study

Many foreign automotive OEMs and suppliers have not yet tapped the full potential of their presence in China and in India: 1 China and India offer endless pools of engineers BUT most automotive R&D centers are relatively small and have only limited autonomy 2 China and India have become important supply bases for most automotive OEMs and suppliers BUT on a global scale, sourcing from China/India still plays a minor role 3 Over 100 automotive plants have been established in China in the past years¹ BUT two-thirds of the foreign automotive companies do not produce at lower costs in China 4 China is expected to be 15% and India 5% of the global car market in 2015 BUT most suppliers are mainly focused on large-scale international OEMs and do not cover emergent local OEMs 5 Almost every foreign OEM has established local presence in China and India

only part of the market potential is covered by current sales network, and products need further customization

Fig. 2

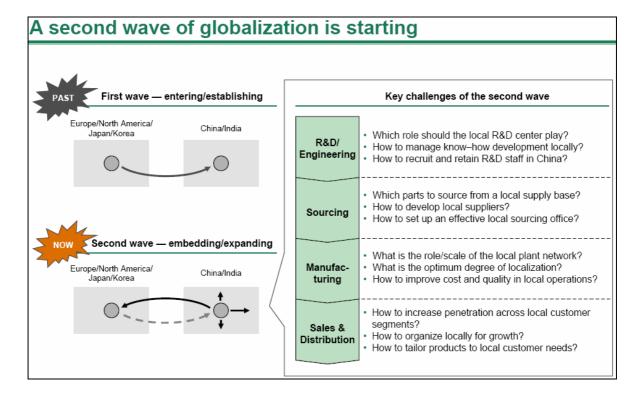


Fig. 3

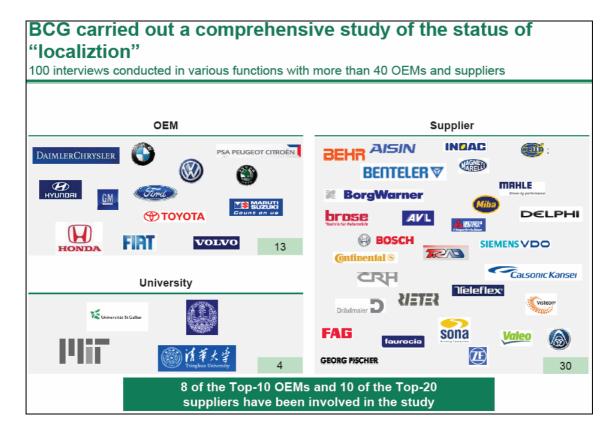


Fig. 4

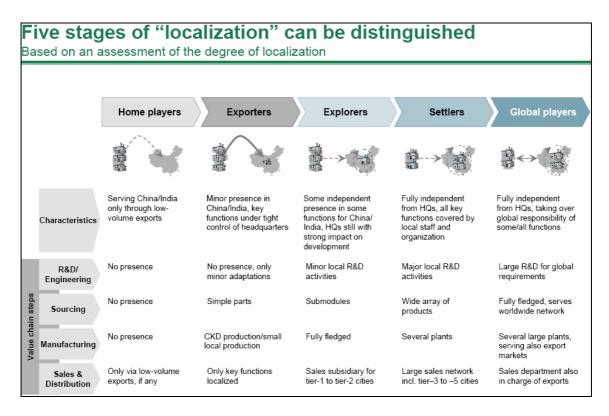


Fig. 5

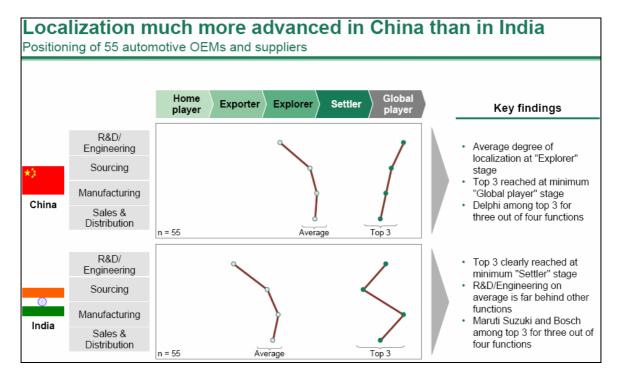


Fig. 6

2 How to leverage China and India as R&D base?

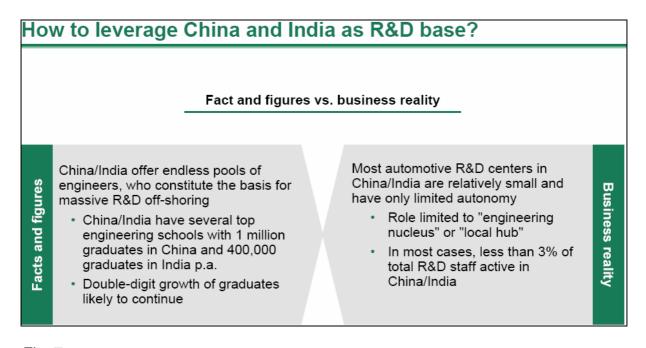


Fig. 7

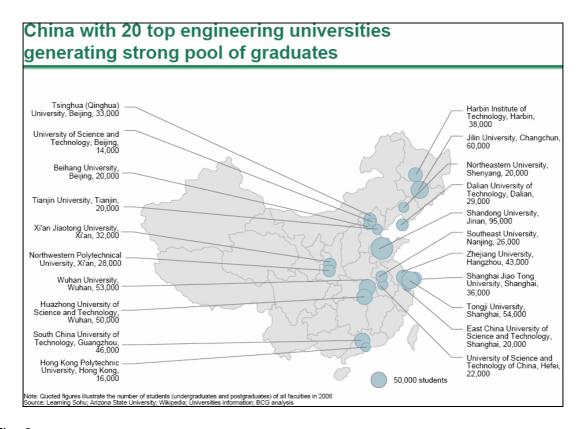


Fig. 8

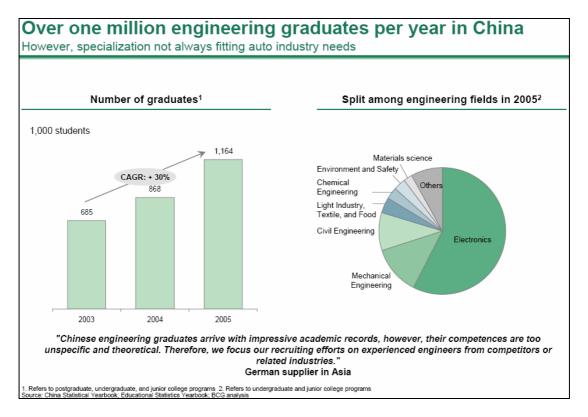


Fig. 9

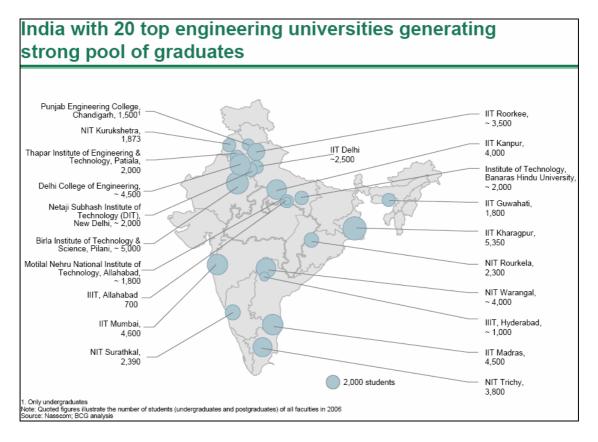


Fig. 10

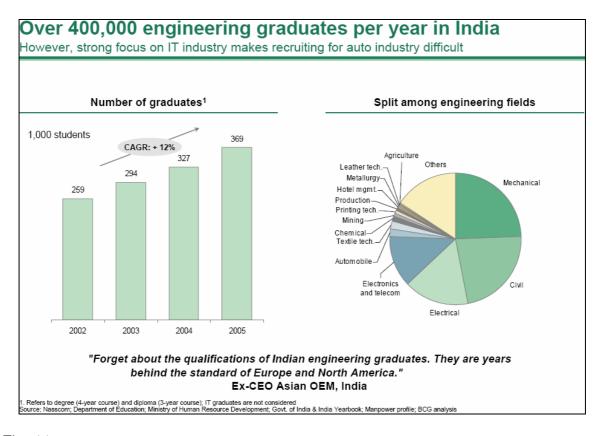


Fig. 11

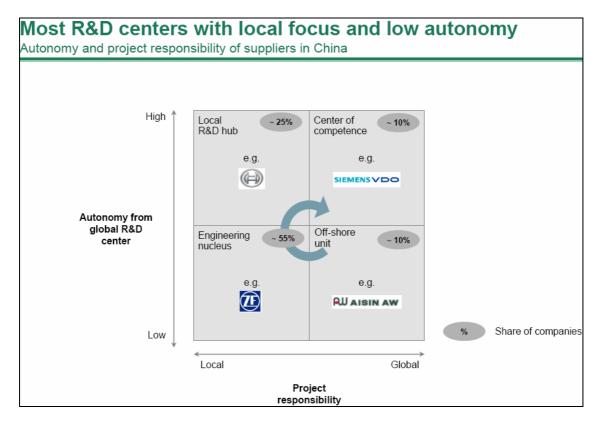


Fig. 12

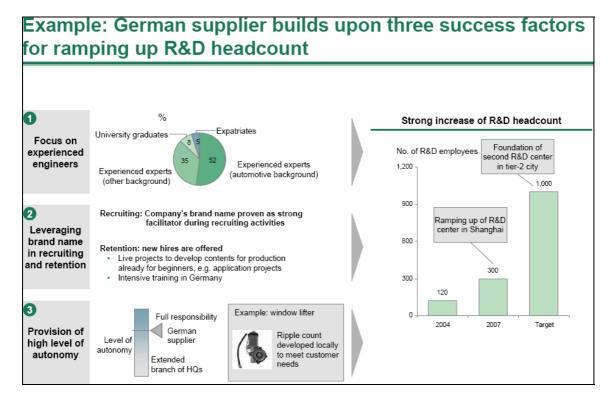


Fig. 13

Key learnings on how to leverage China and India as R&D base In general, R&D centers can evolve along four stages 1) Offshore unit 3) Local R&D hub 2) Engineering nucleus 4) Center of competence "Which role should the local R&D center To tap the maximum potential from local R&D, stages 3 and 4 are best, as they allow play?' maximum cost savings and best staff development through · Higher level of responsibility and autonomy · Relevance of live projects Sustainable know-how transfer is based on a skillful combination of Dispatching of expert staff to China/India Fostering broad, long-term staff exchange from China/India to headquarters "How to manage Setting up multinational R&D teams, incl. China/India teams know-how locally?" The combination of these three approaches ensures the transfer of technical expertise, corporate culture, and project management skills Recruiting strategy has to be differentiated according to staff level Experienced staff: primarily through Internet and – to lesser extent – headhunters Inexperienced staff: primarily through university cooperations, job fairs, and trainee programs "How to recruit and retain R&D staff in Retention cannot be managed through financial means only. It is a combination of China? Salary and benefits (housing, preferential loans, etc.) · Level of responsibility and exposure to seniors

Fig. 14

3 How to expand the local supply base?

How to expand the local supply base? Fact and figures vs. business reality China and India have become important At most automotive companies supply bases for most automotive OEMs sourcing from China & India Facts and figures **Business reality** and suppliers represents only a minor portion of total sourcing volume Car components export exploding in China (+36% p.a.) and India (+25% Local sourcing generally between p.a.) 1-3% of global sourcing volume targets range between 3-10% Substantial savings to be achieved for many car components Large majority avoids sourcing from leading local suppliers

Fig. 15

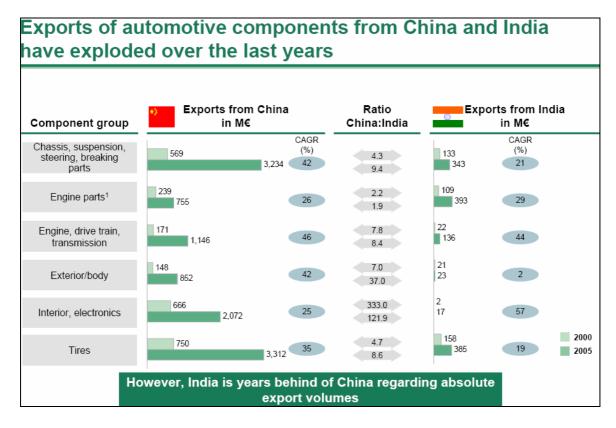


Fig. 16

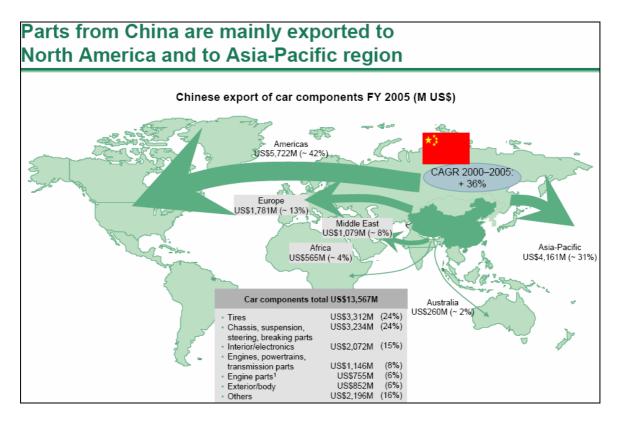


Fig. 17

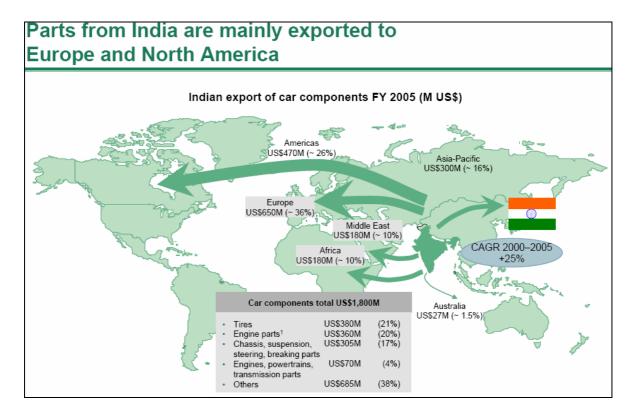


Fig. 18

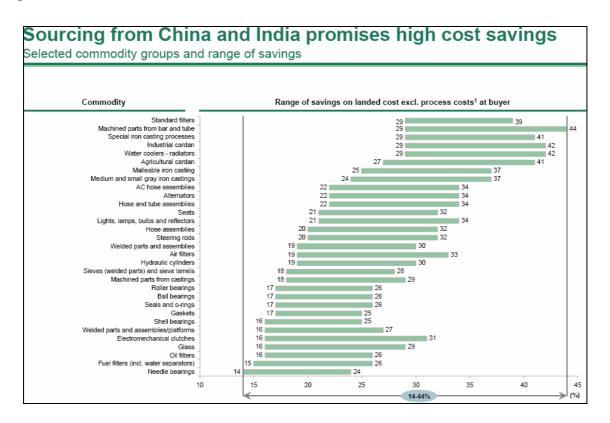


Fig. 19



Fig. 20

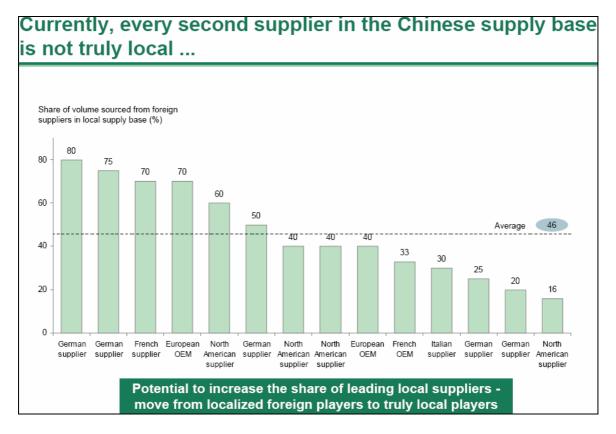


Fig. 21

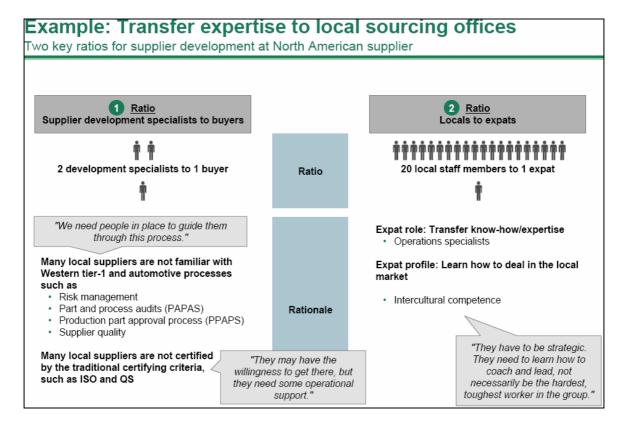
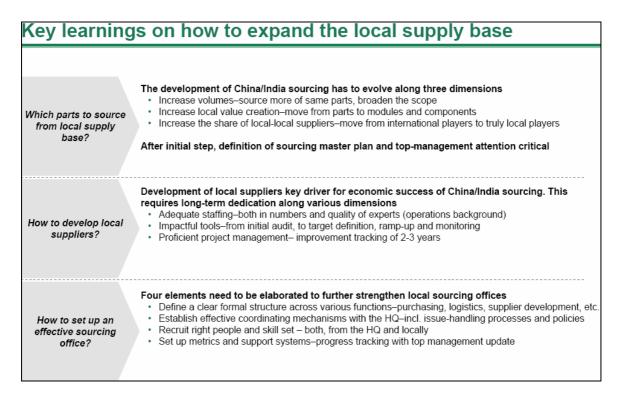


Fig. 22



4 How to leverage manufacturing in China and India?

How to leverage manufacturing in China and India? Fact and figures vs. business reality China and India have become major Large majority of automotive production hubs due to substantial cost companies find it difficult to achieve Facts and figures **Business reality** savings opportunities and strong local lower unit production costs than in market demand home countries Over 100 automotive plants · Only one-third with lower unit established in China in the past costs years1 · Higher cost mainly driven by Labor cost advantage to remain in diseconomies of scale, limited the near future (factor 1:5 vs. localization of process and equip-Western Europe) ment, and additional quality efforts

Fig. 24

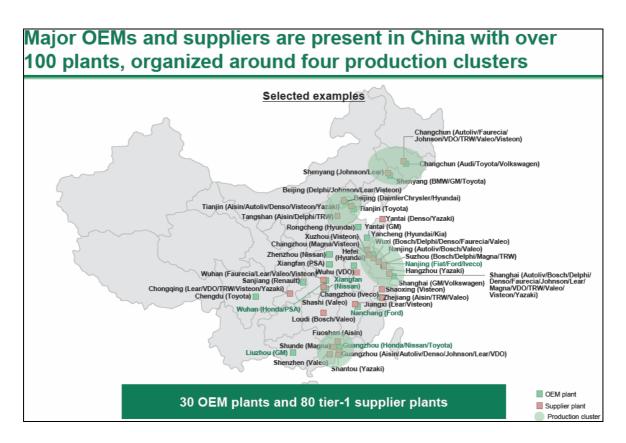


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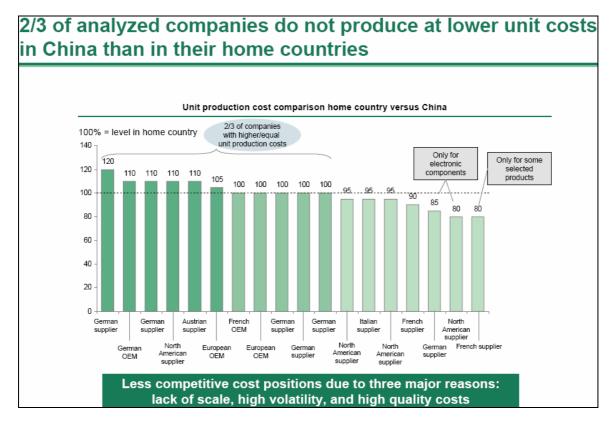


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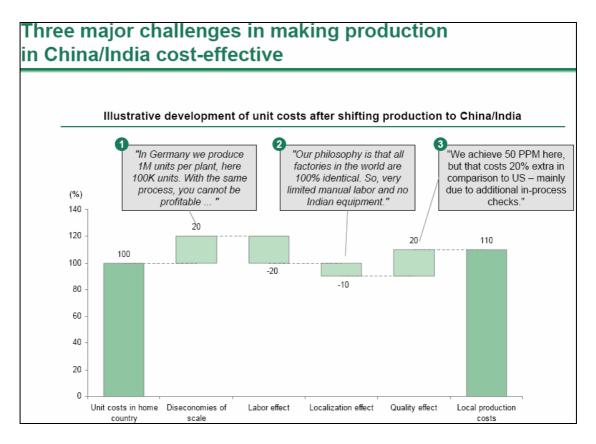


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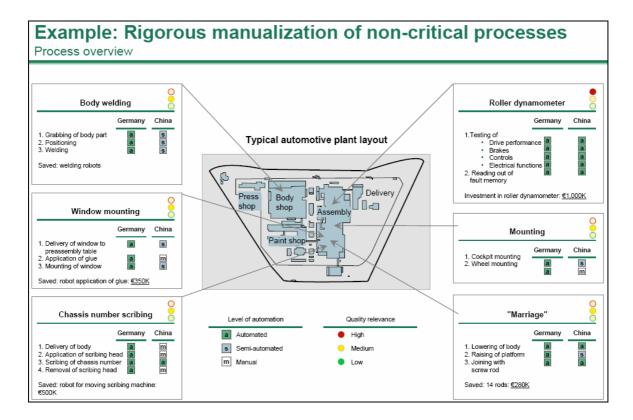


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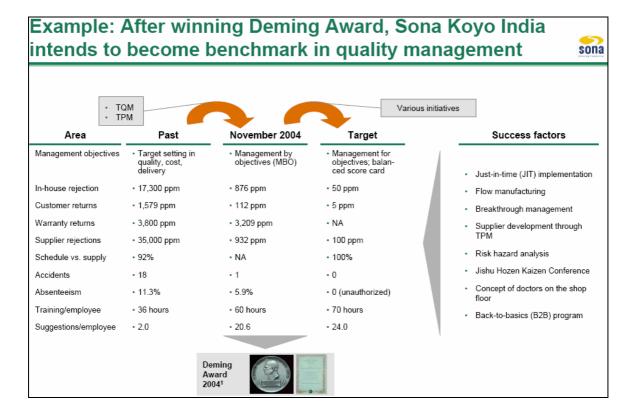


Fig. 29

Key learnings on how to leverage manufacturing in China/India Plant networks in China/India reflect historical, client-driven investment decisions and do not achieve optimal size. To overcome these diseconomies of scale, two approaches seem to make sense What is the role of the Product bundling—move from several small plants to one larger plant, wherever technically local plant? Increase of geographical scope—move from local dedication to global dedication To achieve full potential of low-cost-country manufacturing, four key levers need to be Increase manualization of non-critical process steps (in logistics, material handling, assembly and What is the optimum quality control) degree of localization? Use local equipment (esp. in machinery, for jigs & tools, for dies & castings, etc.) Set up flexible, universal production lines, whenever technically feasible Move on to other lower-labor-cost locations (e.g., from East to West in China) World-class quality can only be achieved in China and India by stringently applying all of the following four approaches Quality management leadership—engage in anticipatory capacity planning and supplier integration How to improve Preventive action—foster cross-functional development and a learning organization quality in local Corrective action—apply additional controls and ensure precise locally oriented root cause analysis operations? Quality metrics—set up a central quality data mgmt. and a consistent metrics system

Fig. 30

5 How to expand customer bases in China and India (supplier perspective)?



Fig. 31



Fig. 32

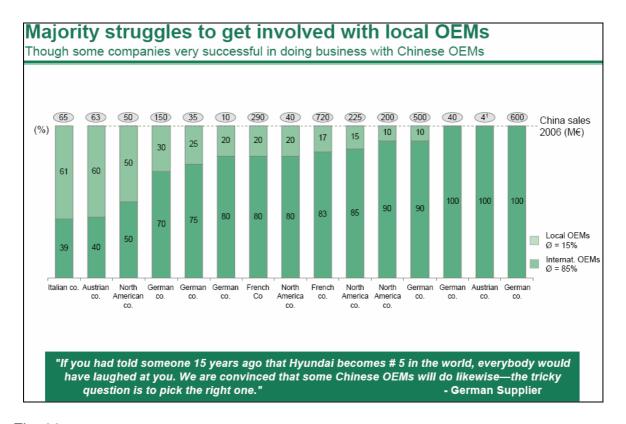


Fig. 33

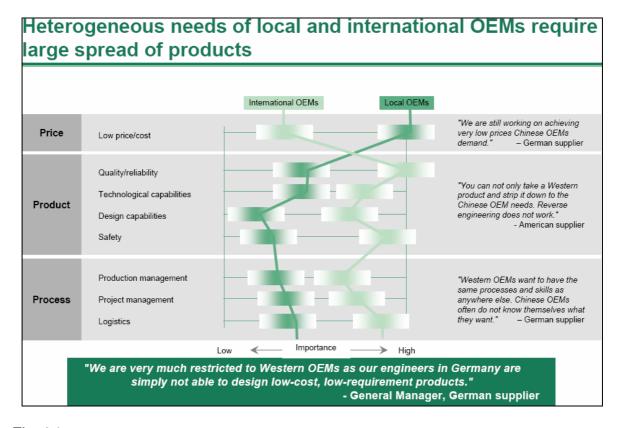


Fig. 34

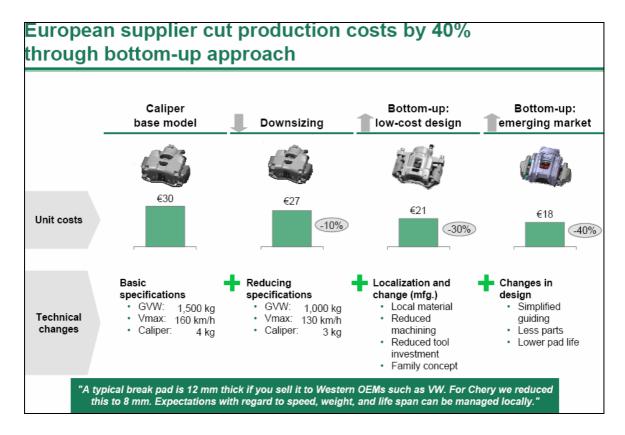


Fig. 35

Key learnings on how to expand the local



Fig. 36

customer base of suppliers Strongly differentiated sales approach according to client segments International premium OEMs—support smooth homologation and launch of cars and parts How to increase International volume OEMs—engage in top-down cost reduction without risking brand damage penetration across Local premium-oriented OEMs—provide navigation on cost-reduction opportunities and selectively local customer market innovations segments? Local volume OEMs—provide technical advice (co-develop) and engage in bottom-up redesign In general, two approaches are meaningful and should be applied according to customer segments Top-down adaptation—coming from US/European/Japanese base product and adapting it to local How to tailor products needs → primarily for international OEMs to local customer Bottom-up redesign—re-engaging in new product design according to new, simpler specifications needs? → primarily for local OEMs The local sales organization needs to reflect the variety of international/local customers From traditional sales-oriented KAM approach to broad, cooperative and supportive approach ("strategic partnerships") How to adapt local Including sales people, product engineers, operations experts, etc. to cover full range of customer sales organization? Clear interface with HQs sales & distribution functions, which should work as enablers, not hurdles

6 Summary

Seven "Commandments" for Winning the Localization Game

Derive localization strategy from overall strategy

 OEMs and suppliers need to have a comprehensive China and/or India strategy with a clear understanding of these markets' impact on the future of the company.

Set the right time-horizon

 When defining a localization strategy, companies need to apply a time horizon of at least 3 to 5 years for achieving the targeted degree of localization.

Plan step-by-step and function-by-function

 The targeted degree of localization cannot be reached over night – a step-by-step approach with well defined and aligned activities in each function is required in order to ensure implementation while remaining flexible to changes in these markets.

Try to establish "local-to-local" processes

 Activities in the individual functions need to be linked in end-to-end local processes to accommodate local needs (local supply for local products and manufacturing, for local clients).

Allow for more flexibility

Smaller scale, higher levels of uncertainty and different levels of localization by function require a very flexible approach – ensure
this flexibility when setting up organisational rules.

Always consider the local and the global role of China/India operations

 Because of the size of the markets and the size of the resource pools, the role of the China and/or India operations needs to be seen in their local and their global context in parallel (e.g. as competence center or a production hub with global reach).

Grow the human resources pool

· Both for localization and future growth, it is essential to recruit, develop and retain key local staff along the whole value chain.

Fig. 38