

“Design-to-Value” Machine Building Concept

An Engineering Approach of Growing in Local MAINSTREAM Market



To develop right products for local mainstream markets

Growth in local mainstream markets is an important strategic topic for Western visionary machinery companies. Get insights from EAC’s investigation on how foreign players could develop “Fit-to-Mainstream-Segment” machines in China and Asia



“DESIGN-TO-VALUE” – A product development tool to activate "Dual Business Model"

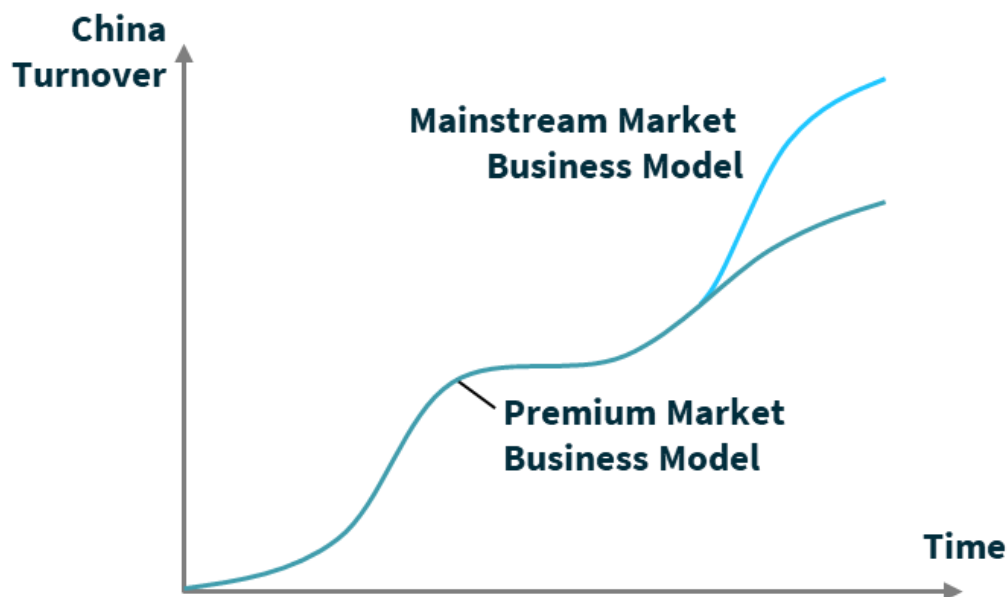
SUSTAINABLE GROWTH WITH LOCAL MAINSTREAM PRODUCTS

Growth in Chinese MAINSTREAM market has long become a **prioritized strategic approach** for most Western machinery companies.

The leading players believe a **“Dual Business Model”** can leverage existing strength in premium segment and simultaneously capture new opportunities in the local MAINSTREAM market

□ “DUAL BUSINESS MODEL”

- ✓ **Mainstream market is the second curve of business growth**
- ✓ **Existing (and usually successful) premium market business model will not be neglected** but complemented with an additional business model for the mainstream range market



- **Dual business model can leverage existing strength** in premium segments and **simultaneously anticipate new chances** in the **mid mainstream market segment**

The fast-growing MAINSTREAM segment is mostly engaged by **local champions** who offer **“Fit-to-Mainstream-Segment”** or even **“Good Enough”** products and technologies to meet local MAINSTREAM requirements with more competitive price and cost

Growing in Chinese local MAINSTREAM market requires to offer a **“standardized”** product solution – **“analysis, benchmark, adaptation”** without sacrificing existing margin quality or branding

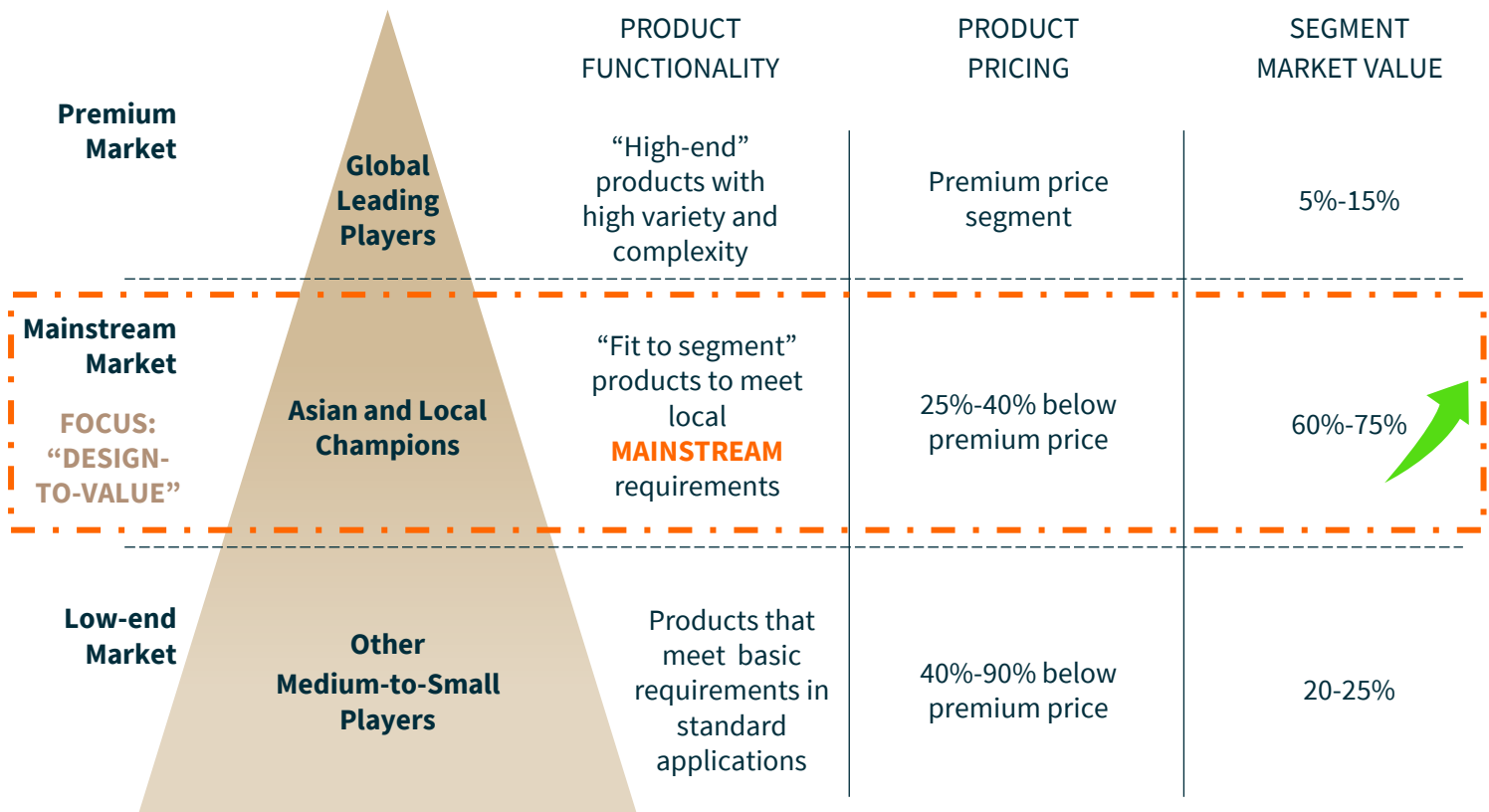
EAC is offering **“Design-to-Value”** machine building concept for a clearer product & technology definition, pricing target, further cost optimization and Go-to-Market strategy



“DESIGN-TO-VALUE” – For typical local mainstream markets, and for foreign players

□ TYPICAL MARKET SCENARIO IN CHINA

While Western players still follow premium segment focus, incremental growth increasingly requires successful participation in untapped MAINSTREAM market segment which amounts to 60-75%



□ KEY CHALLENGES FOR FOREIGN PLAYERS

Today’s machine builders are faced with tremendous challenges in developing the right machine concept for local mainstream markets



Market segmentation criteria – growing difficulties to define appropriate machine concept for target market segments



Cost increase - increasing costs for labor, raw materials and utilities require adequate counter-measures (“Make-or-buy”)



Fierce competition - increasing competition from both foreign players and improved local manufacturers



Local sourcing - difficulties to identify local suppliers to meet sufficient quality requirements at target costs



Fast-growing and dynamic markets – new applications and developing technologies e.g. Industry 4.0, IoT and Automation



Industry standards - different industry standards cause ambiguity for key machine criteria, e.g. safety precautions



Customer requirements - difficulties to grasp local customer requirements which are constantly changing



Cultural differences - colliding mindsets (Western vs. Eastern) result in diverse machine building philosophies



“DESIGN-TO-VALUE” – A 4-folded mindset to assess market, product, technology, cost

□ FACT-BASED “DESIGN-TO-VALUE” METHODOLOGY

1 Marketability & Customer Clinics Which applications and customers to target?

- EAC “Design-to-Value” Scope
 - ✓ Up-front definition of target MAINSTREAM market segment and customer values
 - ✓ “Customer clinics” to identify gap to customer values, and gaps to competitors
- Pitfalls to avoid
 - ✓ Mainstream market segmentation not clear due to lack of detailed data
 - ✓ Limited field research to retrieve in-depth customer insights

2 Product Technical Benchmarking What products to meet local markets?

- EAC “Design-to-Value” Scope
 - ✓ Development on new machine concept “**Fit-to-MAINSTREA-Segment**” including **adaptation** to technical parameters, system solution, technology/ supply chain
 - ✓ Localization potential along value chain: R&D, operation, procurement, sales and service...
- Pitfalls to avoid
 - ✓ Wrong product selection for benchmarking
 - ✓ Unacknowledged difference of machine design philosophies (Europe vs. Asia)

“Design
- to -
Value”

3 Target Costing Approach How much cost to deliver the right machines?

- EAC “Design-to-Value” Scope
 - ✓ Deconstruct technology chain to derive implications for “Make-or-Buy” for local sourcing
 - ✓ Understand trade-offs between design flexibility and local sourcing to verify different product concept & industrial norm
- Pitfalls to avoid
 - ✓ Difficulties to retrieve and assess manufacturing cost parameters of competitive products (e.g. different cost allocation)
 - ✓ Suppliers not involved early enough to verify target cost assumptions with actual RFQs

4 Smart Machine Building Product launch & Go-to-Market swiftly and confidently

- EAC “Design-to-Value” Scope
 - ✓ New product design concept by local customer values, local standards, local supply chain
 - ✓ Local engineering competence based on detailed mid-tech product design, competitive cost structure and appropriate local suppliers
- Covered Pitfalls
 - ✓ Western clients still tend to “over-engineer” with negative target cost impact (cross-functional/-regional frictions)
 - ✓ New product concept not adequately tested with target customers



**“DESIGN-TO-VALUE” –
Advices on market share, cost structure, value chain, sales set-up**

□ KEY ELEMENTS OF LOCAL MAINSTREAM MARKET ENTRY



BUSINESS GROWTH

- Increase **market share** through exploiting competitive advantages
- Ensure **sustainable and profitable** growth in target **MAINSTREAM** market segments



COST STRUCTURE

- **Optimize** cost structure using hidden potential and local supplier capabilities
- Deliver **right** machines at **adequate** costs for focus markets and applications



VALUE CHAIN

- Identify **local** value propositions that match company’s regional footprint
- **Re-arrange** value chain shift value-add according to **optimization** potentials



SALES SET-UP

- Identify **customer values** and specific requirements
- Localize **sales and service** infrastructure according to **target** customers and industries

□ KEY SUCCESS FACTORS ALONG VALUE CHAIN



- | | | | | |
|--|--|---|--|---|
| <ul style="list-style-type: none"> ➤ Local product management in target segments ➤ Machine specs (e.g. adaptation vs. bottom-up/ new machine design) ➤ Price levels | <ul style="list-style-type: none"> ➤ Know-how transfer (e.g. platforms) ➤ Local R&D for local requirements ➤ Design to local suppliers & manufacturing ➤ Disruptive innovation | <ul style="list-style-type: none"> ➤ Local supplier networks with supplier qualification ➤ Leverage low-cost procurement ➤ Optimize logistics costs | <ul style="list-style-type: none"> ➤ Standard vs. customized process - Industry 4.0 ➤ Shared platform and production technologies ➤ Quality consistency ➤ Economies of scale | <ul style="list-style-type: none"> ➤ Customized sales and service set-up ➤ Effective market promotion ➤ Brand strategy ➤ E-commerce |
|--|--|---|--|---|

<p>Cross-functional/ Others</p>	<ul style="list-style-type: none"> ▪ Reasonable factor costs ▪ Gross margin control 	<ul style="list-style-type: none"> ▪ Industry 4.0 ▪ HQ-Region communication 	<ul style="list-style-type: none"> ▪ Innovation process ▪ Make-or-Buy
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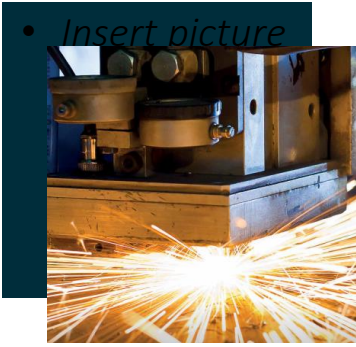


“DESIGN-TO-VALUE” – EAC extensive reference cases

□ EAC “DESIGN-TO-VALUE” PROJECT STUDIES

Successful project cases range from single components to complex machinery solutions with unique challenges and results

PRODUCTS	RESULTS		
<p>MEDICAL EQUIPMENT</p> 	<ul style="list-style-type: none"> ▪ Significant feature reduction by translating “voice of customer” 	<ul style="list-style-type: none"> ▪ New development of machines for local mainstream markets (China and beyond) 	<ul style="list-style-type: none"> ▪ Achieved cost saving of approximately 30% with exact match to required functionality
<p>MACHINERY</p> 	<ul style="list-style-type: none"> ▪ Simplification of functionality, variations and operator interface 	<ul style="list-style-type: none"> ▪ Clear separation from established premium product (brand, channel) 	<ul style="list-style-type: none"> ▪ Achievement of profitable add-on business
<p>ELECTRICS</p> 	<ul style="list-style-type: none"> ▪ Re-design of technical and commercial product features 	<ul style="list-style-type: none"> ▪ Full localization of product development and manufacturing to China 	<ul style="list-style-type: none"> ▪ Achievement of >50% cost saving vs. import landed costs
<p>SEATING</p> 	<ul style="list-style-type: none"> ▪ New specification definition to fit functional requirements of target customer group 	<ul style="list-style-type: none"> ▪ Customer clinic confirmed product fit and acceptance 	<ul style="list-style-type: none"> ▪ Cost reduction of 35% through local product concept and localization
<p>GEARBOX</p> 	<ul style="list-style-type: none"> ▪ Re-design of heavy gearboxes to local market requirements 	<ul style="list-style-type: none"> ▪ Fulfillment of technical configurations compared to peers 	<ul style="list-style-type: none"> ▪ Significant reduction of price gap of 50%
<p>MACHINERY</p> 	<ul style="list-style-type: none"> ▪ New machine concept with reduced complexity and variances 	<ul style="list-style-type: none"> ▪ Successful access into new market segments and application industries 	<ul style="list-style-type: none"> ▪ 30% cost savings through design adjustment and outsourced assembly




EAC “Design-to-Value” Machine Building Concept – benefit from our local network


Contact our experts directly to discuss goals and ideas

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