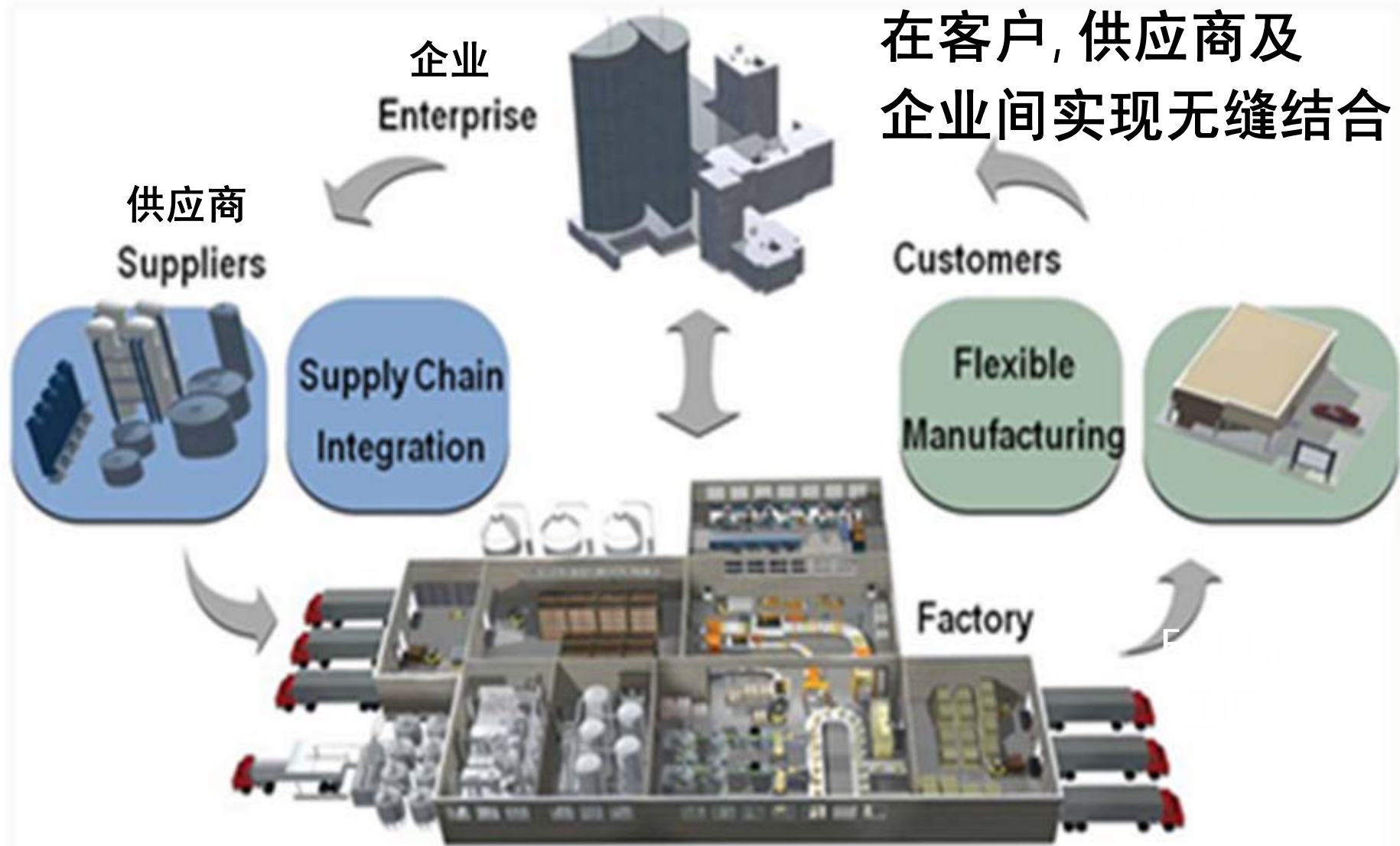


LISTEN.
THINK.
SOLVE.®

MANUFACTURING
CONVERGENCE

当代制造业的创新，
融合和可持续发展

The Vision 制造业的愿景

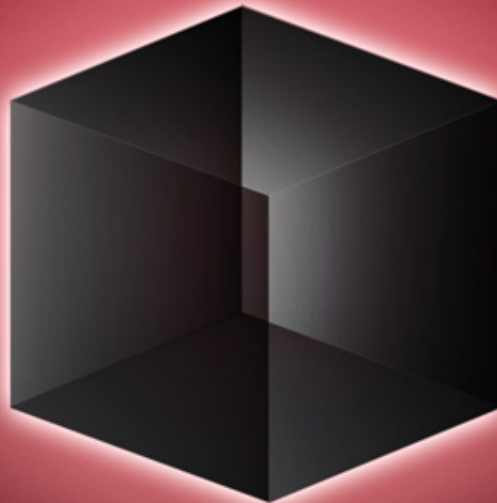


在客户, 供应商及
企业间实现无缝结合

Manufacturing: The Black Box

制造业的黑匣子现象

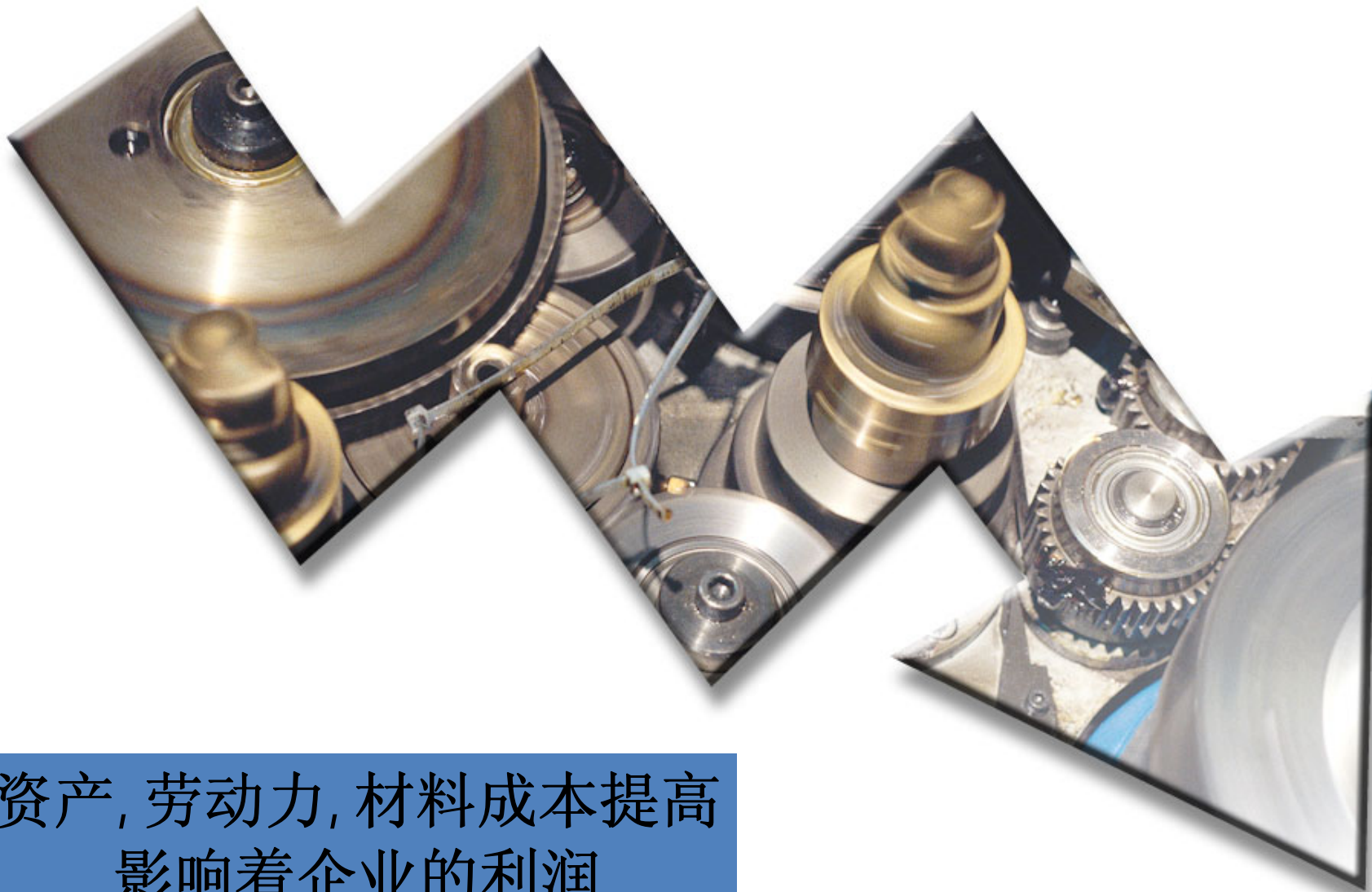
人力, 设备,
原材料...



准时, 产量,
质量, 预算

Manufacturing: The Black Box

制造业的黑匣子现象



资产, 劳动力, 材料成本提高
影响着企业的利润

Manufacturing: The Black Box

制造业的苦恼：黑匣子现象



能源供应的不确定性, 环境保护的要求
影响着企业的利润

Manufacturing: The Black Box

制造业的黑匣子现象

D W C

T O Q Y I

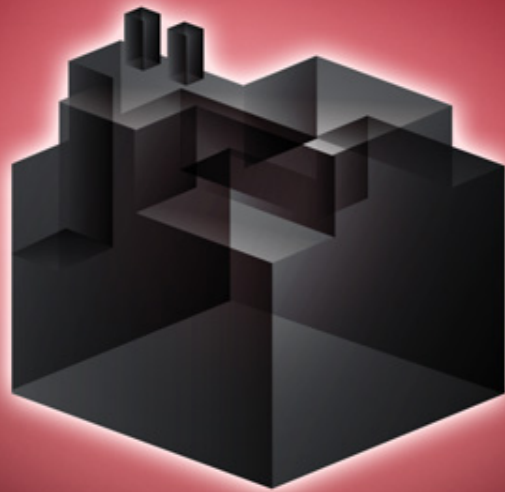
E P F V A S Z

K X U G B L H M

内部运营及外包可视度低, 及经济环境的变化影响着企业的利润

Black Box Behavior 黑匣子的特征

Blind Spots 盲点



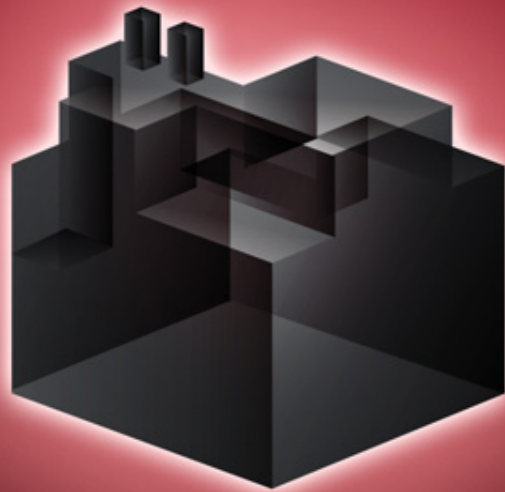
Visibility 可视度 Assets 资产 Labor 劳动力 Energy 能源
Change 变化 Materials 材料 Emissions 排放

Getting Out of the Box

冲出黑匣子

What's Driving
Manufacturing
Today?

什么是当今
制造业的驱动力?



How are These
Drivers Changing?

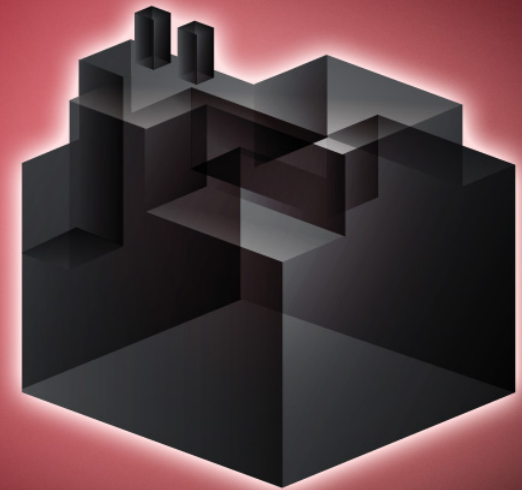
这些驱动力是
如何变化的?

Productivity 生产力



The traditional driver...Is it enough today?

传统的驱动力...
足够吗?

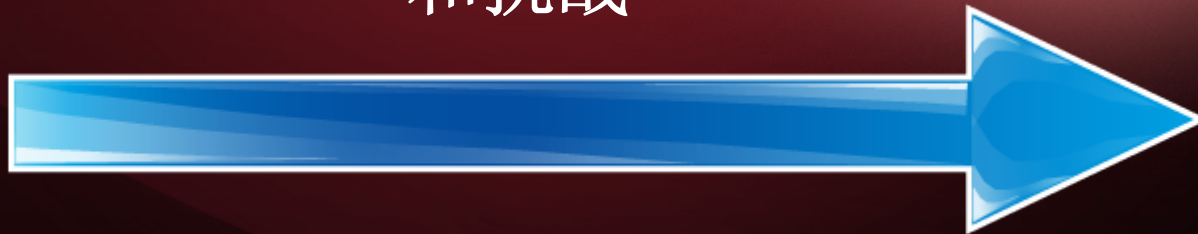
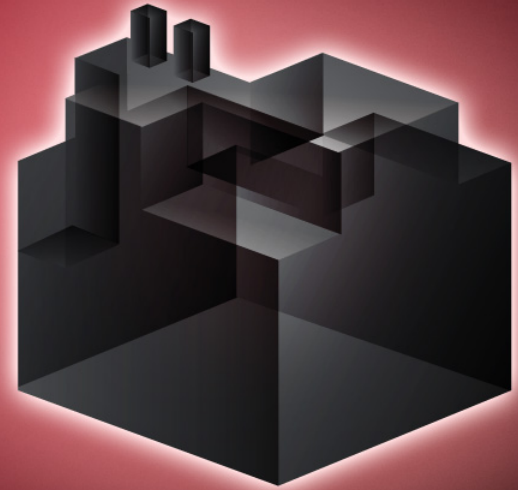


Globalization 全球化



Boundless challenges
and opportunities for
differentiation

差异化的无限机会
和挑战



Market Drivers 市场驱动力

全球化



无限的机会 - 整个世界都是舞台

Market Drivers 市场驱动力

全球化



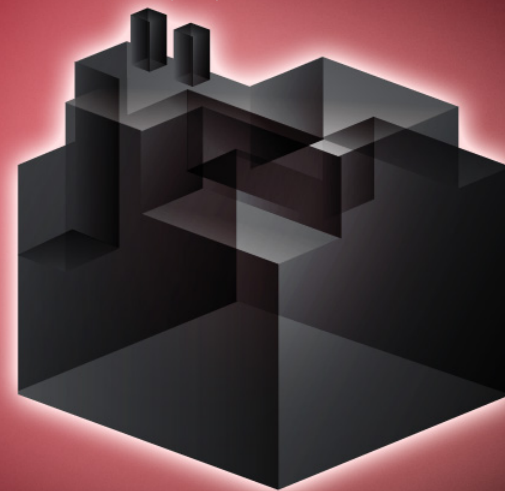
无限的挑战 - 同质化, 盗版, 品牌建设, 全球标准...

Innovation 创新



New customers...
New competition

新客户...新竞争





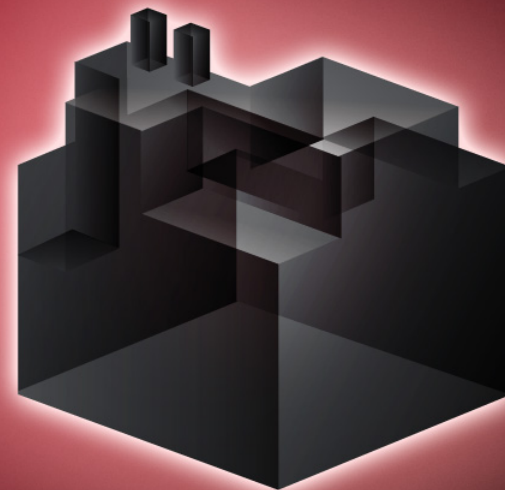
创新在一个组织内无处不在

Sustainability 可持续发展



Cleaner, safer and
more efficient

更清洁, 更安全
和更高效





能源的消耗可控性, 污染排放的处理...
给企业的运营增加了成本和复杂化

Now What? 如何面对挑战?

Productivity 生产力



Globalization 全球化



Innovation 创新



Sustainability 可持续



Market Drivers 市场驱动力



Technology Roadblocks 技术屏障



现代化工厂中，动力，控制，通讯和信息问题错综繁杂
带给管理者的是：血压的升高和无眠的夜晚

Information 信息



Communication 通讯



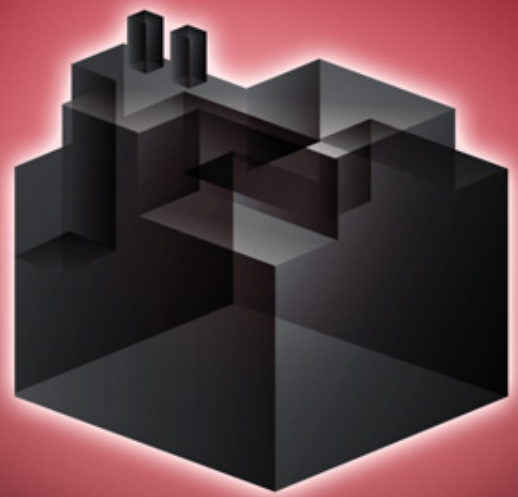
Control 控制



Power 动力



Automation Disciplines 自动化的应对策略



Manufacturing Convergence 制造业的融合



Information 信息



Communication 通讯



Control 控制



Power 动力



Manufacturing Convergence 制造业的融合



Manufacturing Convergence 制造业的融合

Productivity 生产力



Globalization
全球化



Innovation
创新



Sustainability
可持续



Market Drivers
市场驱动力



Automation
Disciplines
自动化策略



Information 信息



Communication 通讯



Control 控制



Power 动力





Information

Delivering insight for decision making and exposing competitive opportunities.

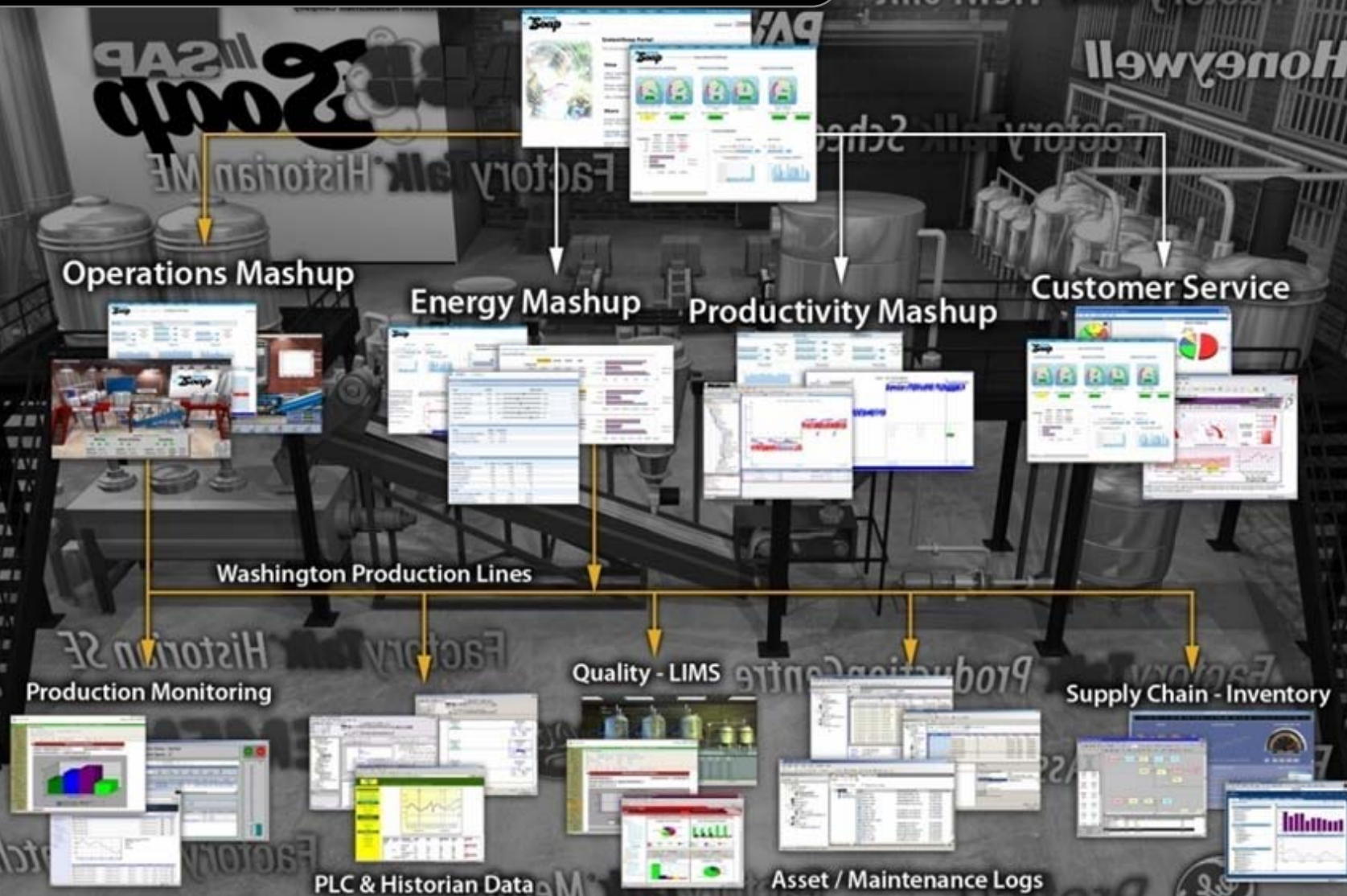
决策和发现竞争机会的依据

from disparate to streamlined



从杂乱到有序

Information 信息





FactoryTalk[®]

INTEGRATED PRODUCTION & PERFORMANCE SUITE



Design & Configuration



Production Management



Data Management



Quality & Compliance



Asset Management



Performance & Visibility

Access to information has helped us understand production inefficiencies...

信息技术帮助我们发现什么环节的生产没有效率



FactoryTalk VantagePoint

对来自不同系统的数据进行优化
Elegantly simple, yet powerful – data on demand, from:

- Production systems 生产系统
- Historians 数据库
- Legacy systems 传统系统
- Enterprise, business & supply chain systems, 业务系统和供应链
- Data outside the four walls 外围数据





PAVILION[®] TECHNOLOGIES

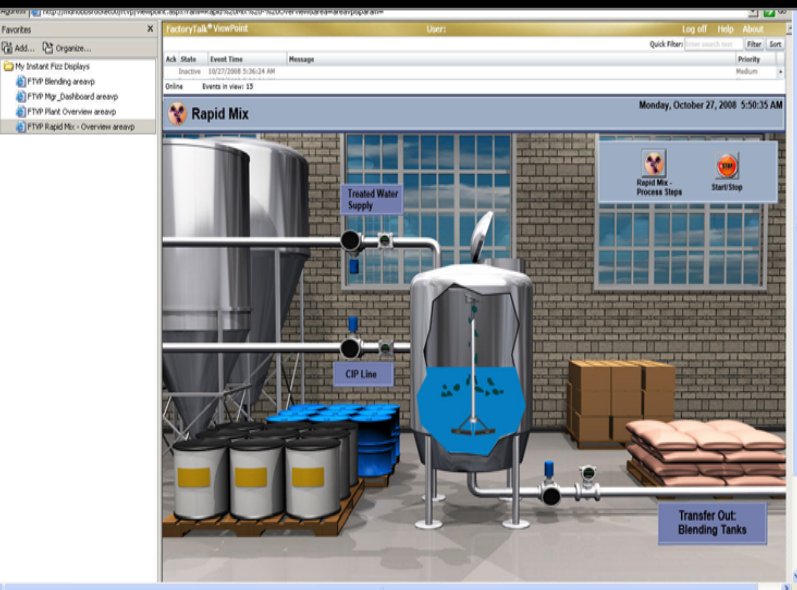
A Rockwell Automation Company

Increase Production 增加产量

Reduce Manufacturing Costs
减少制造成本

Improve Product Quality
提高质量

Reduce Environmental Risk
降低环境风险



FactoryTalk® ViewPoint

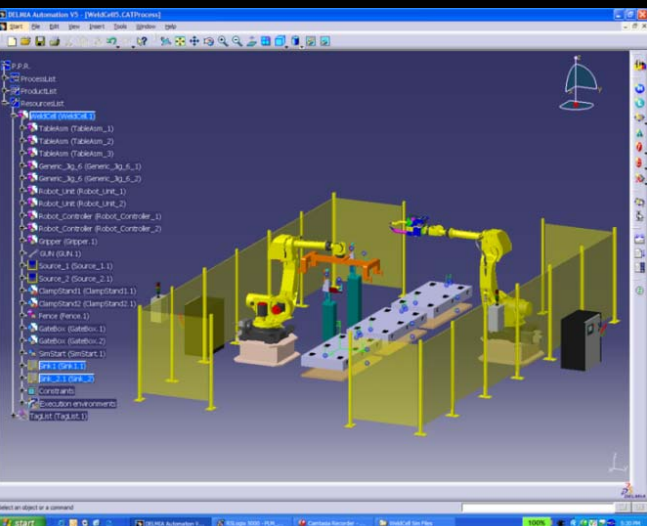
Extending visualization and real-time decision capabilities to browser-based users anywhere

基于互联网和浏览器技术



随时随地浏览企业运行数据, 提高可视化和实时决策能力

Virtual Design & Production 可视化设计和生产



精确, 实时的仿真系统, 优化制造系统的管理, 加快新产品研发和投入市场



Optimize manufacturing operations & accelerate time to production by testing various what-if scenarios with an accurate, real-time simulation model



Communications

Binding all disciplines together, adding seamless & secure business value.

把全部的控制策略融合在一起
以提高商业价值

from device level wiring to unification

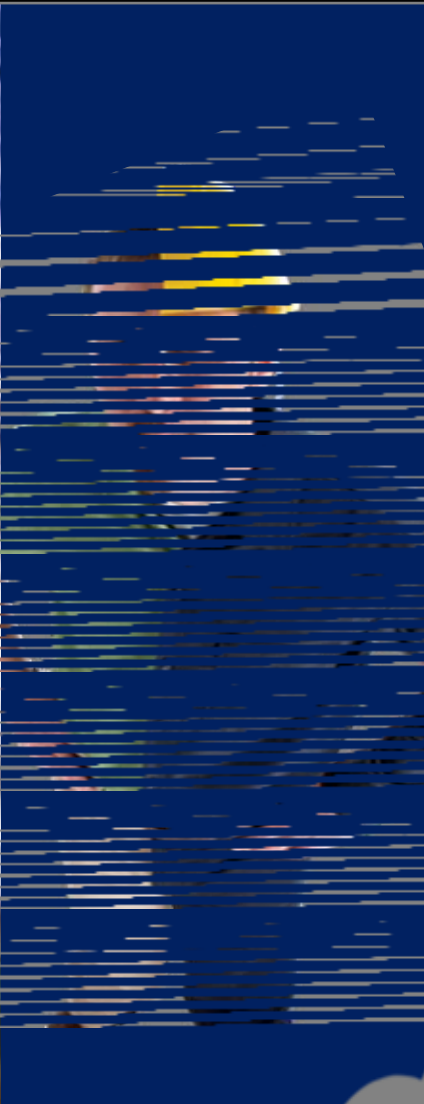


从底层设备连接到系统的集成

Communications 通讯



IT Domain IT域



Shared Domain 共享域



Control Domain 控制域



Rockwell
Automation
Market Leader in Automation




CISCO
Market Leader in Networking



Stratix 8000

工业以太网交换机系统的最前瞻性的解决方案

彰显着过去，
代表着现在，
引领着未来。



Achieve greater visibility, improve data assimilation, reduce costs and simplify management



Control

Multiple control disciplines,
integrating seamlessly.

多种控制策略的无缝集成

from fragmented to integrated & plant-wide & IT ready



从局部到整个工厂及IT的集成



Process
过程



Batch
批处理



Discrete
离散



Motion
运动



Drives
传动



Safety
安全



Plant Wide Control Values

全厂统一控制的价值

- Faster Integration 更快集成
- Less Training 更少培训
- Simplified Maintenance 简化维护
- Reduced Complexity 降低复杂性
- Design Productivity 设计效率
- Faster time to Market & Changeover 加快上市和更新时间

Logix



Multiple Disciplines 多种控制策略

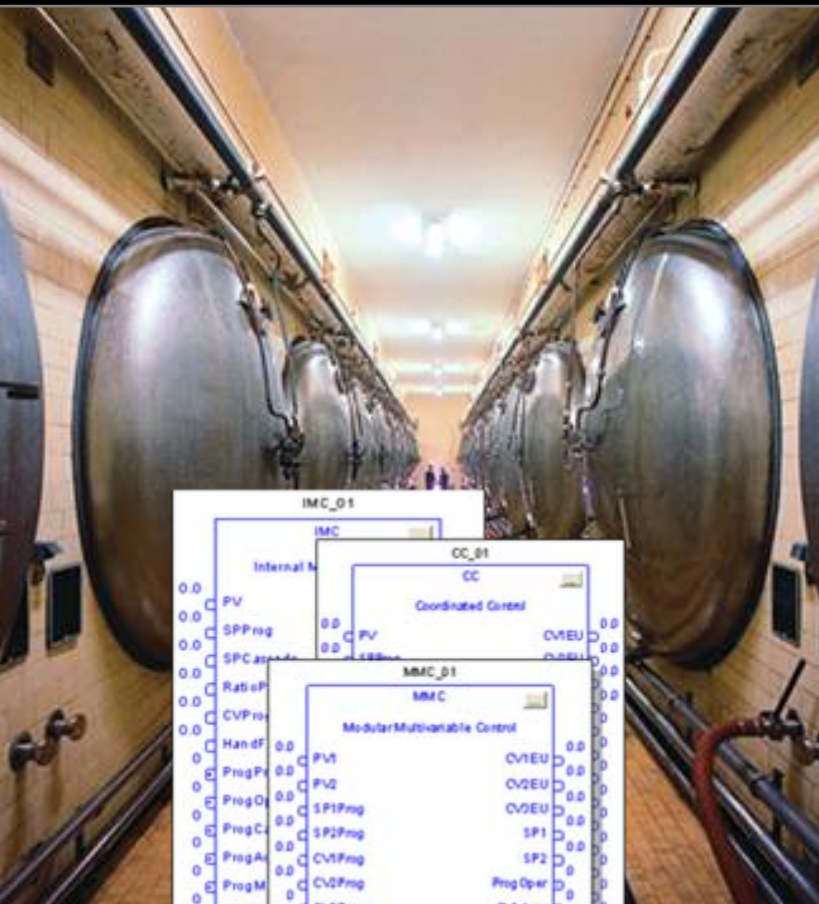


ControlLogix™

Fully converged solution in a single development environment

在同一个开发环境下的完全融合的解决方案

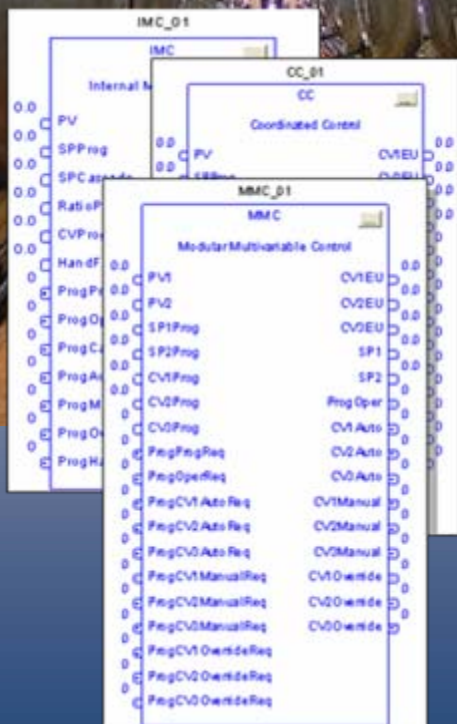




PlantPAx™
Process Automation System

媲美DCS的过程控制系统

Bringing together an end-to-end suite of plant wide process control with DCS like functions





CompactLogix™

Wide range of available control, network and visualization sizes to fit your application

多种控制策略，网络及可视化选择满足您的控制需要





Kinetix™

Seamless integration decreases machine design time and optimizes machine performance

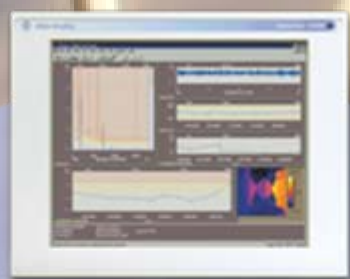
无缝集成的运动控制系统解决方案, 降低机器设计时间和优化机器性能



Dynamix Condition Monitoring

Integrating condition monitoring and control for unprecedented production intelligence

集成的状态监测和控制系统，
提高生产过程的智能化



PowerFlex™

IntelliCENTER

Power

Integrated to control, protect & maintain strategic assets.

控制集成，保护和维护战略资产

From mechanical control to a competitive advantage

从机械控制到竞争优势



Repeatable Solutions 可重复的解决方案

Repeatable Solutions: Reusable Engineering, Tools & Processes



消费品 Consumer Packaged Goods

- Tracking & Tracing
- Production Management
- Clean In Place (CIP)
- Match Mixing & Blending
- Brewhouse Automation
- Energy & Combustion Control



生命科技 Life Sciences

- Full MES & Compliance
- Formulation & Filling
- Solid Dosage Suite



特殊化工 Specialty Chemical

- Formulation & Mixing
- Chemical Synthesis



电力和基础设施建设 Power & Infrastructure

- Flue Gas Scrubbing
- Solar & Wind Power Generation
- Alternative Energy



冶金 Metals

- Material Handling
- Melting and Forming
- Processing & Finishing



纸浆造纸 Pulp & Paper

- Digesters & Boilers
- Tissue & Paper Machines
- Printing



矿山水泥 Mining & Cement

- Material Handling
- Raw Mill & Kiln Control
- Waste Fuel Control



汽车轮胎 Automotive/Tire

- MES Systems
- Body, Paint, and Assembly
- Mixers & Tire Machines



石油天然气 Oil & Gas

- On Shore Production Facilities
- Safety/Critical Control Systems
- Pipelines & Off Shore Platforms

Partner Network: 合作伙伴网络



Rockwell Automation PartnerNetwork™

**Business Enterprise
Sales & Solutions
Products & Technologies**

The Power of Collaboration

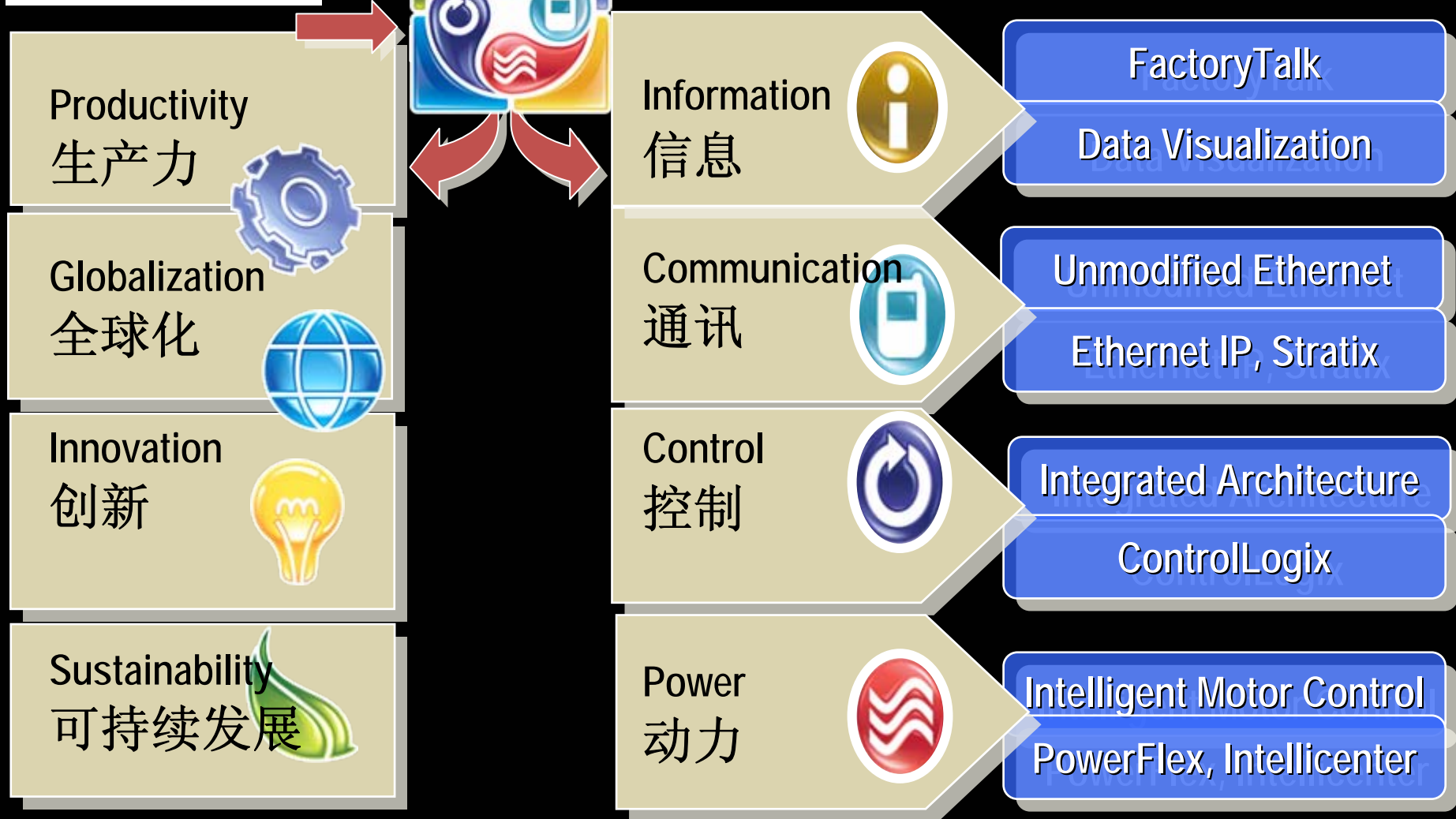
战略联盟

- Authorized Distributors(分销)
- Solution Providers
(系统集成商)
- Machine Builders (OEM)
- Encompass Product Reference
(战略联盟伙伴)
- Technology Licensing
(技术授权)

帮助用户赢得挑战：
Locally, regionally and
globally with products,
solutions and professionals
bringing you engineering
expertise.

Manufacturing Convergence 制造业的融合

Rockwell Automation
LISTEN. THINK. SOLVE.



Manufacturing Convergence

制造业的融合



生产企业和自动化供应商的融合 -
齐心协力, 共同面对, 共同探讨, 共同进步

LISTEN.
THINK.
SOLVE.®

THANK YOU !
谢谢 !