

F&B CUSTOMER DAY 2018 | SURABAYA , SEPTEMBER 5, 2018

# The Future of Food & Beverage

Building tomorrow's food & beverage plant today

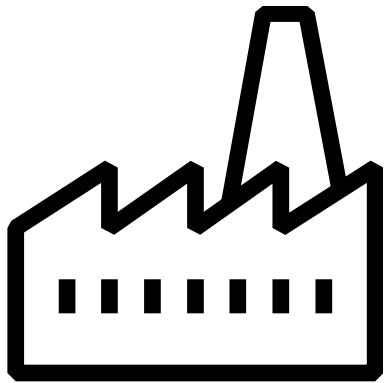
Darcy Simonis, Industry Network Leader – F&B



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**The landscape is changing...**

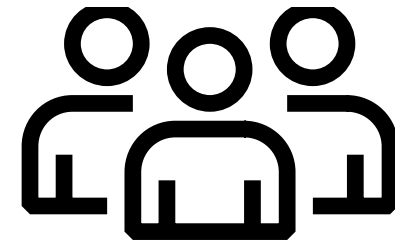
# Yesterday...



Manufacturers



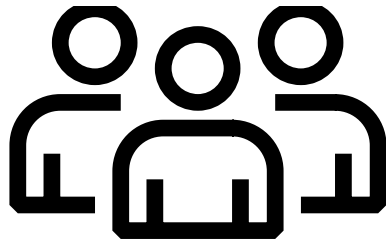
**“We make this – Try it!”**



Consumers

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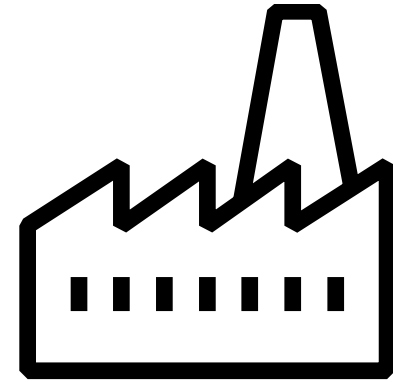
## Versus today...



Consumers



**“We want this – Make it!”**



Manufacturers



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# The consumer is the new food & beverage king



# Nestle's KitKat perfectly demonstrates this shift



Single product launched in 1935.



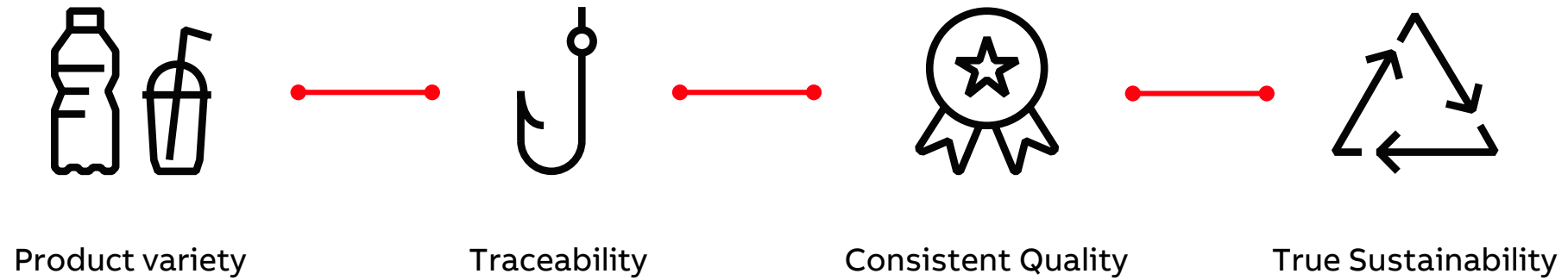
Globally manufactured for over 75 years.



Over 200 flavors and product variants.



**How do you evolve with the industry and drive success**  
with the pressure on you to provide –





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**You need an experienced partner  
who understands the big picture expectations**





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# You need an experienced partner who understands the big picture expectations

## Efficiency



## Digitalization



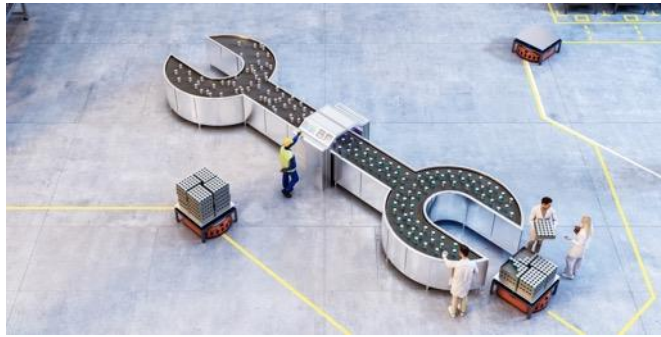
## Sustainability



## Safety



## Reliability



## Quality



# Optimizing efficiencies with a plant of infinite possibilities



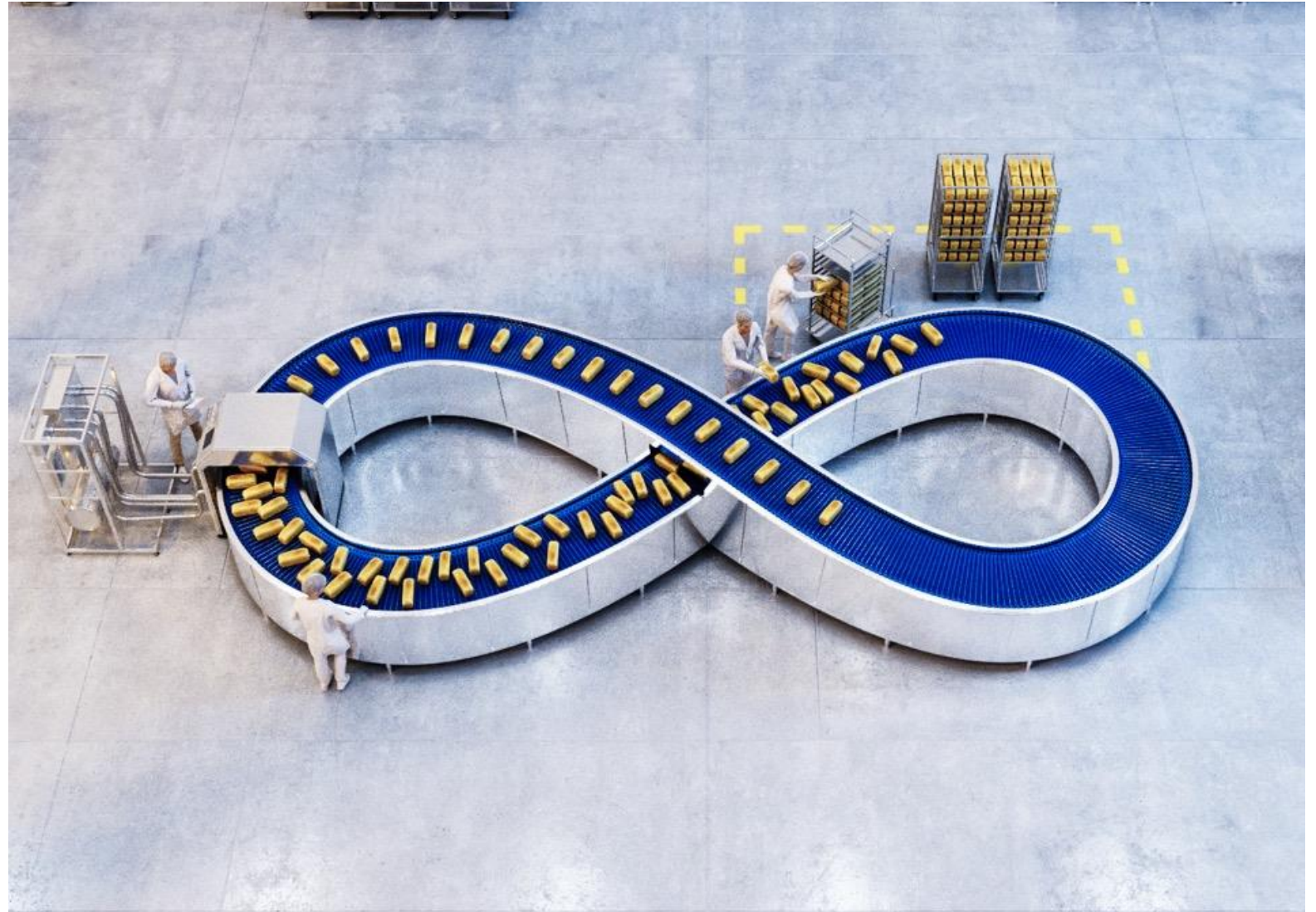
Power generation &  
distribution



Energy usage & control



Overall equipment  
effectiveness





# Production processes that talk to you with a plant that connects to everything



Remote monitoring & plant optimization



Greater visibility & traceability





# Reduced energy consumption and waste with a plant that's truly sustainable



Increase productivity



Increase ingredient traceability



Conserve energy & utilities



Prevent wastage



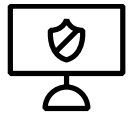
# Perfecting the process with a plant that safeguards product integrity



Food safety



Personnel safety



Cyber security





# Preventing downtime with a plant that maximizes reliability



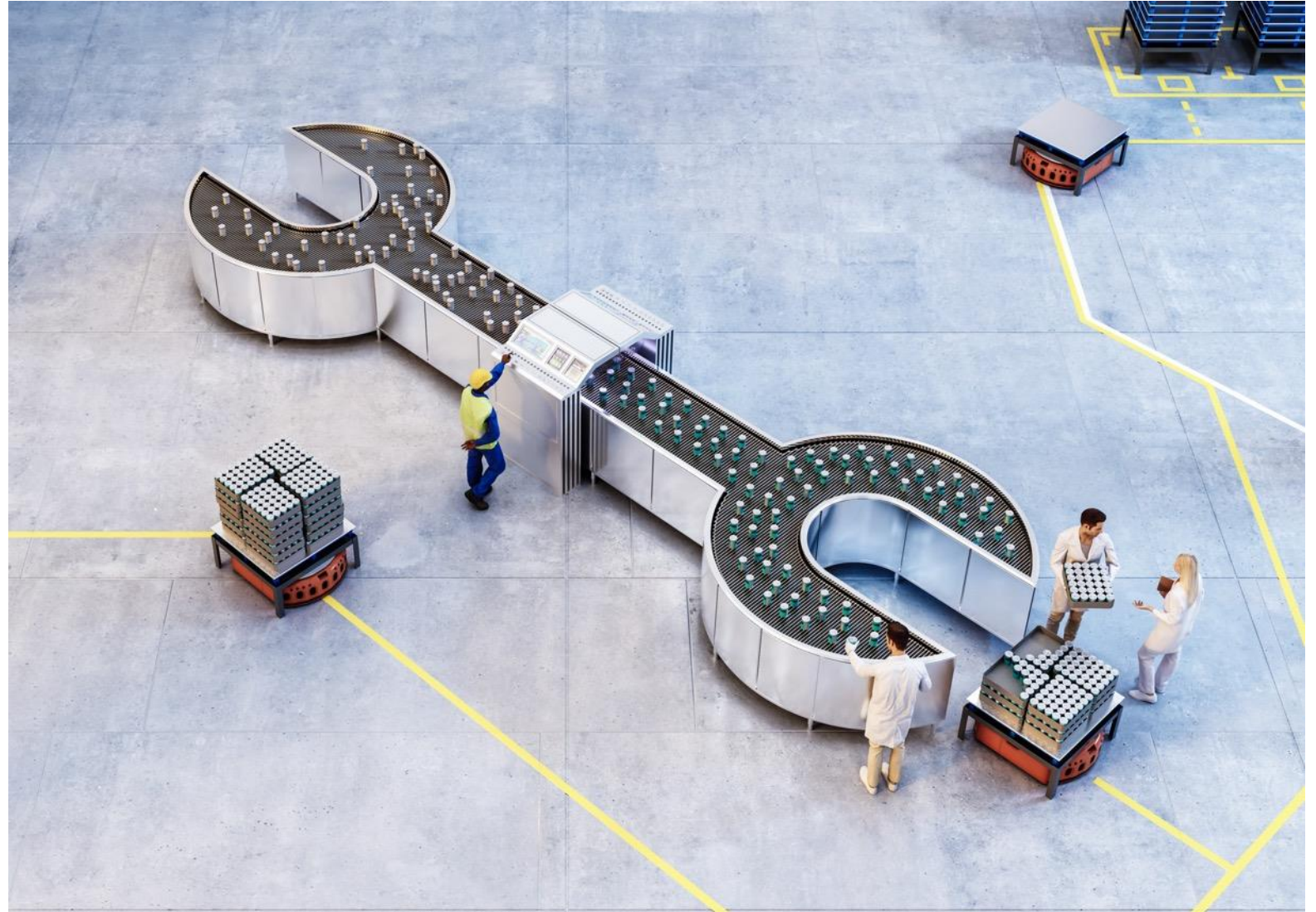
Reduce total cost  
of ownership



Predict lifetime of plant  
& machinery



Proactive and  
preventative  
maintenance





# Producing a quality product every time with a plant that creates certainty



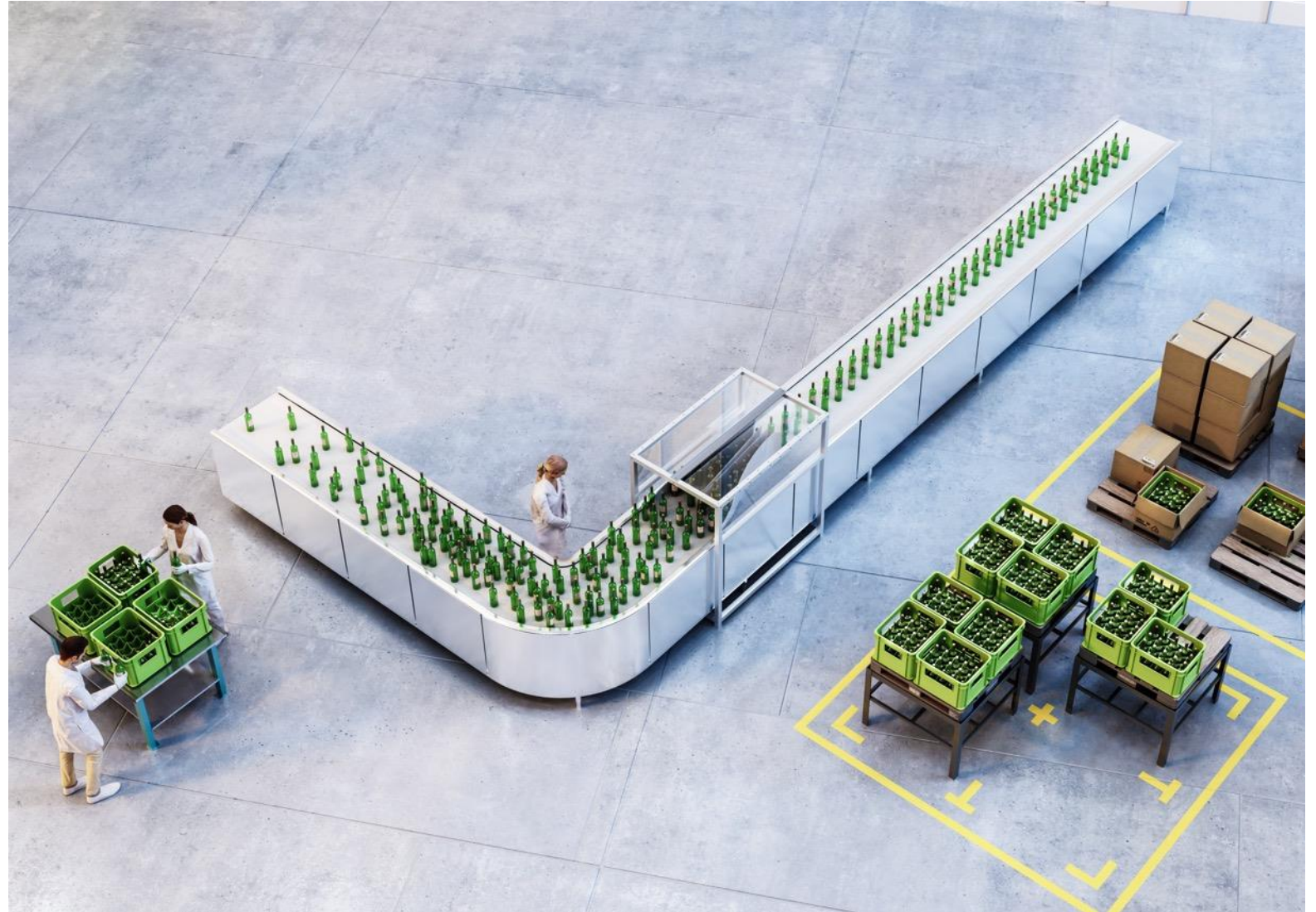
Consistent quality of output



Quotas are met



Production volumes meet demand & deadlines



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**A partner with a unique approach**



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## A partner with a unique approach

Our consultative approach ensures that we arrive at the best solution for your specific needs – even if it's not an ABB solution.



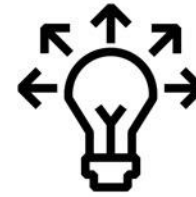
Listen



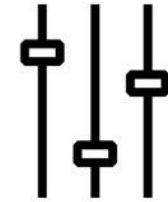
Analyse



Discuss



Implement



Optimise







# Tasting success



# Tasting success – Thai Roong Ruang Sugar Group (TRR)

Eliminating downtime in record time

- ABB Ability™ System 800xA for improved mill control
- LV motors and multidrives for pinionless control of rolling mill
- Drives and motors for more efficient control of the mill
- Reduces investment & maintenance
- Increases energy savings





# Moving more beer at Cosmos Brewery in Thailand

Palletizing robot solution for factory producing Chang beer for ThaiBev



- Robot to pick up to 24,000 bottles an hour
- 240 bottles at a time
- Quick and precisely-coordinated motion sequences programmed with our palletizing applications and RobotStudio® simulation and virtual commissioning software
- With the robot, a 20% productivity increase is forecasted after 3 years



# Tasting success - Mehran Sugar Mills

Eliminating downtime in record time

*“Sugar processing companies can only operate for around 130 days a year, so they cannot tolerate one single hour of stoppage during the harvesting season.”*

*“ABB’s AC500 PLC/HMI has been working well on our Silver Weibull refining centrifuge for the last two years with absolutely no issues.”*

Aziz Ahmed  
Senior Supervisor  
Mehran Sugar Mills





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**A partner with a comprehensive offering**



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## A partner with a comprehensive offering

### Power your plant

- Utility power connection & plant distribution
- Power generation solutions
- Power quality solutions
- Renewable power solutions

#### Did you know...

Our power quality solutions save a New Zealand dairy \$50,000 per power disturbance?





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## A partner with a comprehensive offering

### Electrify your processes

- Electrical distribution solutions
- Electrical protection solutions
- Liquid and dust ingress solutions
- Corrosion resistant solutions
- Condensation protection solutions
- Food safety solutions
- Hazardous area and potentially explosive atmosphere solutions

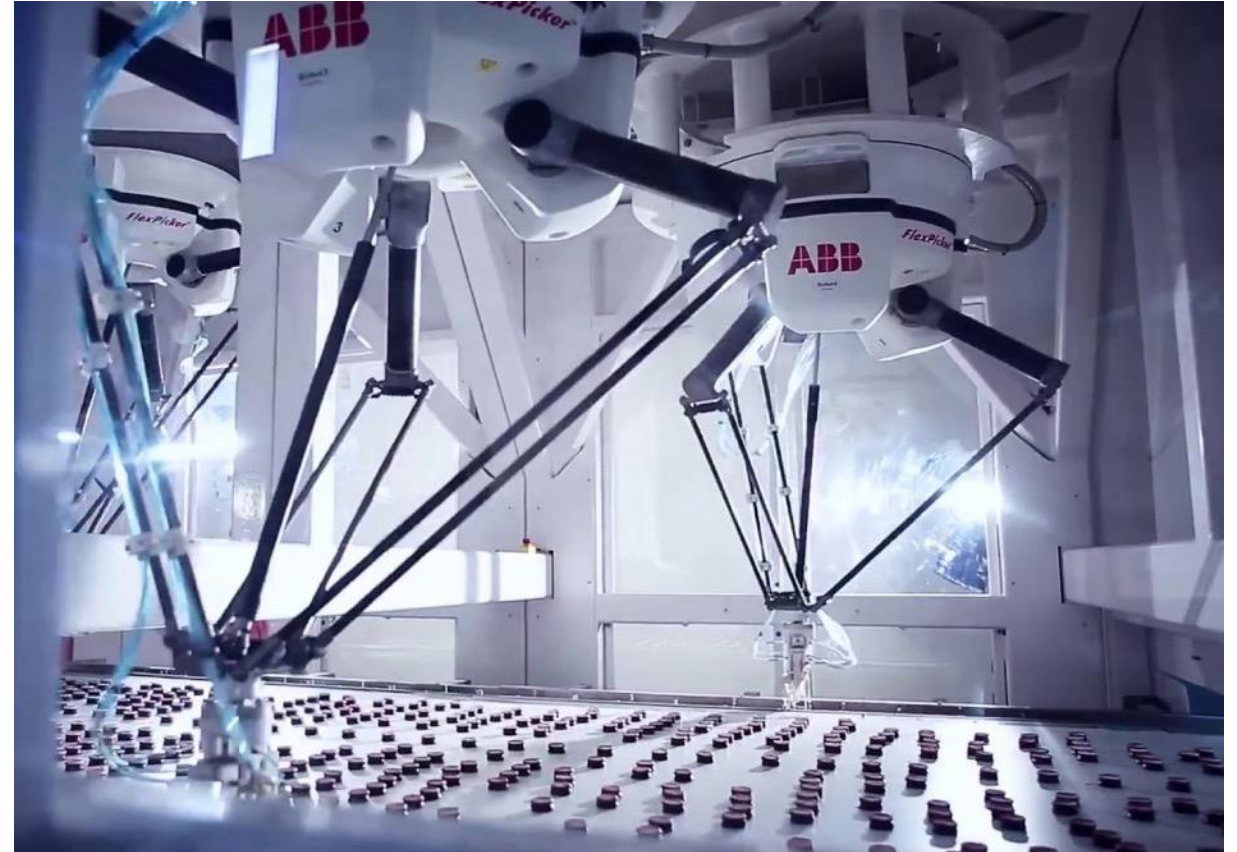


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## A partner with a comprehensive offering

Automate your processes & safeguard operations

- Plant, process, and machine automation and control
- Picking, packing, and palletizing robotics
- Food and people safety solutions





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## A partner with a comprehensive offering

### And digitalize your future

- Measuring & sensing
- ABB Ability™ portfolio
- Continuous operations

#### Did you know...

Our ABB Ability SmartSensor™ for motors can reduce downtime by as much as 70 percent, extend motor lifetimes by up to 30 percent, and reduce energy consumption by up to 10%?

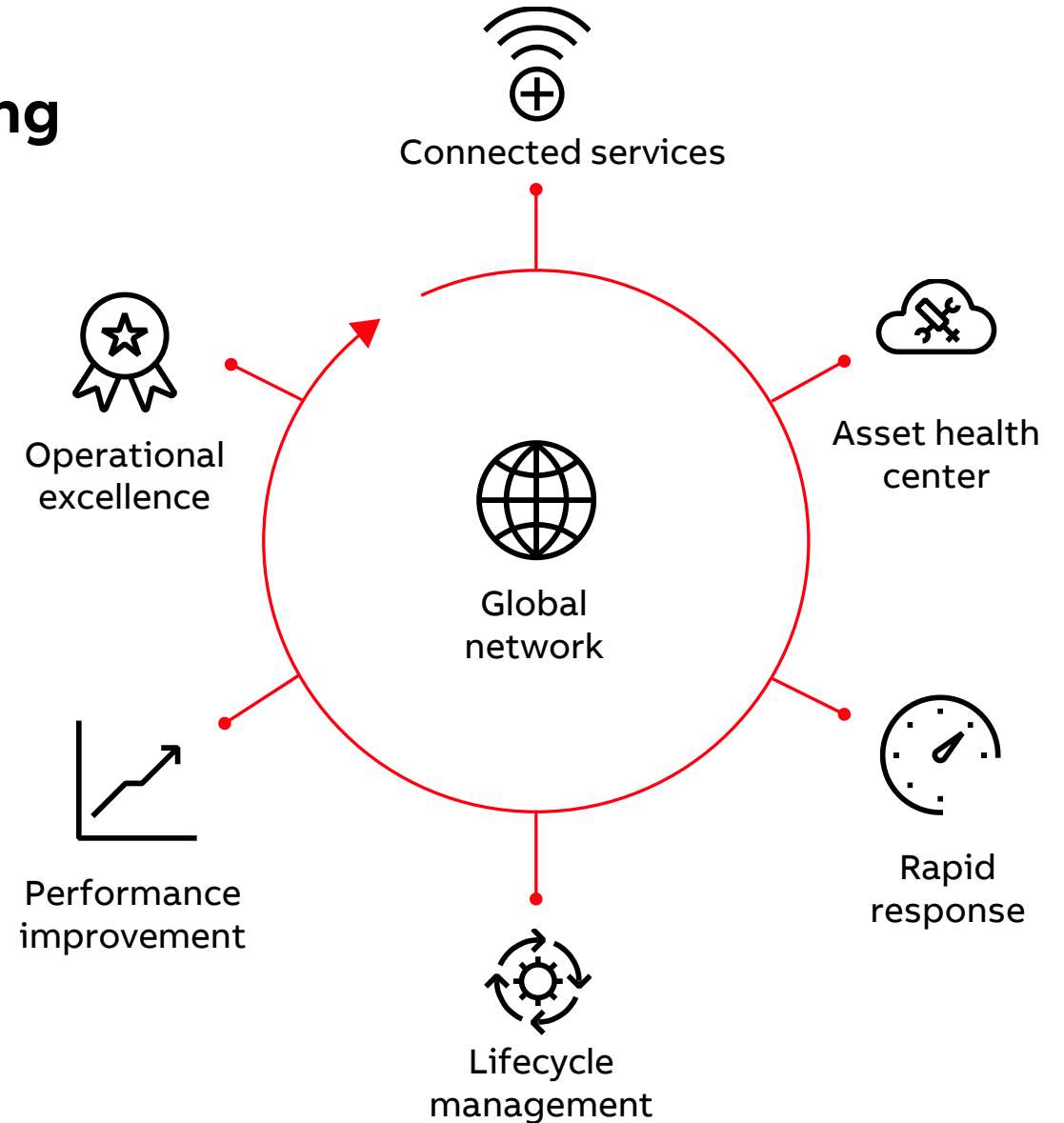


# A partner with a comprehensive offering

## For continuous operations

A broad portfolio of services and support at each stage of the production process, backed by a global network.

- Site assessments
- Process optimization
- Power studies
- Consultation services





# A partner with a comprehensive offering

## Picking, packing & palletizing



- Flex Picker
- PalletPack
- RacerPack

## Electrical & mechanical



- LV drives
- Softstarters
- SynRM
- Baldor
- Dodge
- Ultra-Kleen

## Power distribution, protection & quality



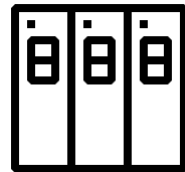
- MV & LV SWG
- Transformers
- UPS, AVC, RPC

## Control



- 800xA
- MES
- AC500
- Batch Management

## Safety & protection



- MNS iS
- Thomas & Betts
- Jokab Safety

## Instrumentation



- Hygienic Master

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**We are the partner who can power, automate  
and digitalize your production**



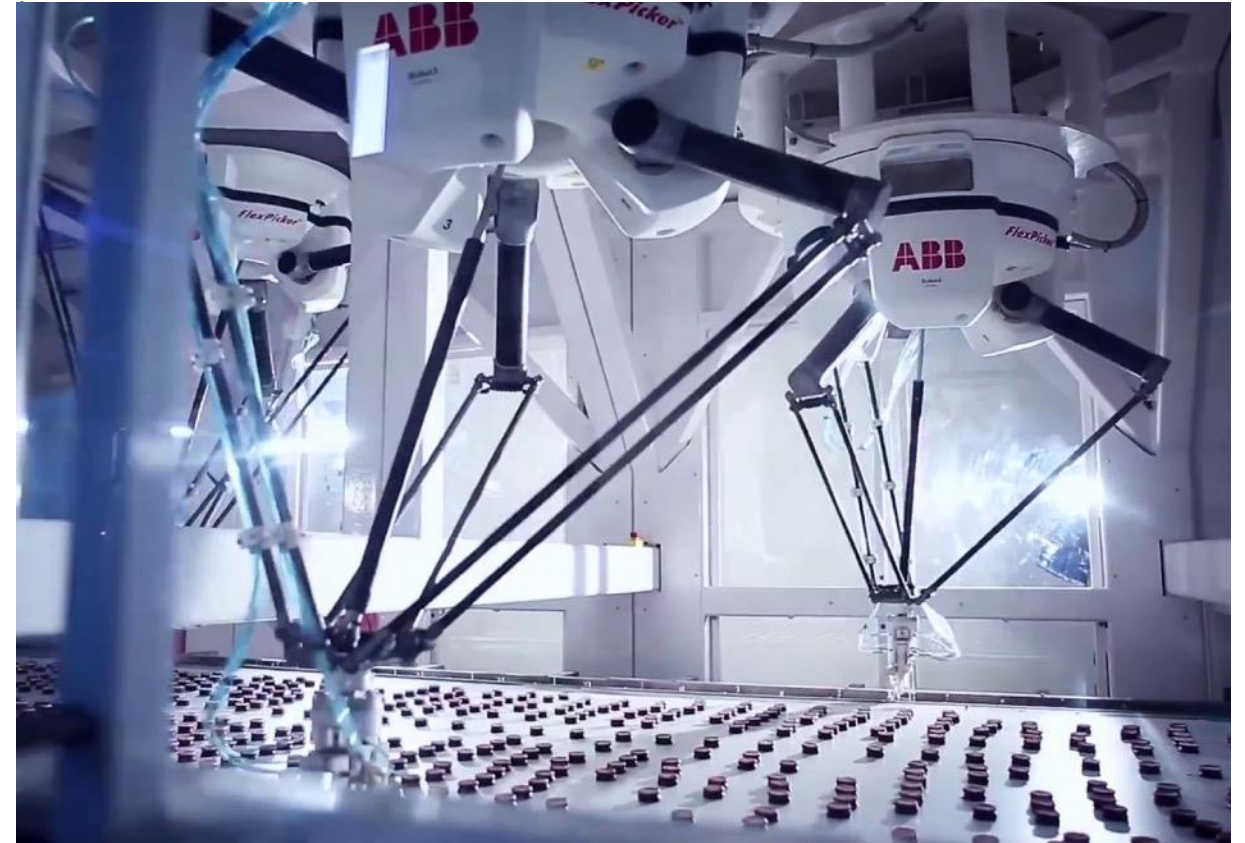


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## No challenge is too great

A strong portfolio supported by a global network and a history of exceptional service

- 130 years technological leadership
- Operations in over 100 countries
- Around 147,000 team members
- More than 30,000 robots installed
- \$1.4 billion investment in R&D every year
- Largest global portfolio from power to palletizing



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# A partner with a comprehensive offering

## That continues to grow – key acquisitions

2015 - GomTec

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2017 – B&R

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2018 – GE Industrial Solutions

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GE  
Industrial Solutions

2016 - SVIA

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2017 - Keymile

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# No challenge is too great

All set for growth in 2018 and beyond



## Global structure & positioning

- 2,600+ new customers won
- 12 BU segment leaders
- 30+ account managers
- 25+ new hires from the industry



## Local team activation

- 54+ countries with F&B teams ready to go
- 45+ F&B leaders

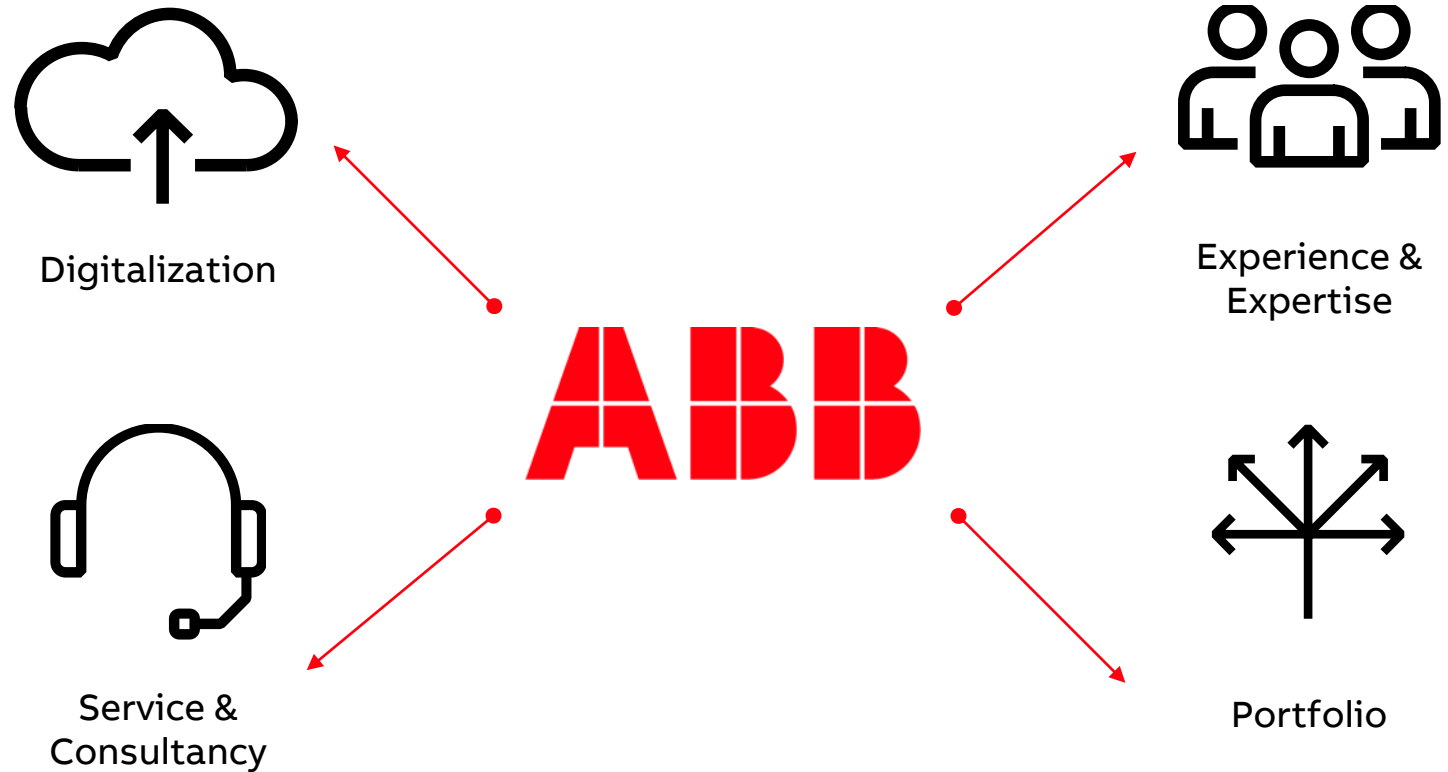


## Customer wins

- 100+ customer events completed
- 10+ digital assessments conducted
- 20 full plant assessments
- 1<sup>st</sup> digital expert group completed

# No challenge is too great

With our approach, capabilities and combined experience, we can find the solution together.





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**So let's talk**



**ABB**