

Strategies for Small Manufacturers: From an OEM Perspective

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Naperville, IL

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ALSTOM
Shaping the future



welcome • bienvenue • swagtam

Ground Rules

- Save questions for the end
- Be courteous with phones
- Find me afterwards for take-home tools



- Goals, Intro to ALSTOM
- The big risks for OEMs
- What to do and why
 - Have a process
 - Have a product
 - Identify Opportunities
 - Re-cap
- Questions

- **Goals, Intro to ALSTOM**

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Ultimate Goal



- Enter Transit market
- Increase sales/profit
- Refine strategy

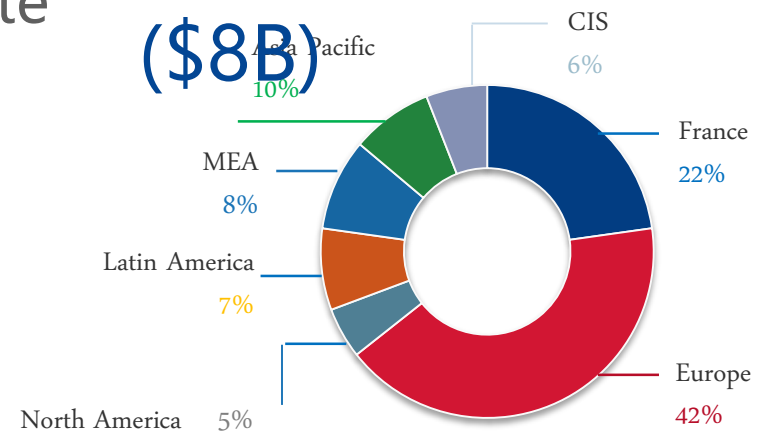
Who is ↩↪↪↩?

A Global Provider of Rail Products and Services

- **\$8 Billion** revenue in 2013
- 28,000 employees across 90 sites
- 100+ years experience in rail market
 - Over 9000 trains sold to date



Distribution of Global Revenue (\$8B)



Urban Tramways and Tram-Trains

- **1,800** Citadis ordered in **over 40** cities
- **1 in 4** low-floor trams in service manufactured by Alstom
- **6 billion** passengers & **500 million km** since 2000
- **1st** catenary-less tramway in service
- **1st** easily accessible tramway

Casablanca

Bordeaux

Aubagne

Rotterdam

Montpellier

Paris



Dubai

Le Mans

Nice

Istanbul

Madrid

Reims

Dijon

Metros (subway)

- **4000+** Metropolis sold in **40+** cities
- **60+ years** expertise
- **100,000** passengers per hour & per direction

Panama City



Chennai



Barcelona



Lausanne



Paris



Santiago



Singapore



Amsterdam



Santo Domingo



Shanghai

Suburban trains

- Around **4,600** X'Trapolis cars ordered
 - **3,600** cars of X'Trapolis Mega for South Africa - the world's largest fleet renewal
- Up to **30,000** passengers per hour and per direction
- Double-deck for greater capacity
 - **1,725** passengers per trainset on RER A (Paris) which transports 1 million people/day



Melbourne



Spain



Paris



South Africa

Regional trains

- More than **1,200** Coradia currently operating in **9** European countries and Canada
- **1st 100%** full low-floor bi-mode Regional train – Coradia Polyvalent for Régiolis* (France)

Coradia Polyvalent (France)



Coradia Continental (Germany)



Coradia Lint (Germany)



Coradia Nordic (Sweden)



Coradia Liner (France)



Coradia Meridian (Italy)



Coradia Duplex (France)

High-speed trains

- More than **500** Pendolino ordered
- Cross-border train, certified in **13** countries and soon to be **14**
- **1 out of 3** trains in service worldwide running **at more than 200 km/h** uses Alstom technology



Italy



Switzerland



Russia & Finland



United Kingdom



USA

Very High-Speed Trains

Euroduplex

- **Over 700** VHST trains ordered
- **Best** capacity on the market

AGV

- **25** sold to NTV, all in commercial service
- **1st** train to combine articulated architecture with distributed power for maximum safety



Euroduplex (France)



AGV .italo (Italy)

Passenger & freight locomotives

- **100 years'** expertise
- **Leader** in installed base
- A **localisation** model
- Co-development with **TMH**, the world leader in locomotives



KZ8A (Kazakhstan)



Prima II (Morocco)



KZ4AT (Kazakhstan)



EP20 (Russia)

Urban signalling

- Urbalis: signalling solution for higher capacity with minimal headway
 - **25%** of all radio CBTC solutions in operation
 - Urbalis Fluence: latest signalling solution with direct train-to-train communication
- Security & control: Iconis, Pacis



Lausanne Metro - Urbalis



Lille Metro - Urbalis Fluence



Hong Kong control centre

Main Line Signalling: Optimum efficiency & complete safety

- Atlas

- Proven ERTMS solution for **100%** interoperable trains
- **#1** worldwide for onboard equipment (**70%** of market)

- Iconis

- Scalable & modular control centre solution
- **80** systems in operation worldwide



Atlas &
X'Trapolis,
Melbourne



Betuweroute, freight corridor A,
Netherlands



Bologna control centre

Infrastructure

- Track

- Appitrack holds the world track-laying record: **403 m** of single track in one day
- **630+** single-track kilometres of track installed

- Electro-mechanical (stations & depots)

- Electrification

- **13 million km** travelled with APS catenary-free solution
- **600+** km of lines equipped with overhead contact system and/or power supply solutions
- Hesop reversible substation for urban networks recovers **more than 99%** of traction energy generated by braking



KTX infrastructure, Republic of Korea



Athens Suburban Rail, Greece

Services

- Maintenance
 - **400+** tram & **1,700** metro cars maintained
- Spare Parts & Repairs
- Train Modernisation
- Support services



Reims



Casablanca



Singapore



Bucharest



Paris

Point?

We buy a LOT of parts...
...from MANY suppliers.

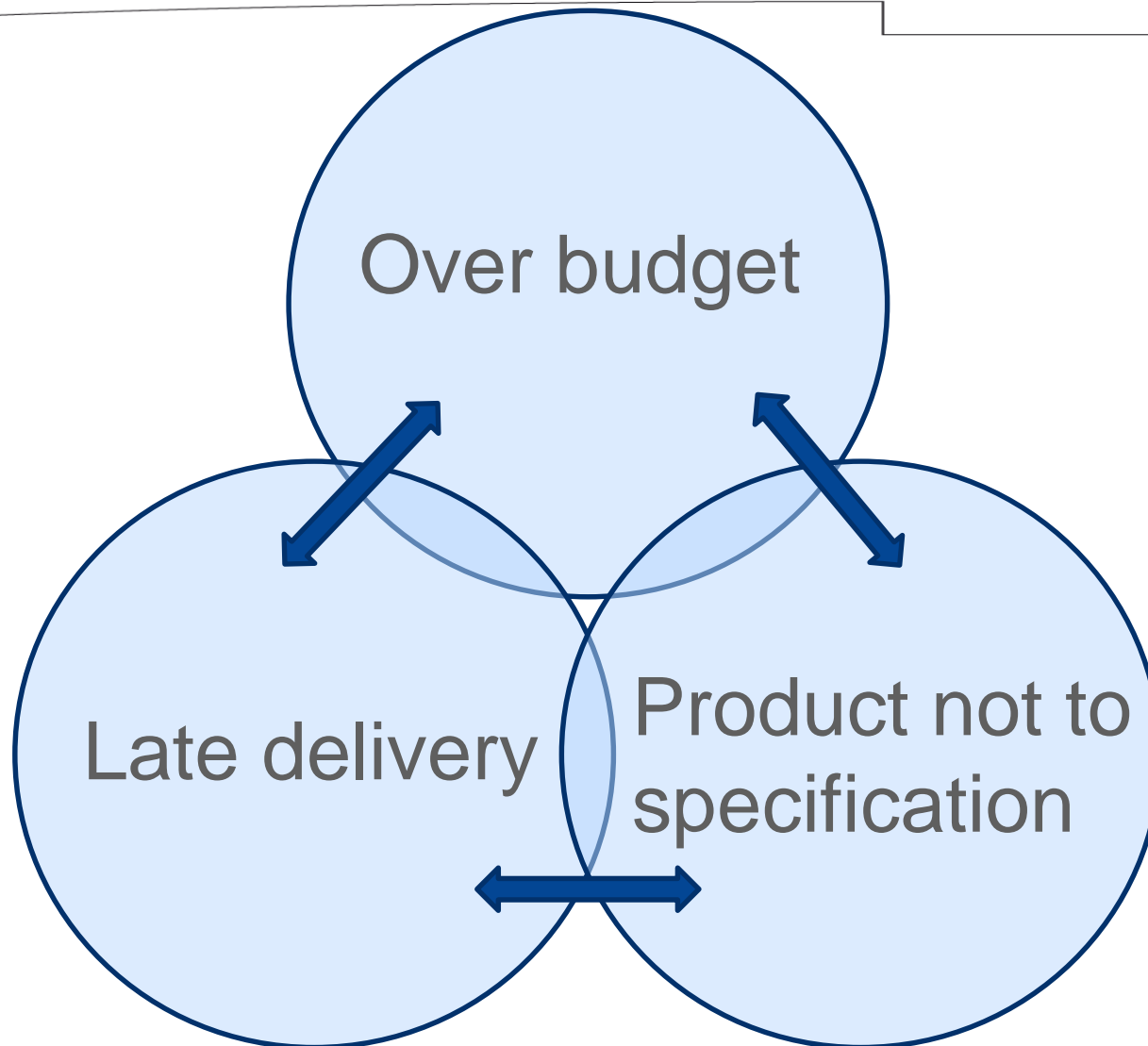
ALSTOM has:

- > **3000+** suppliers engaged globally
- > **800+** North American suppliers used regularly in 2013

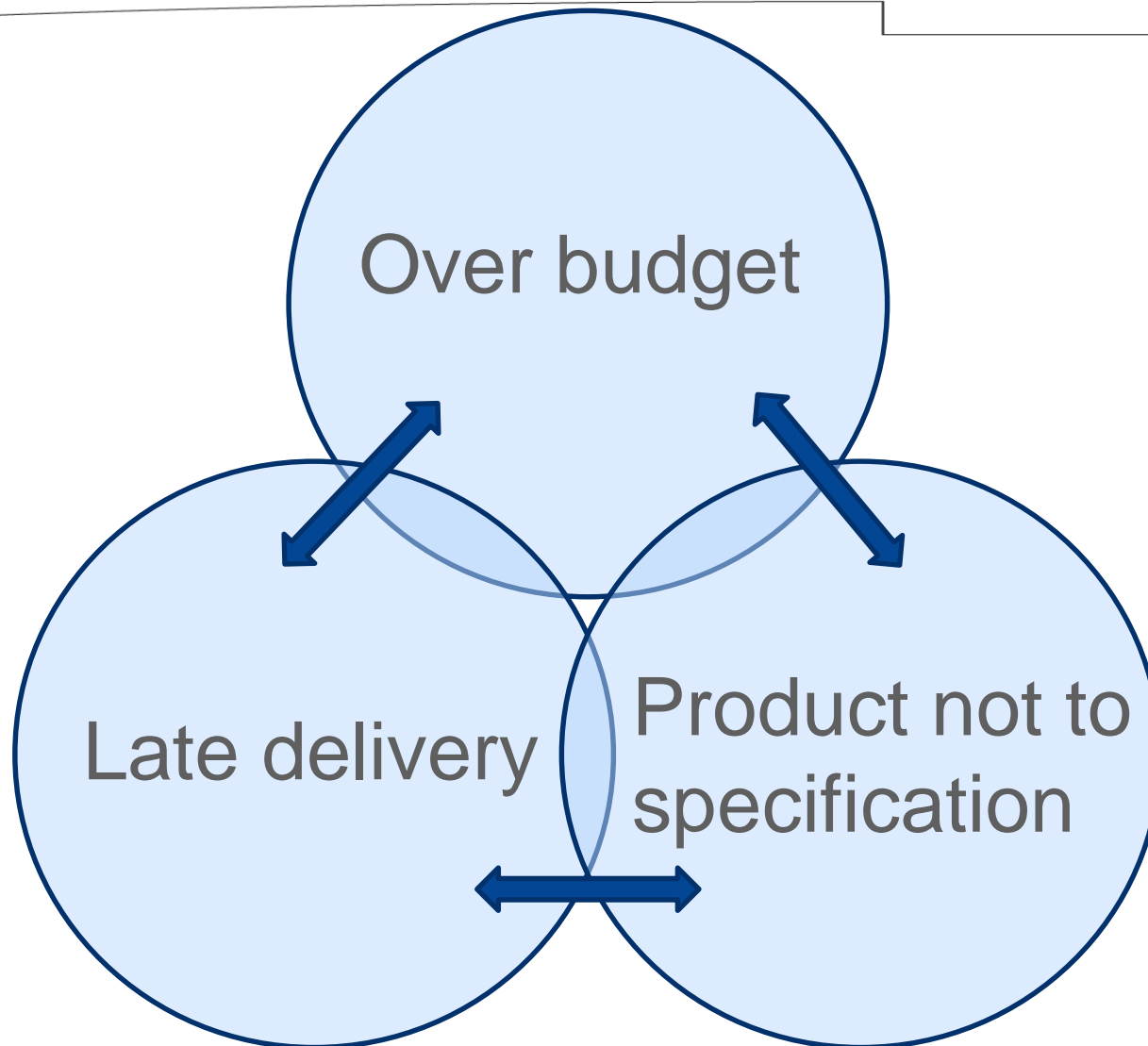


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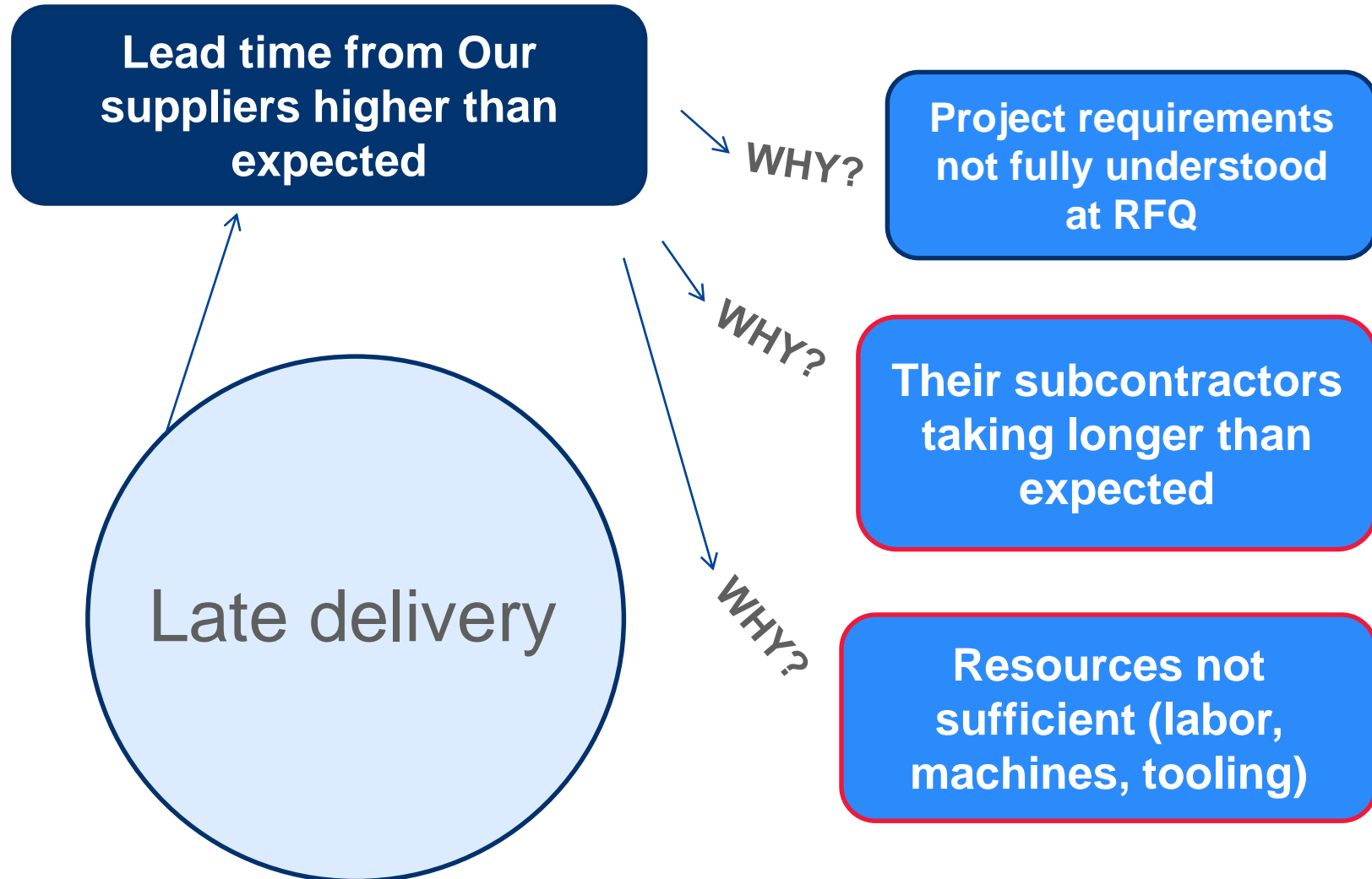
Risks for OEMs



Risks for OEMs



Risks for OEMs concerning our suppliers



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What to do and why?

Show that your business will not be risky



- Big Supplier Contracts awarded:
 - Price competitive
 - Meet schedule
 - Tech. compliant
 - Capacity
- SMALL Business Contracts awarded:
 - Capacity
 - Financial Stability
 - Price competitive
 - Tech. compliant

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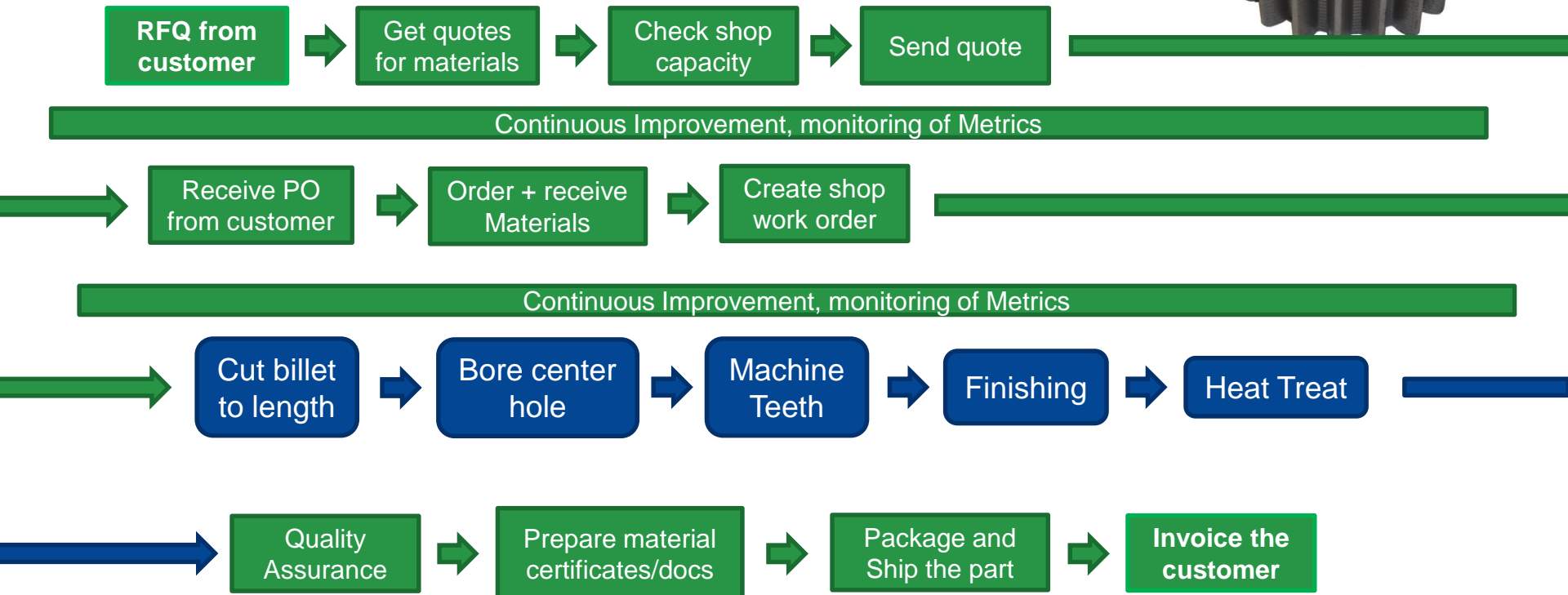
Have a **process**

- Manufacturing isn't everything
- Your people are pillars, but...



Have a process

- Manufacturing isn't everything



Have a **process**, then **measure** and **improve**

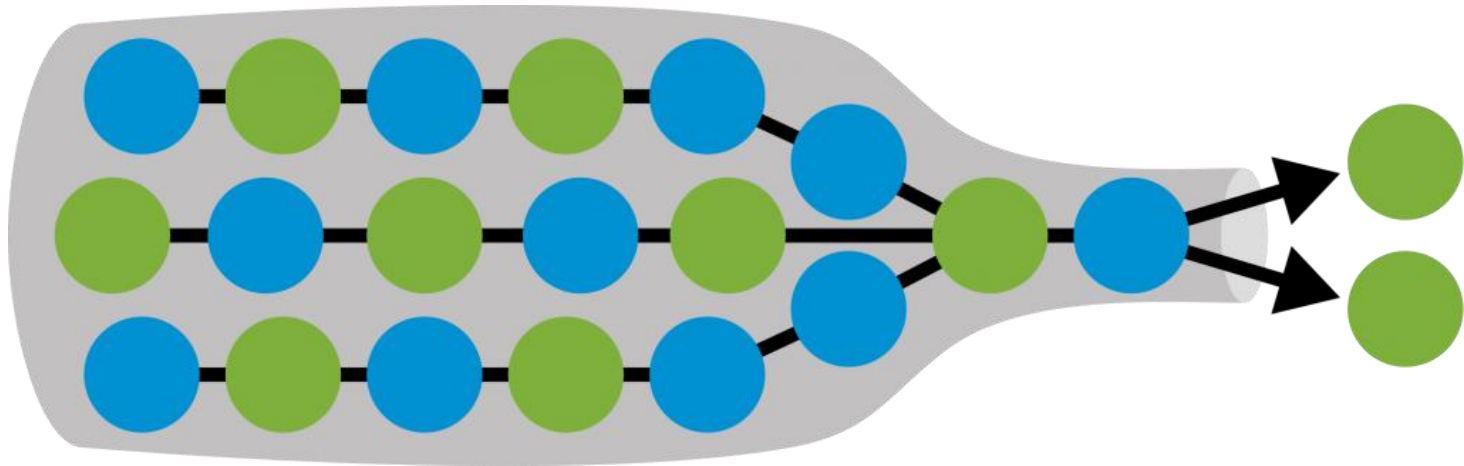
- **Your people are pillars, but...**
 - Most small suppliers do not track “administrative” workloads
 - Identify bottlenecks off the floor
 - Make best use of your resources



Have a **process**, then **measure** and **improve**

...How would the business run if:

- Person A wasn't there?
- Sales doubled next year?
- Machinery broke down?



Re-cap: Have a process

- **Standardize and record**
- **Measure and improve**
- **Roles and responsibility clearly defined**
- **Backup plans established**

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Have a product

- References/examples
- What WON'T you do?
- Find a niche

ALSTOM has:

- > **3000+** suppliers engaged globally
- > **800+** North American suppliers used regularly in 2013
- > At least **8** competitors!

We can build whatever you want!



If Transit was a game of football...

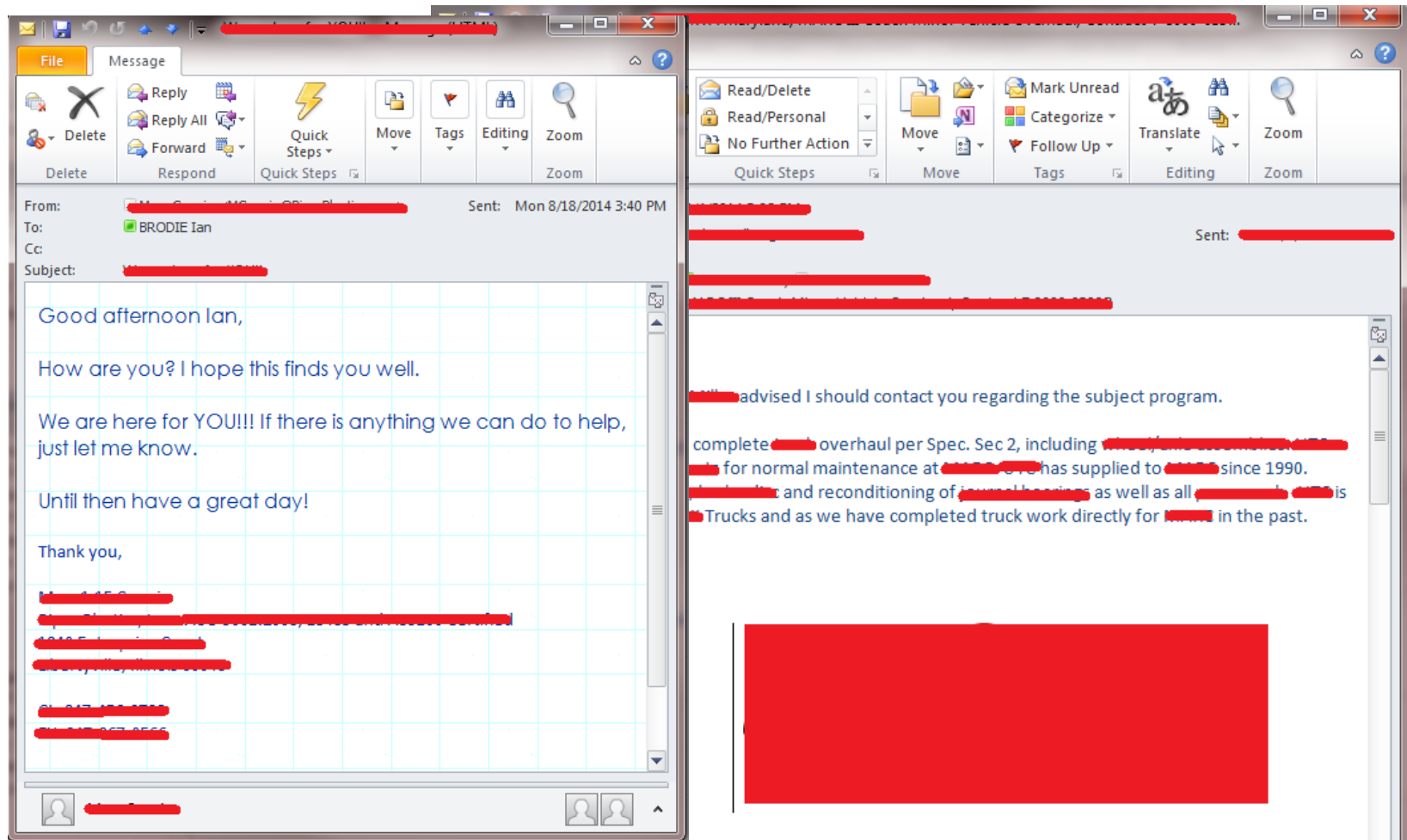
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Identify your **opportunities**

- Public contract announcements
- SBA / SAM
- DBE / MBE
- HUBzone
- NIST MEP



Identify your opportunities



Culture or Strategy?

Culture

- Employees individual ability to grow
- Employees individual attitude
- Employees Individual work ethic

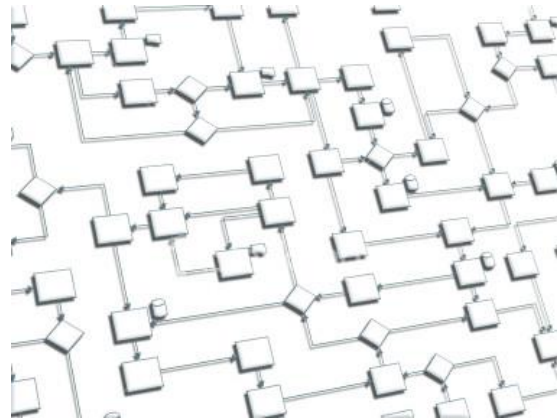
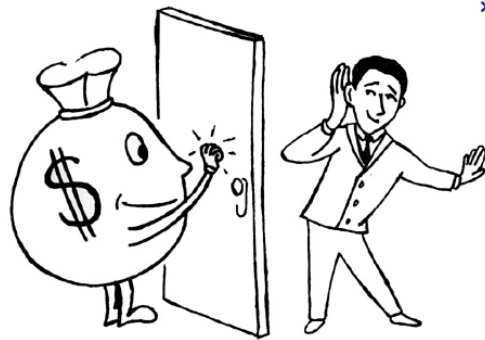
Strategy

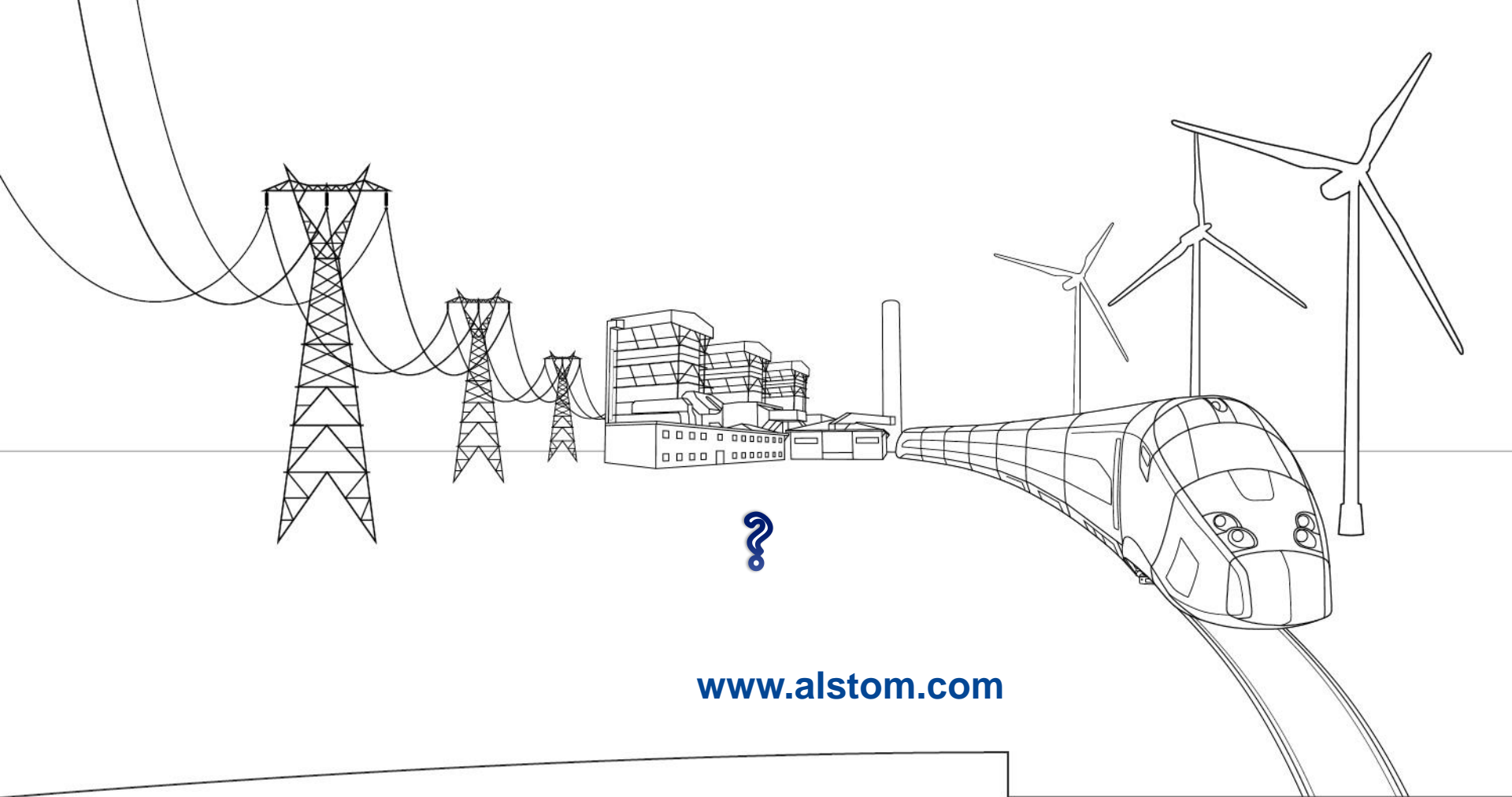
- Affects how the business will grow as a whole
- Which markets or customers to pursue
- How to compete (price, innovation, service)

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Review

- Standardize & Improve
- Plan
- Identify





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