

*Remember to bring an object that you don't know
how it's made to Studio this week.*

Session 9: Product Design Global Sourcing

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Vice Dean of Entrepreneurship & Innovation

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Make-Buy Decision (Do I Produce Myself or Outsource?)

Modern Meadow produces itself...



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Introducing Zoa™
Biofabricated Leather.

Allbirds outsources...

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WOOL RUNNERS



WOOL LOUNGERS

What explains these decisions?

www.menti.com

51 97 03

*Remember to bring an object that you don't know
how it's made to Studio this week.*

Make-Buy Decision (Do I Produce Myself or Outsource?)

Alpha Assets are the source of competitive advantage for companies.

They are the **rare** and **necessary** resources required to do the job.

Can the *production process* be an alpha asset for the company?

If not, then probably will contract for production with a supplier.

Modern Meadow produces itself...



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Introducing Zoa™
Biofabricated Leather.

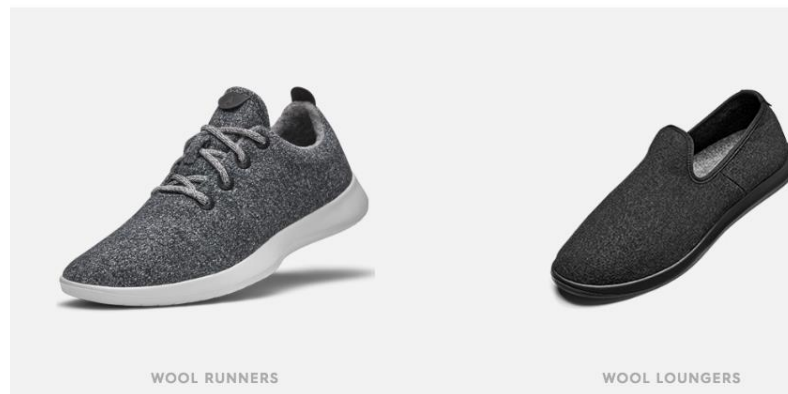
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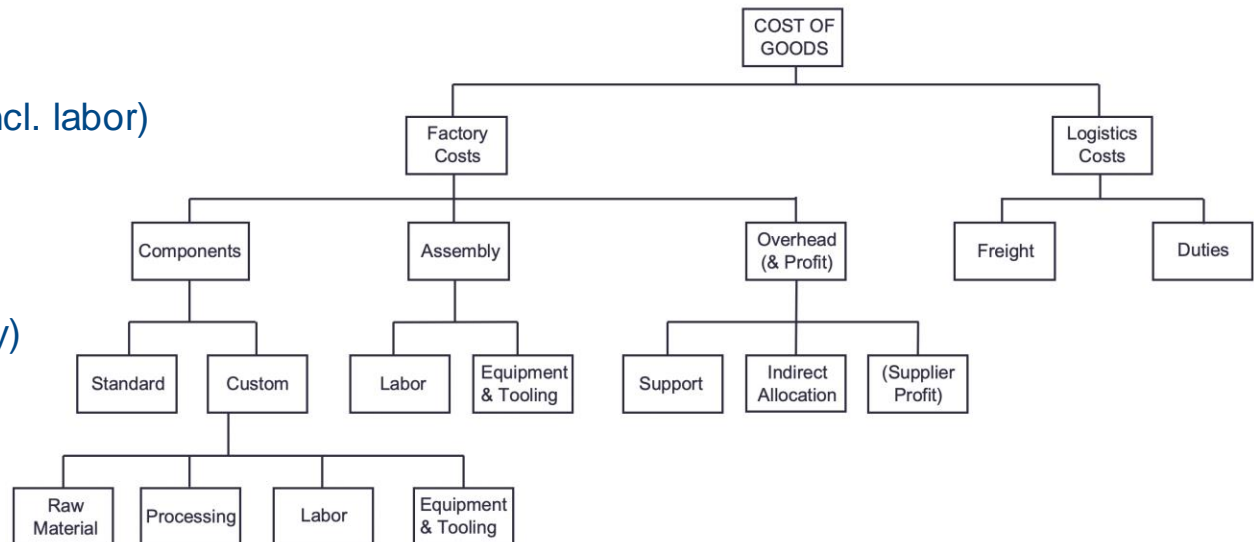
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Key Factors in Supplier Selection

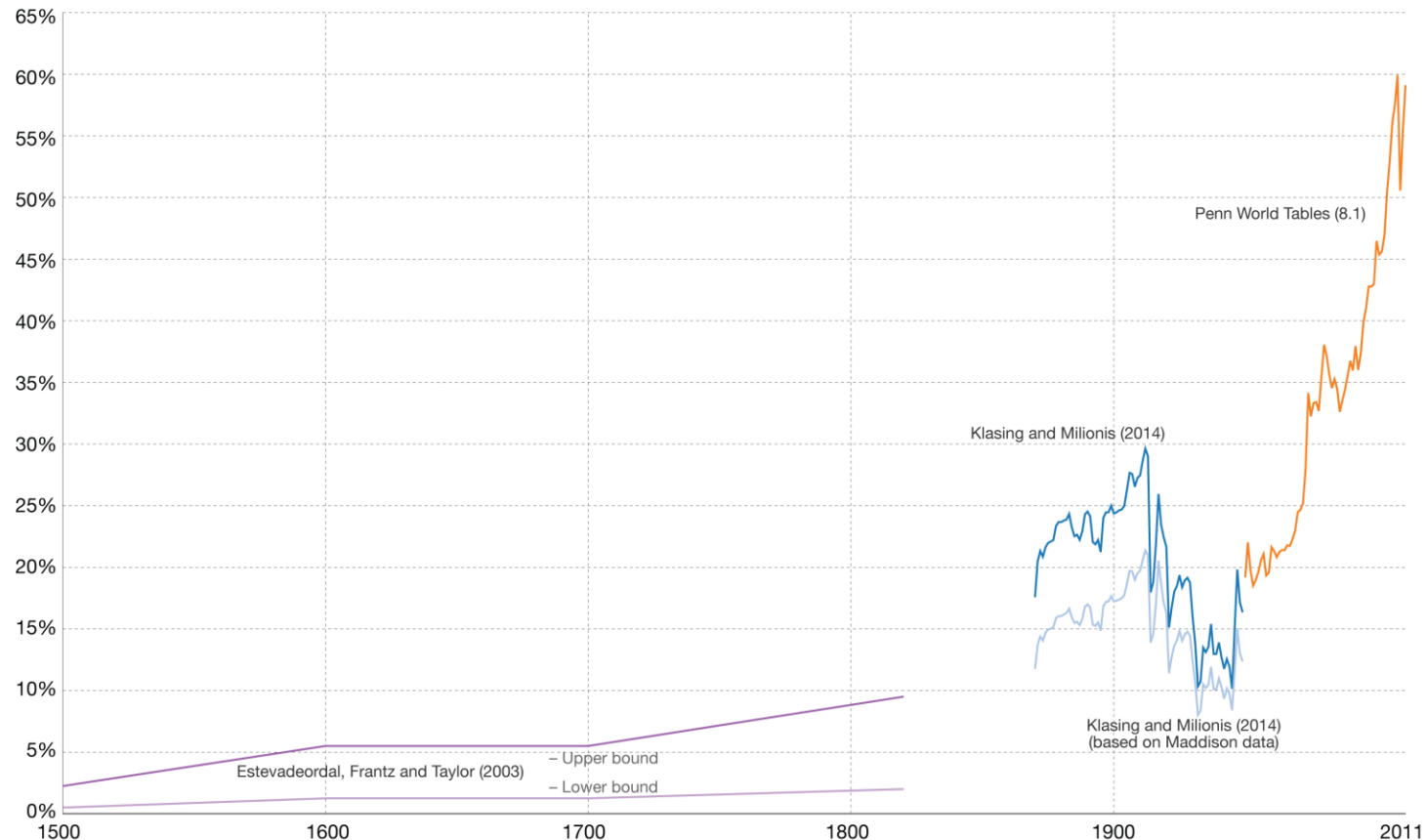
- Quality, capabilities
- Cost
 - Materials
 - Processing (incl. labor)
 - Tooling
 - Assembly (incl. labor)
 - Overhead and profit (incl. labor)
 - Freight
 - Duties
- Lead time (order to delivery)



Globalization over 5 centuries (1500-2011)

Shown is the sum of world exports and imports as a share of world GDP (%)

The individual series are labeled with the source of the data



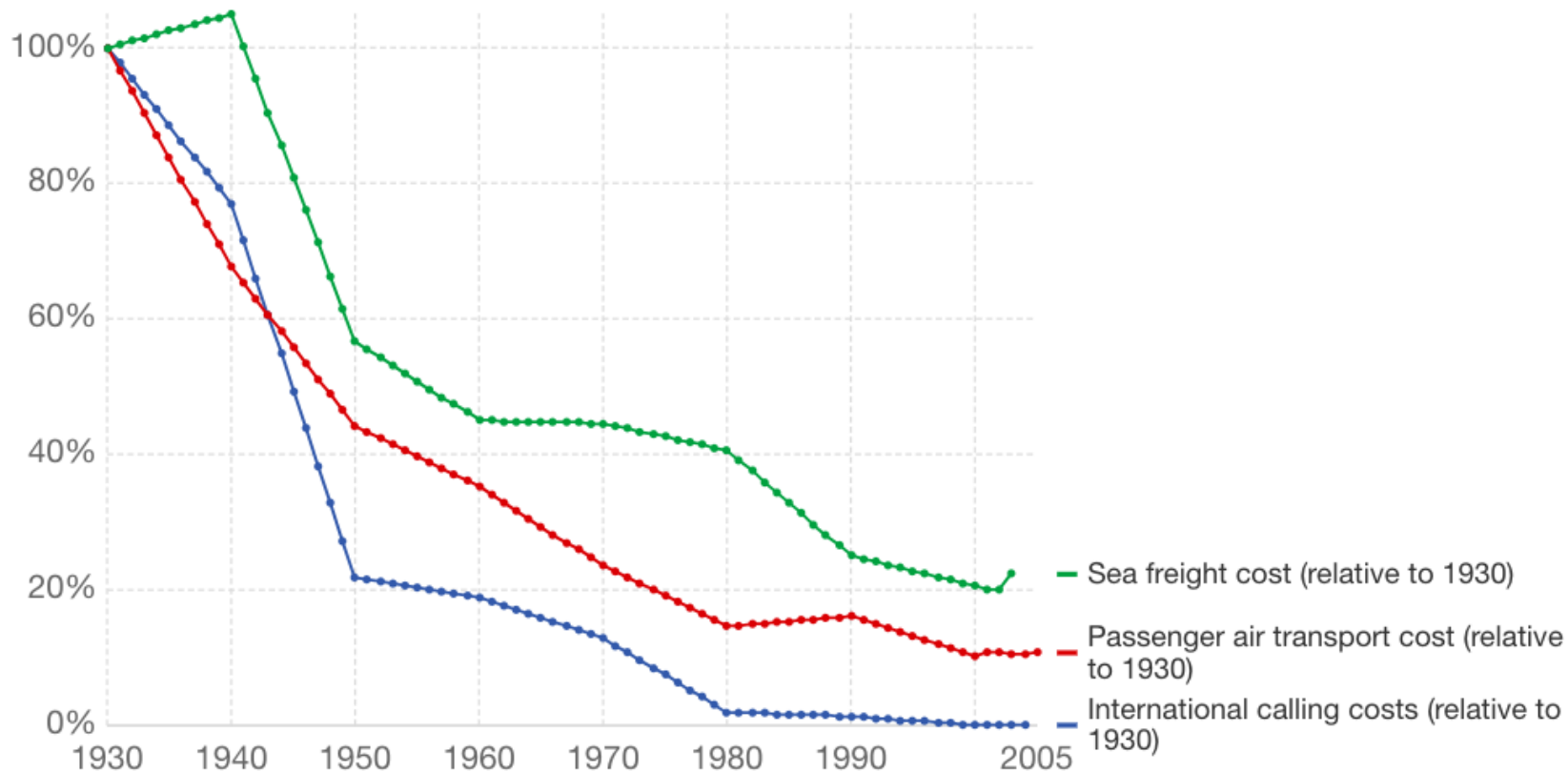
Data sources: Klasing and Milionis (2014), Estevadeordal, Frantz and Taylor (2003) and the Penn World Tables Version 8.1
The interactive data visualization is available at OurWorldinData.org. There you find the raw data and more visualizations on this topic.

Licensed under [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) by the author Max Roser.



The decline of transport and communication costs relative to 1930

Sea freight corresponds to average international freight charges per tonne. Passenger air transport corresponds to average airline revenue per passenger mile until 2000 spliced to US import air passenger fares afterwards. International calls correspond to cost of a three-minute call from New York to London.



What gives a geographic region an advantage in *production*?

Proportion of total manufacturing value added from medium and high-tech industry, 2014

The proportion of medium and high-tech industry (MHT) value added as a percentage of total manufacturing value. Higher values indicate a country's industry sector is focused on high-tech manufacturing.

Our World
in Data

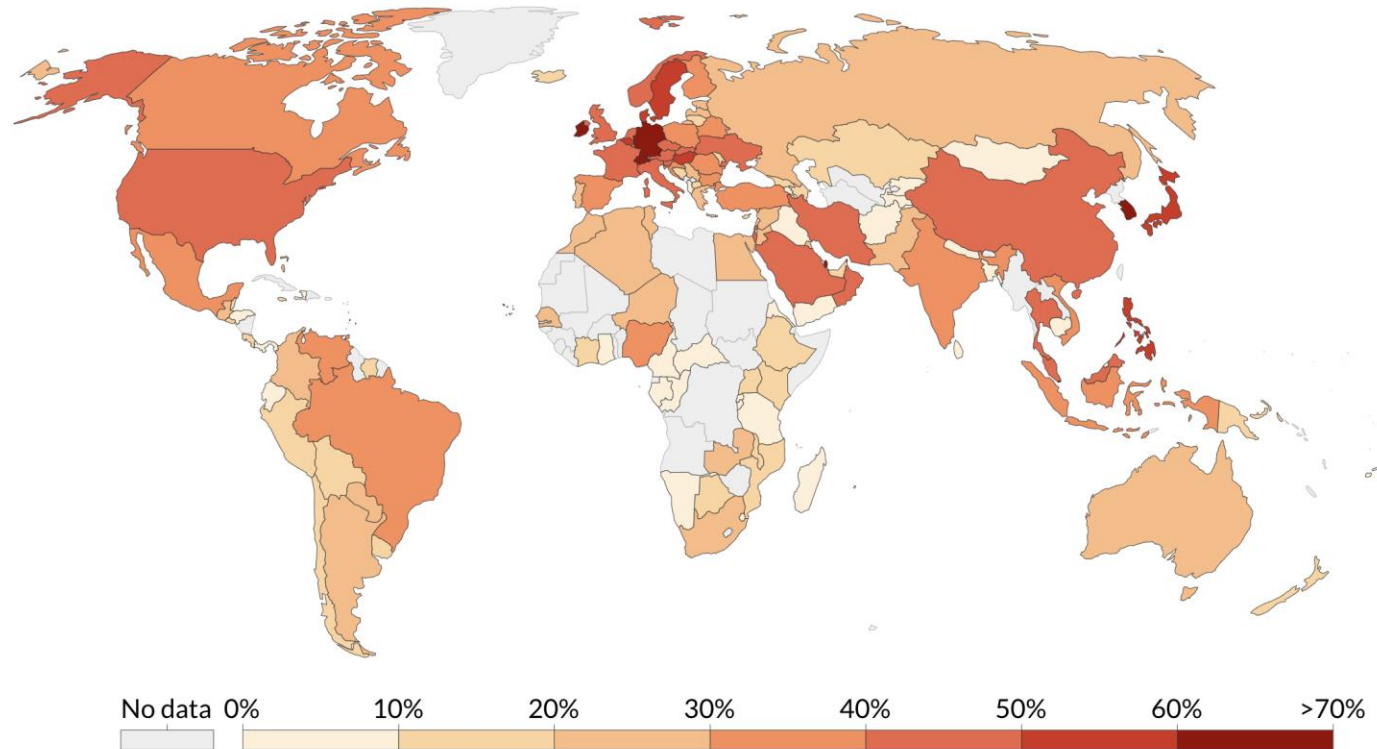
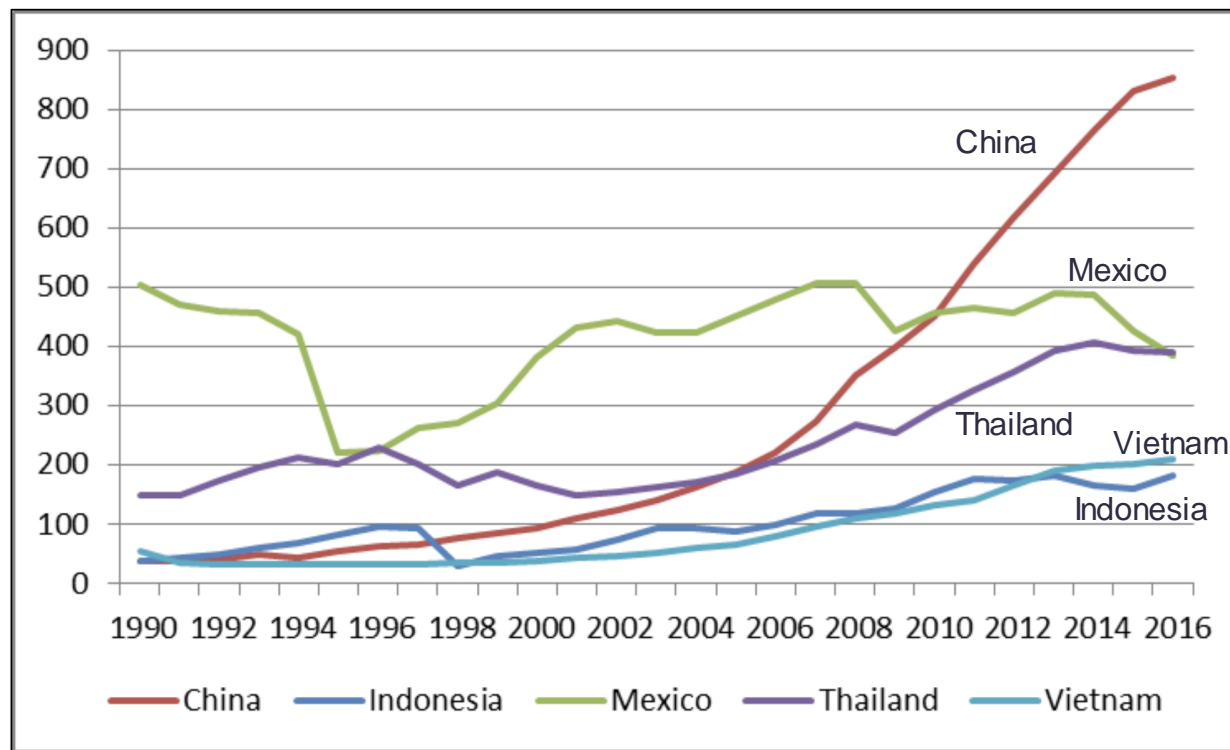


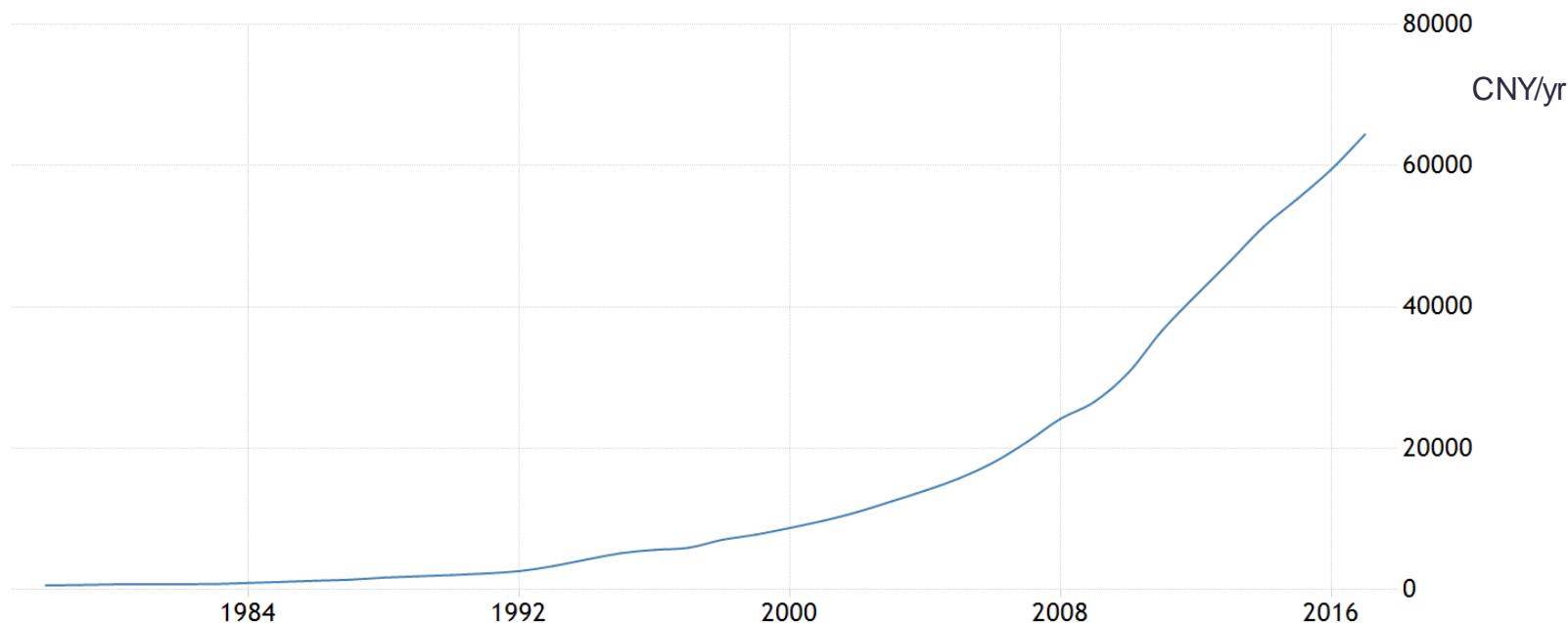
Figure 8. Average Monthly Wages for China and other Selected Countries: 1990-2016
(nominal U.S. dollars)



Source: Economist Intelligence Unit.



Factory Wages in China



SOURCE: TRADINGECONOMICS.COM | NATIONAL BUREAU OF STATISTICS OF CHINA

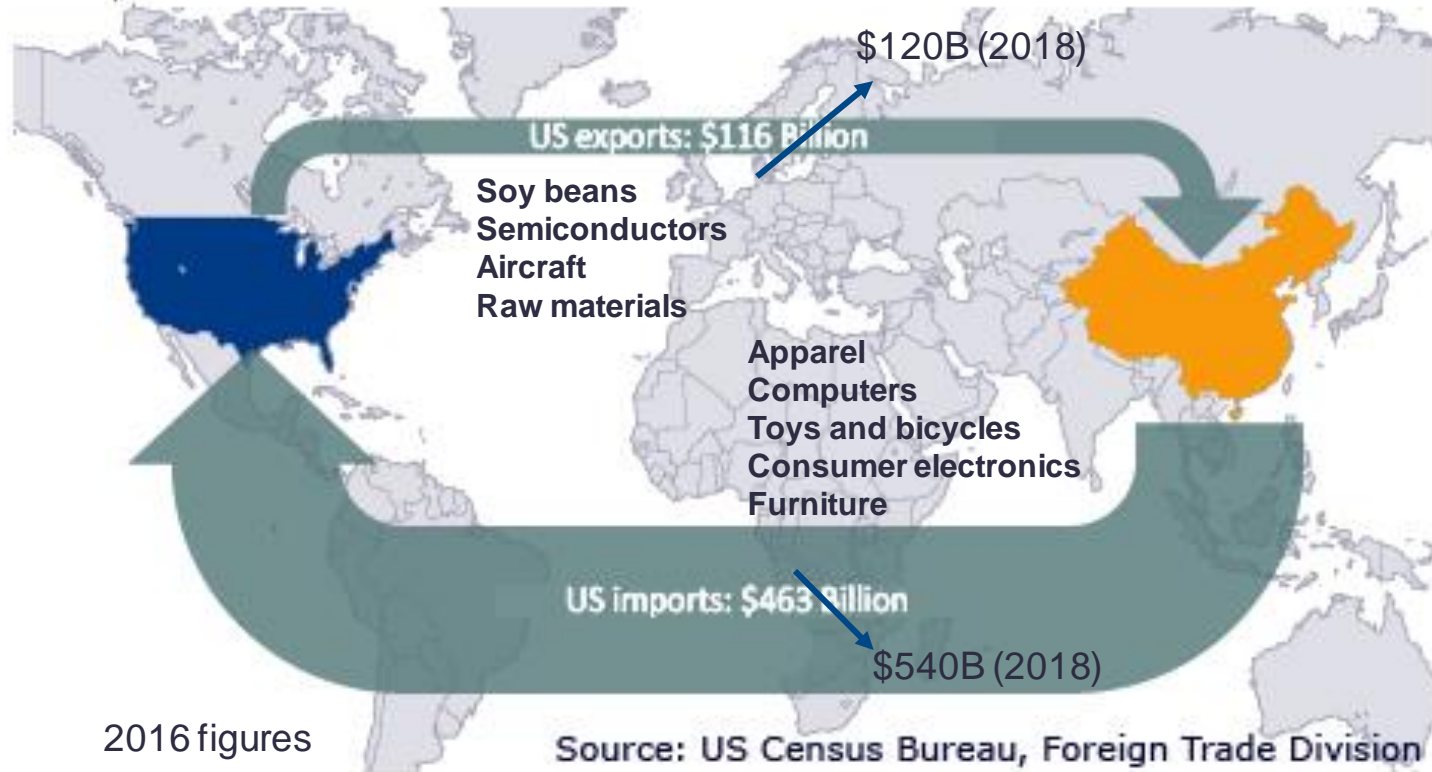
2018 average wage in manufacturing
~ 70,000 CNY/yr ~ 10,500 USD/yr (~ 5 USD/hr)

6.71 RMB (CNY) ~ 1 USD

Minimum wage in Shenzhen ~ 2 USD/hr



Trade balance







Changzhou Fulling Motor Co., Ltd.

Home

Product Categories ▾

Company Profile ▾

Certificates Display

Contacts

Home > Company Profile

Company Overview

Company Introduction

Company Capability

Trade Capacity

Production Capacity

Quality Control

R&D Capacity

Business Performance

Buyer Interactions

Ratings & Reviews

Transaction History

Changzhou Fulling Motor Co., Ltd. 🏠 📄

📧 Leave Messages

✉️ Contact Supplier



This supplier has been verified onsite by world-leading inspection company, TÜV SÜD



Business Type:	Manufacturer, Trading Company	✓ Verified
Location:	Jiangsu, China (Mainland)	✓ Verified
Main Products:	Hybrid Stepper Motor, PM Stepper Motor, DC Brushless Motor, AC Servo Motor	✓ Verified
Ownership:	Joint Venture	✓ Verified
Total Employees:	501 - 1000 People	✓ Verified
Total Annual Revenue:	confidential	✓ Verified

Fulling Motor

富兴机电

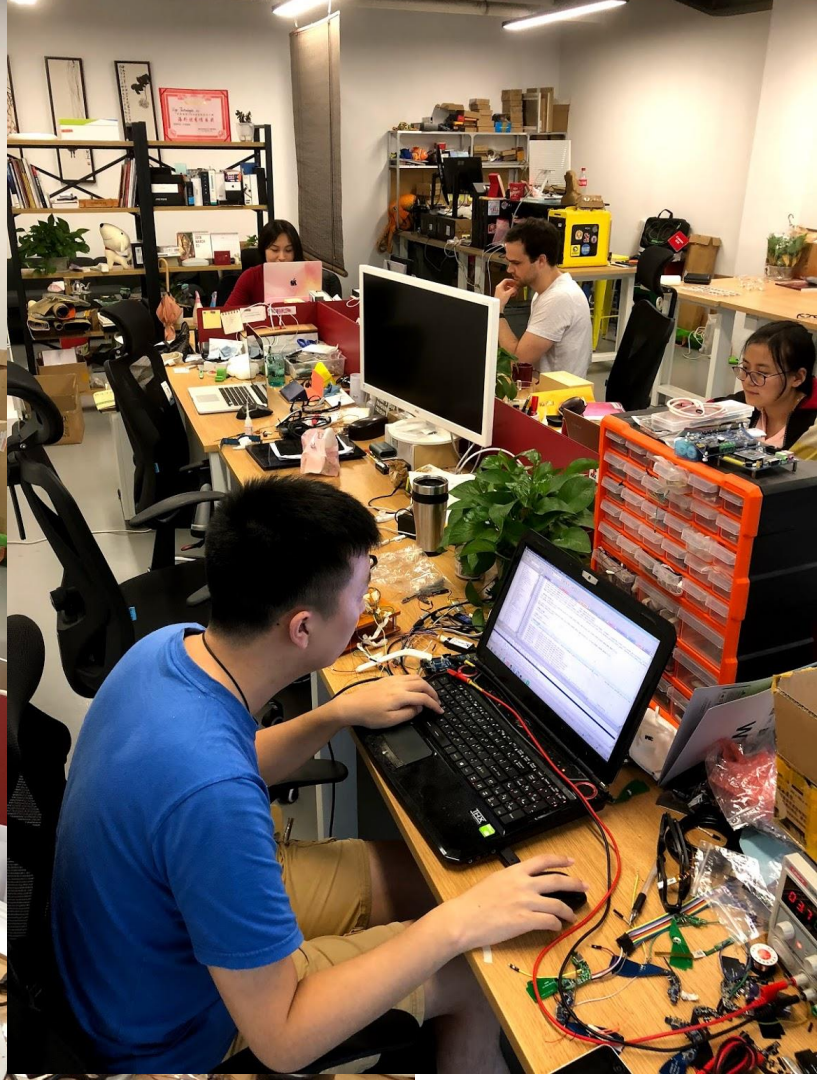


Accelerators/ Incubators (e.g., HAX)



- 3 – 12 months in Shenzhen
- Combination venture investment, incubator
- Several course alums have done HAX.
 - Lilu
 - Wazer
 - Vue

VUE at Hax (May 2018)

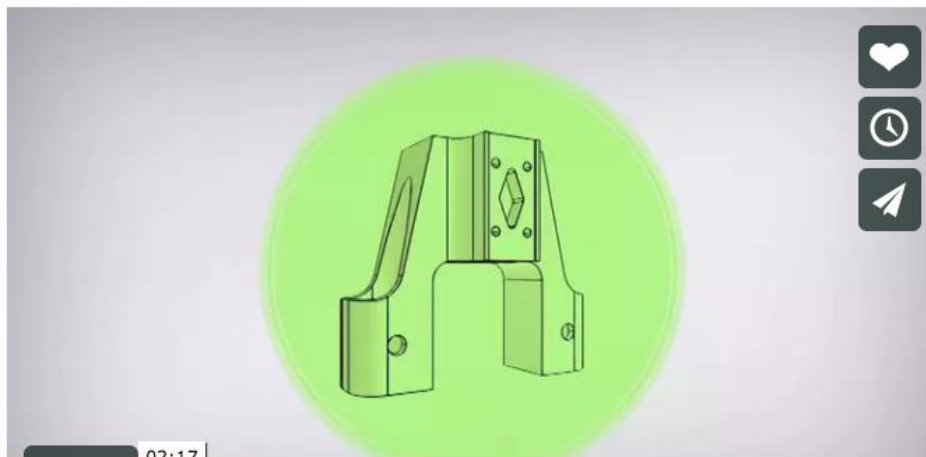




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A Strategic Sourcing Solution Coupled With A Global Network Of Custom Manufacturers



02:17



vimeo

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COMPANY *



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Round trip ▾ 1 passenger ▾ Economy ▾

○ Philadelphia



📍 Hong Kong HKG



Wed, May 1



Wed, May 8



Bags ▾

Stops ▾

Airlines ▾

Price ▾

Times ▾

Connecting airports ▾

More ▾



Track prices ⓘ



Date grid



Price graph



Nearby airports

Best departing flights ⓘ

Total price includes taxes + fees for 1 adult. Additional bag fees and other fees may apply.

Sort by: ↑↓



12:05 PM – 7:10 PM⁺¹

United · Operated by Amtrak Train

19h 5m

Flight + Train

1 stop

2h 6m EWR

\$820

round trip



8:00 AM – 6:55 PM⁺¹

Alaska, Cathay Pacific

22h 55m

PHL–HKG

1 stop

1h 55m SFO

\$855

round trip



8:45 PM – 6:55 AM⁺²

American

22h 10m

PHL–HKG



1 stop

1h 3m LAX

\$881

round trip



**Alice A.****China sourcing agent, Amazon product&FBA, Project manager, Inspection****\$25.00 / hr****\$20k+** earned **97% Job Success** **China**

PS: Some of the projects if hard to run like very small quantity need OEM and customize design, also have very lower target price, i will spend very short time ...

Market Research

Sales



Research

Project Management Professional

4 more

Test: 1

Portfolios: 5

**Jason G.****Chinese Product Sourcing, Negotiating, Inspection, Shipping Amazon FBA****\$15.00 / hr****\$4k+** earned **99% Job Success** **China**

Hi, I am locate in Shenzhen China, have over 10 years sourcing and relative experience, I can find better price than Alibaba.com, I bulit many good relationship ...

Sourcing

Alibaba Sourcing

Product Development

Purchasing Management

6 more

Portfolio: 1



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1669



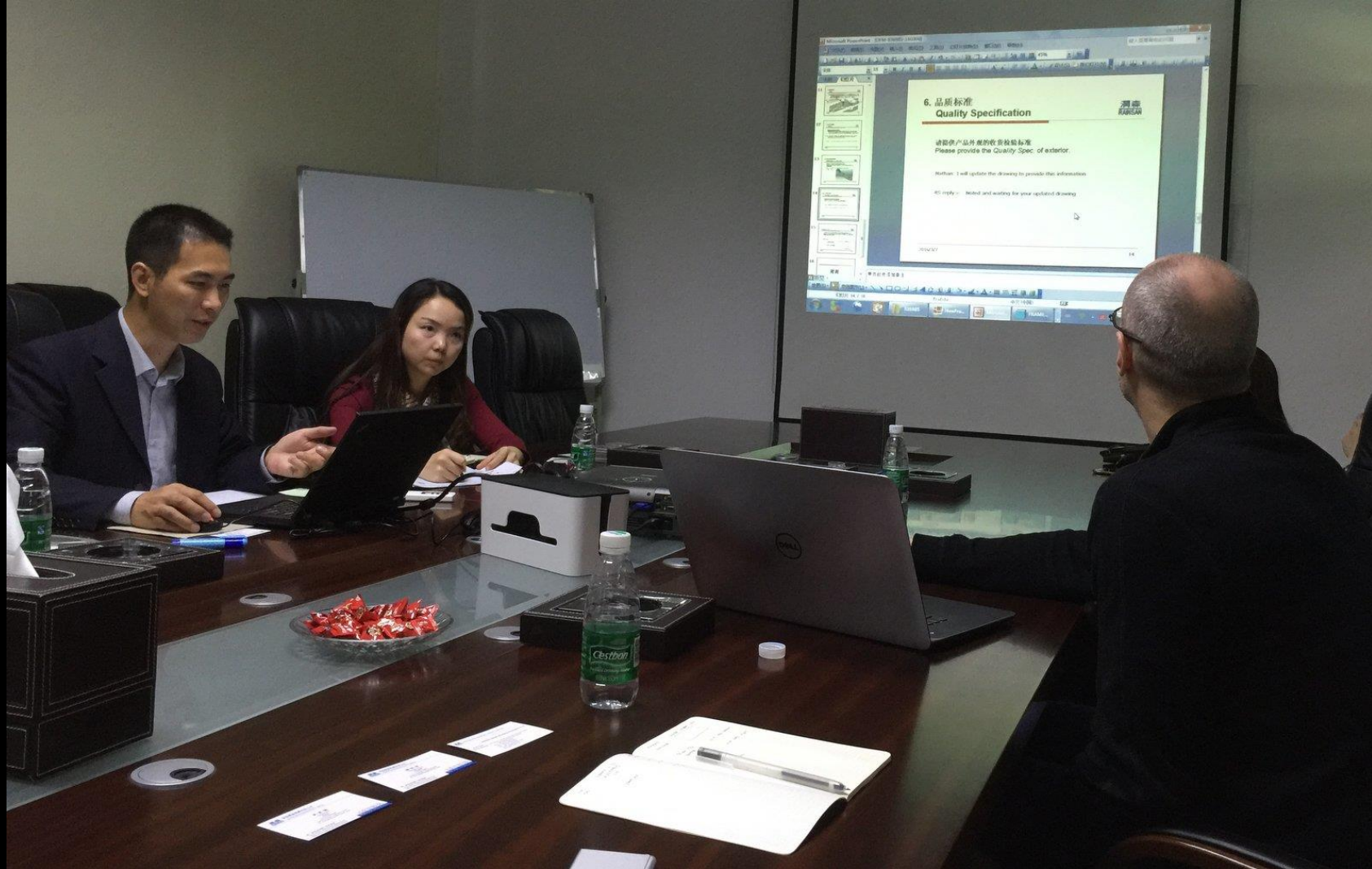
Hong Kong (West Kowloon) to Shenzhen (Futian) now 14 minutes

































① cast mass neighbor 1.1-1.2 kg / per one 19 Rmb
 ② cast machining : 500 T 15.5-17.3 / per one 15.5-17.3 Rmb / 4-5.6 Rmb per m

③ remove burr :

④ second CMC machining 18 holes / both side 12.3-14.3 Rmb

⑤ sand blast

OUT SURFACE :

5.5-6.7 Rmb per

⑥ packing

15-2.3 Rmb per one

⑦ padie

12.9 (20.9)

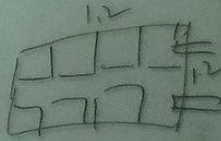
po some

20 Rmb

K=12

20 pu / outer

20 Rmb



HONG KONG RAINSON GROUP LIMITED

10th BUILDING, YUEPENG INDUSTRY PARK, LONGHUA DISTRICT, SHENZHEN CITY, P.R.C.







TEL: 86-755-8937 5758

FAX: 86-755-8937 5015

TO: **Technique Applied Science Inc**ATTN: **Nathan**FROM: **JoJo**PAGES: **1 OF 1**DATE: **Mar-14th-2016**TOPIC: **Quotation for Bracket Project****QUOTATION LIST**

Specification:

Currency:USD

Part Number	H1508-01	H1512-02		E0124-02	E0125-02	E0126-01
Part Name	Steer Support	Frame	Mg Deck	Latch Slide	Latch Pin	Latch Knob
Part Photo						
Material	A380	A380	AZ91D	440C	440C	440C
Finish	Shot Blasting	Shot Blasting	Powder Coating	None	None	None
Cavity Number	1x1	1x1	1x1	---	---	---
Tooling L/T(day)	35	40	45	---	---	---
Mould Material	8407	8407	8418	---	---	---
Tooling Life(shots)	100,000	80,000	80,000	---	---	---
Tooling Cost	\$12,500	\$17,500	\$26,500	---	---	---
MOQ (pcs)	3,000	3,000	3,000	3,000	3,000	3,000
Unit Price	\$4.15	\$5.70	\$11.20	\$0.75	\$0.50	\$0.70

Remark:

1. The incoterms for above quotation is ex-factory, we'll add USD950/time as the shipment cost if change to FOB Hong Kong.
2. This quotation is based on foreign exchange rate as USD1:RMB6.50, if the exchange rate fluctuates more than 2%, the unit price will be adjusted accordingly.
3. When the market price of Aluminum alloy fluctuates more than 3% per month, the unit price will be adjusted accordingly. The quoted material cost is US\$1,580/T based on LME.
4. The MOQ is 3,000pcs/order/shipment, otherwise, customer should pay US\$2,000 per order to Rainsan as the overhead expenses.
5. The tooling lead time is based on Rainsan received the deposit of the mold.
6. Terms of tooling payment: 50% deposit of total payment upon order confirmed, and 30% to be paid upon tooling finished, and 20% balance to be paid while sample confirmed.
7. Terms of order: 50% deposit upon PO received, 50% balance to be paid before shipped.
8. Customer should sign back to Rainsan as the effectual quotation.
9. This quotation is valid in 20 days. The date of quotation is Mar. 14th, 2016.

Confirmed by:

Date:





Assembly Line Circuit Breaker Factory of the World

<https://www.youtube.com/watch?v=fn62gcoOE3Q>

16,023 views



28



3



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...





Learning More

Leslie T. Chang. 2009. *Factory Girls: From Village to City in a Changing China*. ([Amazon](#))

The Last Train Home (Film available via Netflix etc.). [wikipedia](#)

Salsa

Simon Winchester. 2009. *The Man Who Loved China: The Fantastic Story of the Eccentric Scientist Who Unlocked the Mysteries of the Middle Kingdom*. ([Amazon](#))