

THE RETURN TO REGIONALIZATION FOR ELECTRONICS MANUFACTURING



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On-shoring

Localization

Re-shoring

Right-shoring

Repatriation

Near-shoring

Right-sourcing

Next-shoring

Regionalization

REGIONALIZATION

- Build in region for region
- This is how the outsourcing industry began
- Based on proper TCO (True Cost of Outsourcing) analysis
- Clear in both outsourcing and insourcing trends

EXAMPLES OF REGIONALIZATION



WHAT ARE CAUSES?

- Cost
- Quality
- Responsiveness
- Politics

TRUE COST OF OUTSOURCING (TCO)

3 Elements:

1. Global Pricing:
 - Price paid to EMS/ODM
2. OEM Internal Spend:
 - Internal cost to manage outsourcing
3. Geographic Risk:
 - The risk associated w/ solution selected

HISTORIC COST OF LABOR

PCBA	CY2009	CY2010	CY2011	CY2012	CY2013
Australia	\$46.50	\$42.70	\$42.40	\$43.20	\$43.32
Brazil	\$26.45	\$30.23	\$31.00	\$31.45	\$32.32
Canada	\$49.12	\$41.78	\$42.15	\$44.17	\$43.67
China	\$10.15	\$11.31	\$12.45	\$13.38	\$17.26
E. Europe €	\$47.30	\$50.10	\$51.00	\$53.76	\$55.57
E. Europe non €	\$26.13	\$30.02	\$30.40	\$32.23	\$33.75
India	\$9.21	\$9.91	\$9.95	\$10.37	\$10.79
Israel	\$35.97	\$34.81	\$34.89	\$34.83	\$37.43
Malaysia	*	*	\$16.29	\$16.88	\$17.26
Mexico - Border	*	*	\$16.80	\$17.51	\$18.28
Mexico - Central	*	*	\$11.32	\$11.99	\$12.50
Philippines	*	*	*	*	\$8.98
Singapore	\$25.15	\$26.10	\$28.15	\$29.20	\$29.96
Thailand	*	*	*	\$19.39	\$20.08
Turkey	*	*	*	*	\$16.13
United Kingdom	\$93.63	\$93.11	\$92.75	\$95.49	\$95.49
USA	\$37.96	\$39.30	\$39.40	\$39.61	\$39.78
Vietnam	\$8.75	\$8.80	\$8.95	\$9.36	\$10.11
W. Europe	\$89.37	\$92.16	\$90.10	\$92.99	\$95.81

CAPACITY UTILIZATION IS UP

Geography	Q2 CY12	Q3 CY12	Q4 CY12	Q1 CY13	Q2 CY13	Q3 CY13	Q4 CY13
Australia	79%	77%	79%	79%	81%	80%	80%
China	87%	86%	87%	85%	84%	82%	82%
E. Europe non €	95%	96%	96%	98%	98%	98%	98%
E. Europe €	60%	56%	52%	52%	48%	46%	45%
India	87%	82%	80%	80%	78%	74%	73%
Mexico/Central	96%	96%	96%	97%	97%	96%	97%
Israel	96%	96%	95%	95%	95%	95%	96%
Brazil	75%	72%	72%	74%	74%	72%	73%
Malaysia	96%*	88%	90%	94%	96%	98%	98%
Singapore	25%	<25%	<25%	<25%	<25%	25%	25%
USA/Canada	72%	75%	78%	79%	80%	82%	82%
Vietnam	42%	40%	40%	42%	40%	<40%	<40%
W. Europe	30%	<30%	<30%	<30%	<30%	<30%	<30%

NOTE: From an Operational perspective, values at or above 80% are considered to be functionally fully loaded.

QUALITY RATING FACTOR

Geography	V3	V4	V6	V10	V11	V12	V13R1b	V13R2	%Δ
USA	1.10%	1.10%	1.30%	1.05%	1.03%	1.06%	1.11%	1.09%	-1.80%
Canada	1.10%	1.14%	1.08%	1.10%	1.10%	1.11%	1.13%	1.12%	-0.88%
Mexico/Central	1.30%	1.35%	1.32%	1.39%	1.80%	2.10%	2.30%	2.26%	-1.74%
Mexico/Border	3.68%	3.50%	3.42%	3.90%	4.05%	4.75%	5.83%	5.99%	2.74%
Brazil	4.04%	4.01%	4.25%	4.38%	4.86%	5.45%	7.58%	8.71%	14.91%
UK & France	1.18%	1.18%	1.26%	1.24%	1.34%	1.34%	1.45%	1.46%	0.69%
W. Europe/Other	1.30%	1.38%	1.57%	1.77%	2.30%	2.73%	2.88%	2.91%	1.04%
E. Europe €	1.80%	2.61%	2.61%	2.61%	2.61%	2.61%	2.80%	2.84%	1.43%
E. Europe non €	1.85%	2.55%	2.58%	2.55%	2.60%	2.75%	3.88%	4.09%	5.41%
Malaysia	1.45%	1.55%	1.55%	1.50%	2.26%	2.26%	2.64%	3.06%	15.91%
Thailand	1.55%	1.34%	1.48%	1.88%	2.01%	2.21%	2.57%	3.01%	17.12%
China	2.97%	3.06%	3.18%	3.56%	3.72%	3.78%	4.02%	4.69%	16.67%
Singapore	1.16%	1.16%	1.24%	1.15%	1.12%	1.10%	1.10%	1.11%	0.91%
India	3.45%	3.99%	4.06%	4.08%	5.11%	5.93%	8.15%	9.64%	18.28%
Middle East	N/D	1.41%	1.41%	1.53%	1.64%	1.80%	1.83%	1.83%	0.00%
Australia	N/D	N/D	N/D	1.11%	1.11%	1.13%	1.16%	1.16%	0.00%
Global Average	2.00%	2.09%	2.15%	2.18%	2.42%	2.63%	3.15%	3.44%	

WHICH COUNTRIES WILL BENEFIT?

- Primarily low cost regions (LCR)
- China too...but with a caveat
- Mexico...just look at Asian investment there

INSOURCING BY OEMs

lenovo



 **KOSS**



Johnson
Controls 

SAMSUNG

BOSCH 


EMERSON

Questions?