



# Take Back Manufacturing

# TBM

[www.SME-TBM.org](http://www.SME-TBM.org)

[WWW.SMETORONTO.CA](http://WWW.SMETORONTO.CA)

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# SME Toronto Chapter

[WWW.SMETORONTO.CA](http://WWW.SMETORONTO.CA)

**Nigel Southway**  
SME Toronto Chair 2012

**Marie laird**  
SME Toronto Past Chair 2011

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## About SME:

The [Society of Manufacturing Engineers](#)

### **Premier source for manufacturing knowledge, education and networking.**

Many programs, events, magazines, publications and online training division, ([Tooling U](#)),

Connects manufacturing practitioners to each other,

Reviews latest technologies and most up-to-date manufacturing processes.

SME has members around the world supported by a network of chapters and technical communities.

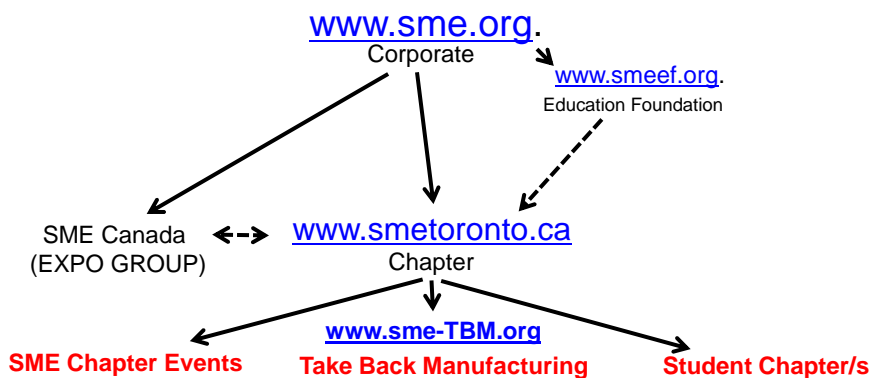
SME is a leader in manufacturing workforce development issues, working with industry, academic and government partners to support the current and future skilled workforce.

[www.sme.org](http://www.sme.org).

\$125 per Year



## SME..... Society of Manufacturing Engineers





Society of Manufacturing Engineers Toronto  
*Advancing Manufacturing in Ontario*

# Take Back Manufacturing

# TBM

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Society of  
 Manufacturing  
 Engineers

## FABTEC Canada

March 20<sup>th</sup> /21<sup>st</sup> /22<sup>nd</sup> 2012

[www.fabtechcanada.ca](http://www.fabtechcanada.ca)



We will Present..... **TAKE BACK MANUFACTURING**

**The TBM Positional Survey.....TBM Road Map and Tool-kit**



# Take Back Manufacturing

## Why would we want to Take Back Manufacturing?

The deep concerns expressed from everyone we have talked too is that:

We are all rapidly losing our prosperity via the ongoing decline in this important part of our economy,

We have doubts about the ability of Ontario and Canada to compete.

We are all concerned about jobs and our ability to pay our way as Ontarians.

Also we are all worried about the next generation's future.

Much more must be done to improve the Canadian economic and business environment to better position us for success.

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# Take Back Manufacturing

It's about:

Having **ONE voice and ONE agenda...**

What we all want :

What we all need:

**STRONG Manufacturing... IN Ontario...  
AGAIN!**





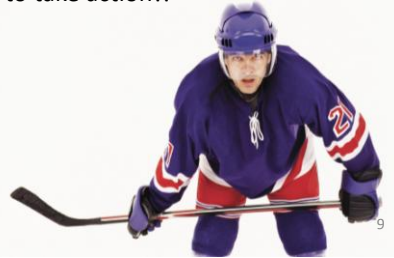
## The TBM FORUM

- A range of Organizations
- Common views and concerns
- Collective strength and unity
- Develop and undertake a Joint recovery plan
- Convince our Governments and Leaders to take action!!
- Define best future for our:
  - Declining industries
  - Economy
  - Our children

25 technical Associations  
 3 Trade associations  
 5 educational policy makers  
 Media experts  
 Local government reps  
 Industry experts

### • Before its too late

- **Its not game over!!!**



**Canadian industry associations, government agencies, major educational institutions, industry associations, unions and industrial experts that have participated and agree to fully support the TBM initiative include:**

#### **Associations:**

American Society of Mechanical Engineers (ASME), Association of Manufacturing Excellence (AME); Association of Operations Management (APICS); Auto Part Manufacturing Association (APMA); Canadian Manufacturers and Exporters (CME); Canadian Tooling and Machining Association (CTMA); High Performance Consortium (HPC), Ontario Power Generation (OPG); Ontario Society of Professional Engineers (OSPE); Professional Engineers Ontario (PEO); Society of Auto and Aeronautics (SAE), Society of Manufacturing Engineers Canadian Exposition Group, and the Society of Manufacturing Engineers (Toronto).

#### **Educators:**

Association of Canadian Colleges (ACCC), Canadian Apprenticeship Forum (CAF); Canadian Competition University Forum (CCUF), and Sheridan College.

#### **Experts:**

High Performance Consortium (HPM), Organization Thought-ware International Inc., (OTI); The Progressive Economics Forum (TPEF), and Re-shore Group USA.

#### **Media:**

Canadian Plant Magazine, CBC Radio/Canada, and the Globe & Mail.

#### **Unions:**

Canadian Autoworkers Union (CAW), United Steel Workers (USW)

#### **Government and Associated Agencies:**

Ontario liberal members of parliament (Industry Education study group), Ontario NDP members of parliament, and the York Municipality Economic and Innovation Development.

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# Take Back Manufacturing

## So what's next?

Everyone is now beginning to see the issues and the situation, but little is being actively done to fix it,

The TBM Initiative has a fresh and much broader representation across many parts of industry,

We are now starting to communicate and gain involvement.

So..its now the turn of government and others that set policy to listen.....

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# Take Back Manufacturing

## Globalization?...

*It is now very clear that the economy both here and in the USA and through-out the world is floundering,*

*We are seeing a general failure and dissatisfaction with the globalization model for financial and economic stability.*

*Our economic policy makers continue to struggle ....*

*They are reaching the realization that something much more **significant** and **fundamental** must be done to reposition all western economies...*

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# Take Back Manufacturing

So...the need for **TBM** should resonate now ....

.....more than ever!!

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Canadian MANUFACTURING **PLANT** Jobs | Events | Newsletter Sign-up Login | Register

Search here for articles, products, companies, contacts, and more...

### Taking back manufacturing

A new plan for economic prosperity  
BY JOE TERRETT, EDITOR, ON DECEMBER 28, 2011 3:56PM

**PLANT**

Email Print Text Size

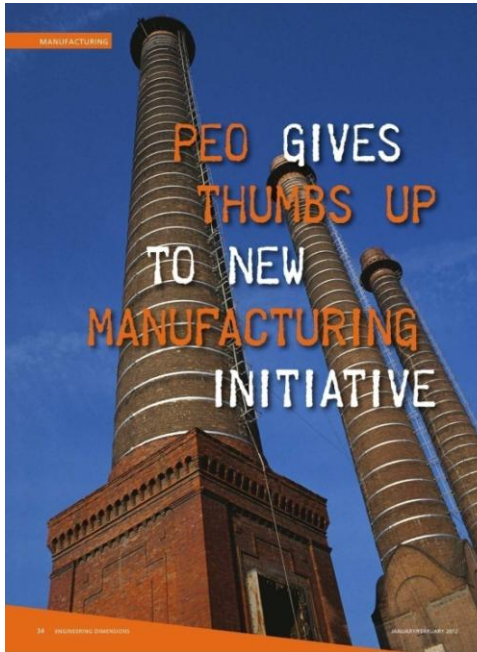
Share or bookmark this post:

*The TBM roadmap addresses knowledge transfer to incoming generations as baby boomers retire. Photo:thinkstock*

There is much to gain from the opportunities offered by a global economy, but the downside has been the loss of North American manufacturing capacity and jobs.

In 1999, manufacturing generated 19.2% of the country's GDP and was the biggest employer. Today it's good for about 13% and has slipped to third-place as an employer behind trade, and health care/social assistance.

More than 322,000 jobs were lost between 2004 and 2008, according to Statistics Canada, and the erosion continues. In October another 48,000 jobs (mostly in Ontario) were lost out of a national total of 54,000.



THE ENGINEERING REGULATOR HAS JOINED FORCES WITH OTHER GROUPS IN AN AMBITIOUS CAMPAIGN TO WIN BACK LOST MANUFACTURING OPPORTUNITIES TO ONTARIO.

By Michael Mastromatteo

**O**ntario's engineering regulator is throwing its weight behind a bold initiative aimed at bolstering Ontario's manufacturing sector.

Take Back Manufacturing (TBM) is a campaign launched by the Toronto chapter of the Society of Manufacturing Engineers (SME), which it describes as a multi-faceted effort to persuade government, the public, industry and other stakeholders of manufacturing's significance to Ontario's long-term prosperity and economic competitiveness.

The ultimate goal of TBM is to implement economic policy changes to enable the recovery of a declining manufacturing sector. SME believes the trend in the last two decades to under-capitalize local manufacturing technology, reduce capability and related education, and allow extensive migration of production to offshore sources has harmed Ontario and the rest of the country by leading to severely unbalanced import-export trade that is counterproductive to the Canadian economy as a whole.

PEO council endorsed PEO's support of the TBM initiative at its September 2011 meeting on the basis that migration of Ontario's manufacturing sector to offshore locations has taken a toll on the engineering profession, including the technical deskilling of members and the lack of the employment opportunities engineering graduates need to become licensed.

The Ontario Society of Professional Engineers (OSPE) also supports TBM.

Nigel Southway, operations manager for TBM, says that while the problems have been identified, there has been little action to shore up the manufacturing sector.

"The goal of TBM is to raise awareness of this issue and ensure that industry, government and the educating bodies get it together to correct the decline and support a sustained recovery," Southway told *Engineering Dimensions* November 14.

"It's clear that the globalized economic picture now looks very bleak for emerged economies and this has clearly proved our point that a TBM approach is the only way to reverse this picture."

TBM includes a full mailing of activities, such as publicity, crafting its message to specific audiences, and a skills development component, aimed at promoting new entrants to the field through four career stages: trade, technician, technologist and engineer.

The initiative emphasizes reducing imports and bringing manufacturing home (reshoring), or rebuilding local capacity to better support local demand. It also seeks to develop "the correct infrastructure" by way of education and training. In fact, phase 3 of TBM includes such proposals as a joint apprenticeship and training board, a professional retraining program, career development activities, and a technology development effort to ensure the province can sustain the manufacturing opportunities starting up in or flowing back to Ontario.

Southway says talk of Ontario as a leader in innovation or the epicentre of a resource based or service economy is meaningless without a solid, sustainable manufacturing base.

"A lot of nonsense has been talked about innovation as a critical imperative for our collective success," he says, "but without manufacturing, how is it going to work?"

SMEDIA

ENGINEERING DIMENSIONS 35



# Take Back Manufacturing

It may be a government policy issue

We do need support and help

But

It is "our job" as industrialists to follow a successful roadmap to improve and be competitive to become entitled to TBM







Society of Manufacturing Engineers Toronto  
Advancing Manufacturing in Ontario

# Take Back Manufacturing



**FOR OUR KIDS!**



**It's only a game!!!**



# It's only a game!!!



We have a generation of parents who have been brought up to think that only the Japanese make good cars!.....

Now we will have their kids thinking Canada cannot make hockey sticks!!



GOOD NEWS

BAD NEWS

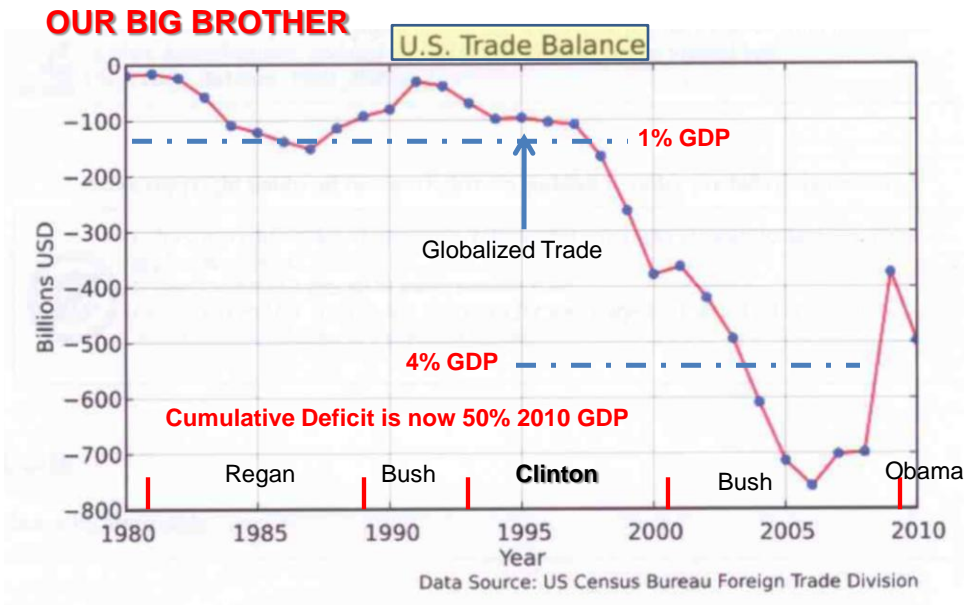


# Stiff Offshore Competition

- Many businesses have faced stiff competition leveraging offshore supply of products or services that threaten survival



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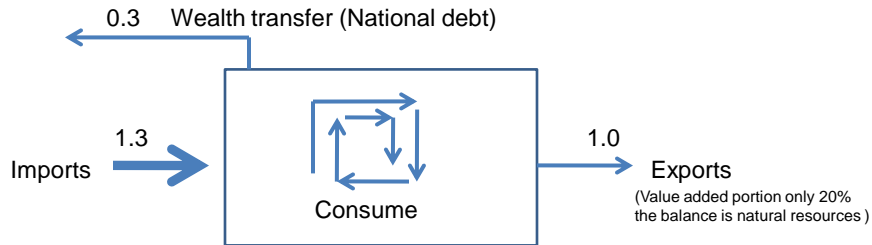


(US GDP 2010=14000B)

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## The Wealth Transfer Machine

**We have developed a Wealth Transfer Machine from North America to emerging economies that is mainly one way.**



Concept from "THE END OF THE FREE MARKET" Bremmer



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**The Big question NOW being asked...**

**Did we manage the trade balance ?**

**Should it have been trade at any cost?**

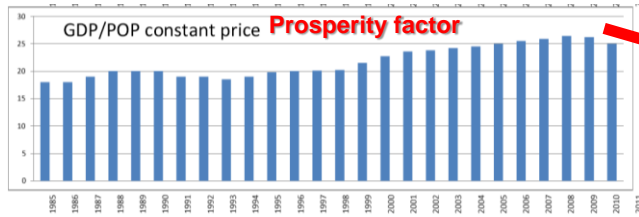
**or**

**Trade that benefits all?**

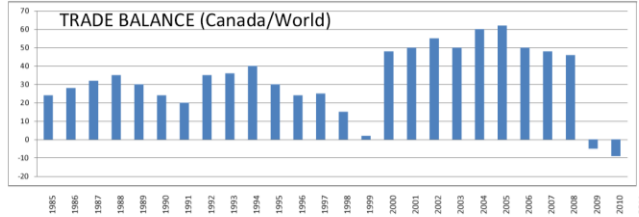


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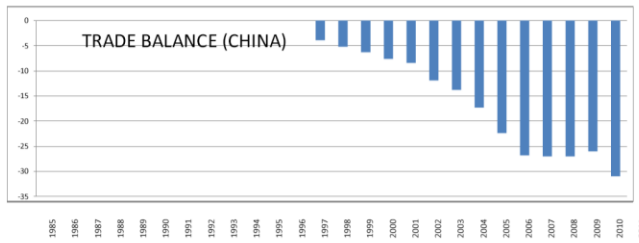
CANADA



Declining



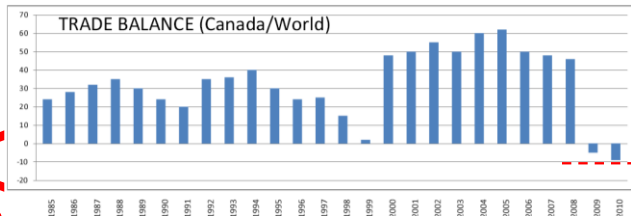
Negative Trend



Out Of Balance

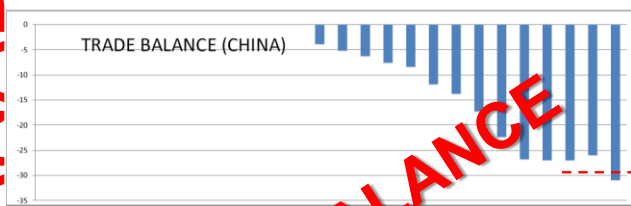


CANADA

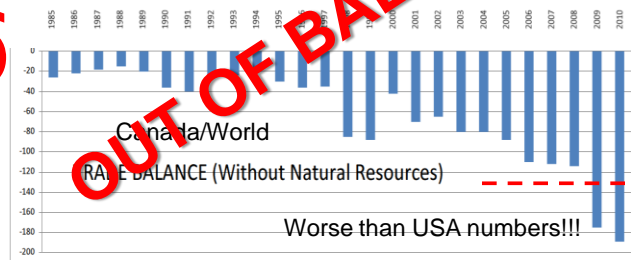


1% GDP

(GDP=1350B)



2% GDP



10% GDP

OUT OF BALANCE

Worse than USA numbers!!!



Industry  
Canada

Industrie  
Canada

Canada

## Ontario Economic Overview

January 2012 Update



## Current situation..... Ontario

Economy in the whole of North America is in “stall” mode.

Ontario falling behind in Productivity/Innovation and Prosperity.

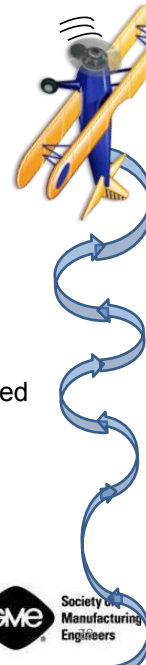
Canada Over-dependent on a Resource based economy. (high \$)

Canada trade .....Not-balanced (for value adding manufacturing)

Manufacturing as a key sector for Ontario..... in serious decline

Manufacturing support/education infrastructure .....badly unfocused

Overall bleak outlook for the next generation



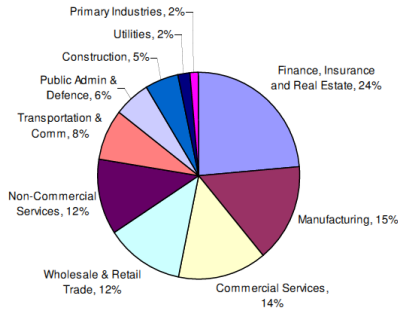
**sme** Society of  
Manufacturing  
Engineers

**KEY ECONOMIC INDICATORS**

(% change unless otherwise indicated)	Real GDP			Employment			Unemployment Rate		
	2010	2011f	2012f	2010	2011f	2012f	2010	2011f	2012f
<b>Ontario</b>	3.0	2.0	1.9	1.6	1.8	1.0	8.7	7.8	7.8
<b>Canada</b>	3.2	2.3	2.0	1.4	1.6	0.8	8.0	7.5	7.4
<b>United States</b>	3.0	1.7	1.9	-0.7	1.0	1.2	9.6	9.0	8.8

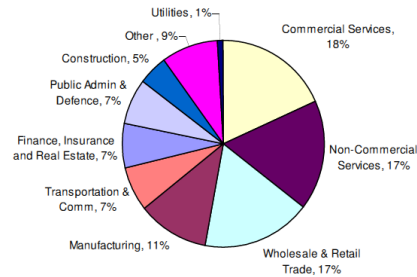
Source: Statistics Canada, U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics; f indicates forecasted data, using median forecasts released in September 2011 or later, where available, from Conference Board of Canada, Scotiabank, RBC Financial, TD Economics, BMO Financial, CIBC World Markets, and Desjardins. Forecasts collected January 2012.

**Ontario GDP by Sector, 2010**



Source: Statistics Canada

**Ontario Employment by Sector, 2010**



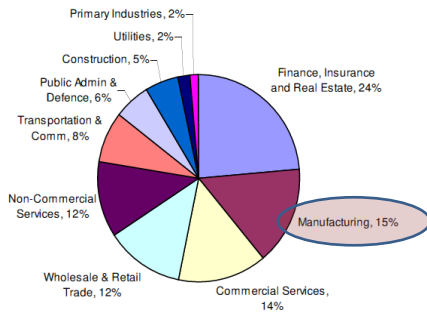
Source: Statistics Canada, Survey of Employment, Payrolls and Hours (SEPH)

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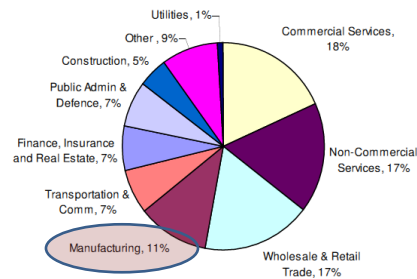
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**Ontario GDP by Sector, 2010**



Source: Statistics Canada

**Ontario Employment by Sector, 2010**



Source: Statistics Canada, Survey of Employment, Payrolls and Hours (SEPH)

# Summary

Ontario GDP = \$612B

Ontario Trade Imbalance (Gap) = \$92B or 15% of GDP

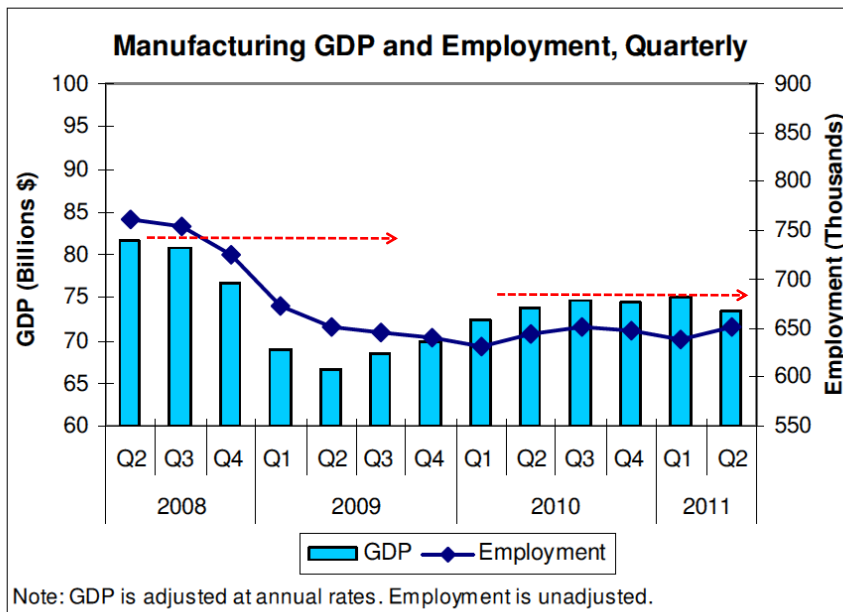
**Will produce an impossible strain on provincial budgets**

At 2% growth we cannot close this gap.

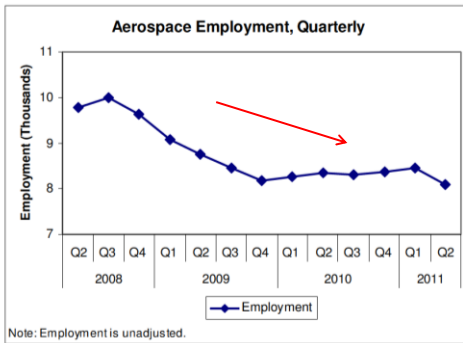
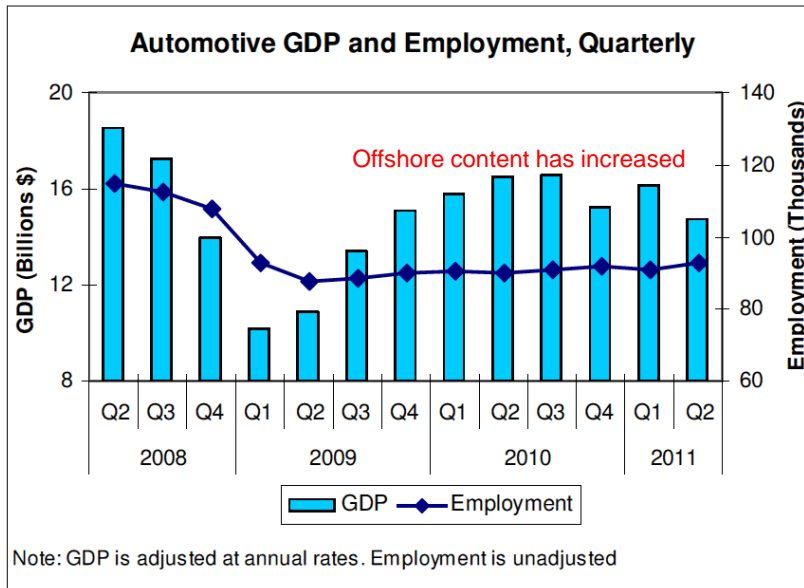
We are now a “have-not” province

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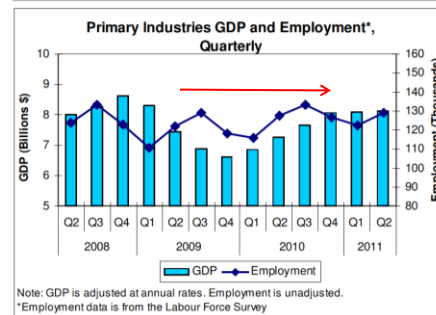
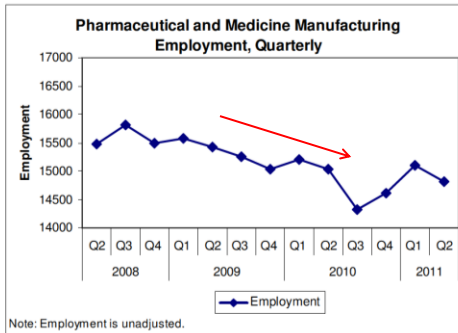
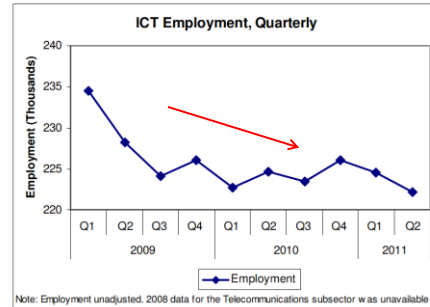
## MANUFACTURING

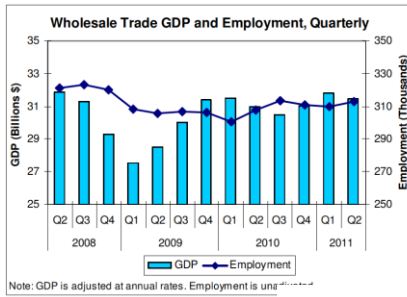




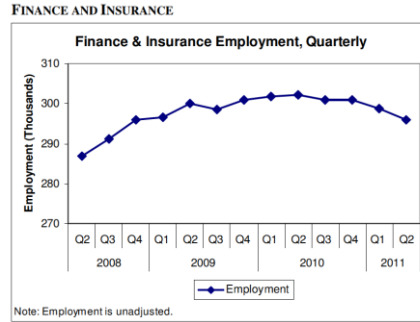
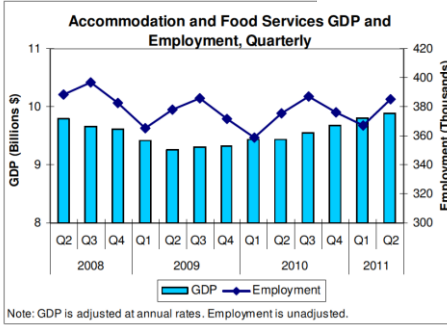


INFORMATION AND COMMUNICATIONS TECHNOLOGY

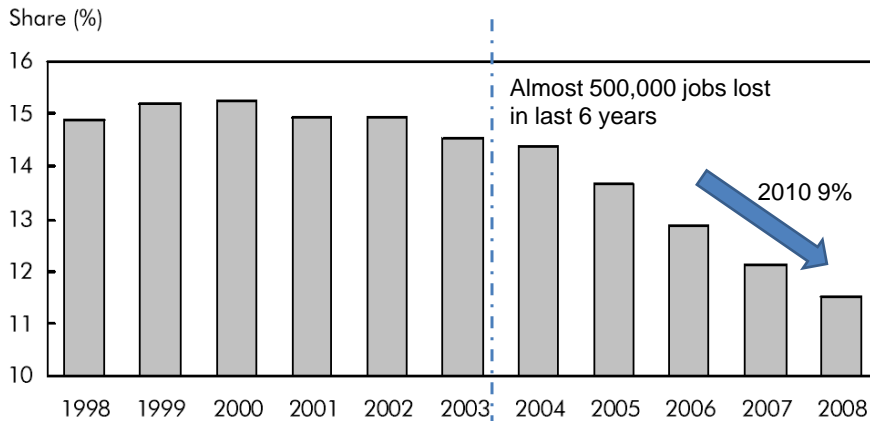




**SERVICE JOBS????**



**Manufacturing's share of employment has fallen sharply since the turn of the century**



Source: Statistics Canada, Labour Force Survey.



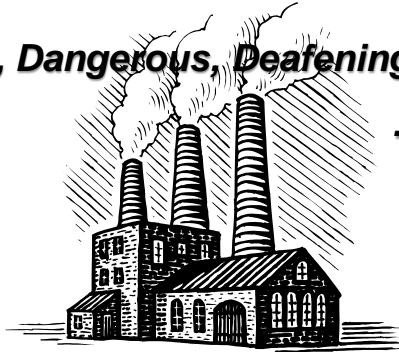
## The social conscience for manufacturing

Most manufacturing based businesses are beyond dispirited....

Our Politicians/Government have little understanding of business and manufacturing. ....(We must EDUCATE them!!)

Manufacturing is deemed:

***Dark, Dirty, Dangerous, Deafening and Difficult....***  
***..... And Smelly!***



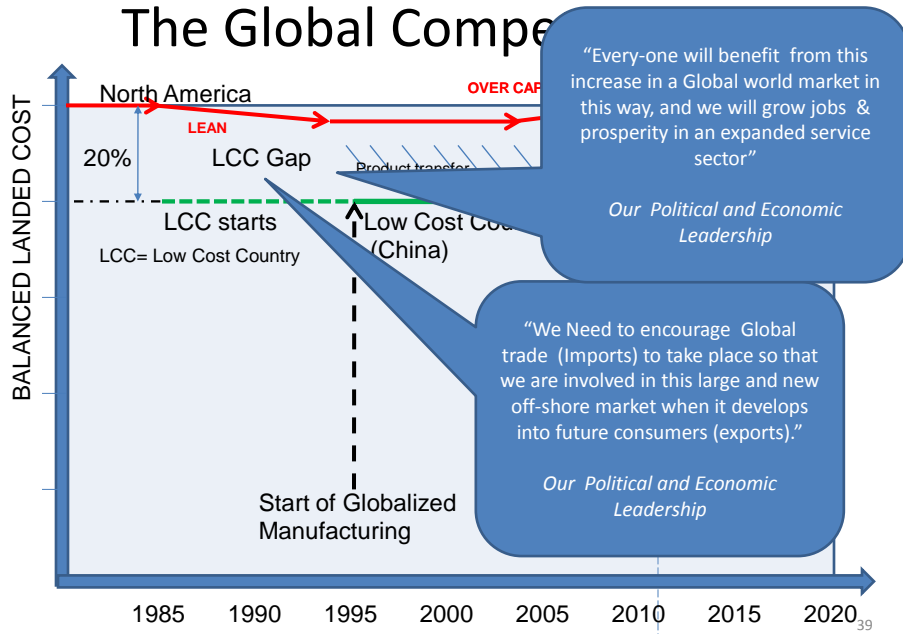
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## HOW COULD THIS HAPPEN?

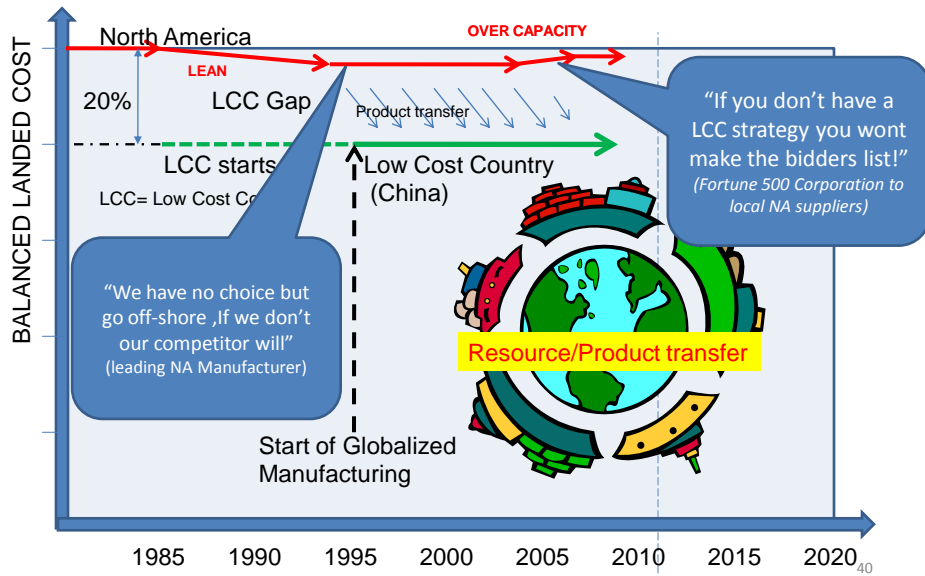


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# The Global Compete



# The Global Competitive gap



# A glimmer of hope !

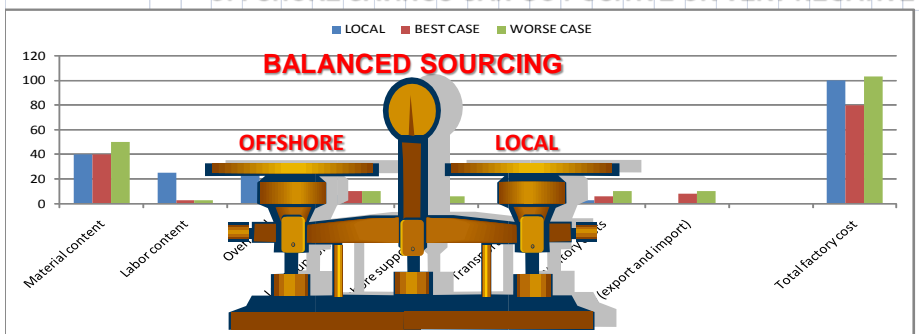


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## Q1. Do you understand the benefits versus all the direct and hidden costs and the types of sourcing and logistic options?

The chart below shows that when the product and source relationships and all the detailed support and logistics are optimized it is possible to see a 20% net gain in operating costs, however equally it does not take much poor optimization to see an overall net loss in the off-share (outsourcing) journey. Many organizations have experienced this chart the hard way... You need to plan to avoid these issues.

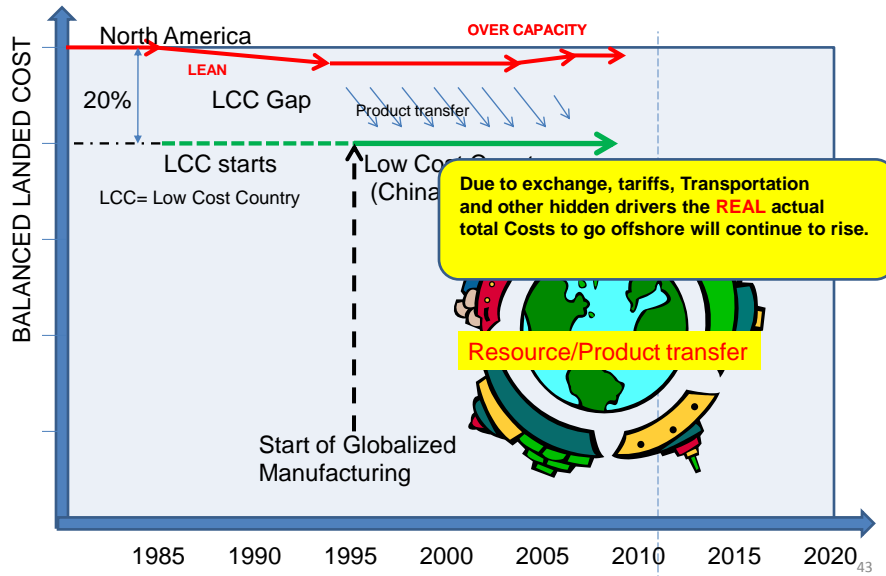
### OFFSHORE SAVINGS CAN GO POSITIVE OR VERY NEGATIVE



% of Total Cost	LOCAL	BEST WORST		Issues
		OFFSHORE	OFFSHORE	
Material content	40	40	50	Foreign country materials may need harmonizing with your designs
Labor content	25	3	3	A clear advantage, but product skill and training may be an issue
Overhead	25	4	6	A lack of foreign management capability may effect other hidden costs
Local Support costs	7	10	10	Your internal support for offshore will be an adder to your business costs
Offshore support costs	0	3	6	Support at offshore site will be an adder to your business costs
Transportation	0	6	8	These added costs can also be effected by containerization skills and knowledge
Inventory costs	3	6	10	longer line of supply and maybe associated forecasting will attract inventory
Duty (export and import)	0	8	10	Brokerage, duty and insurance will add to the costs
Total factory cost	100	80	103	Baseline set on local supply



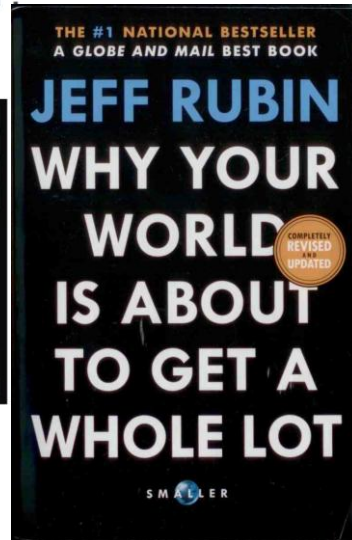
# The Global Competitive gap



ASPO:USA Oil and the End of Globalization :  
**Jeff Rubin**  
 by ASPO-USA 11 months ago

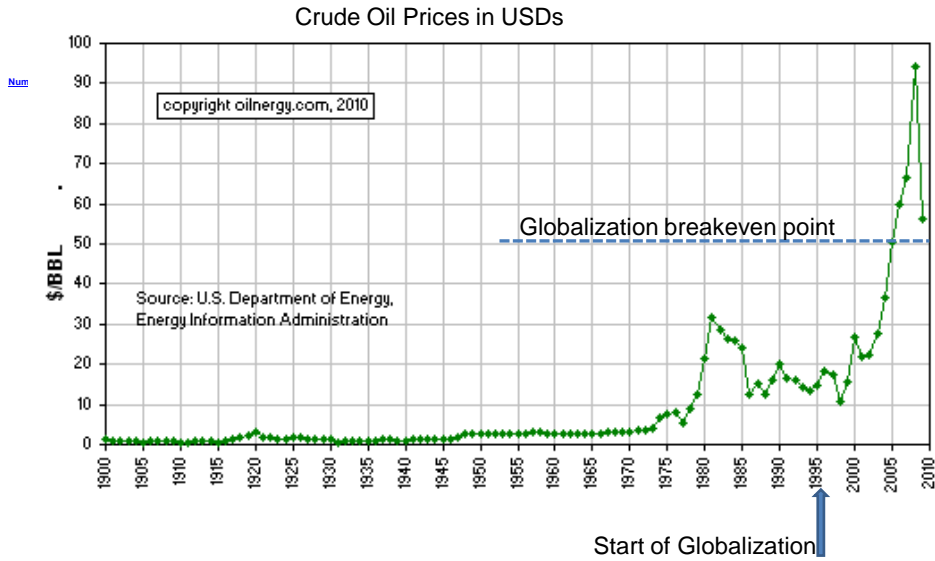


Mr. Jeff Rubin, Author, Former CIBC Chief Economist for more information visit [aspo.tv/](http://aspo.tv/)



**We will not run out of Oil...**

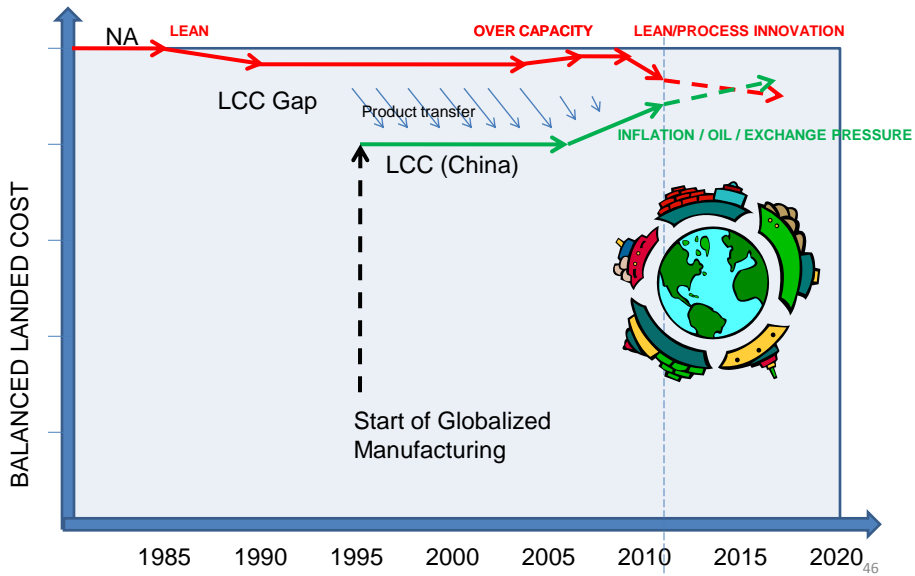
**.....but we will run out of Oil we can afford to burn!!**



**Note: localized supply of energy will not change this outlook**

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## The Global Competitive gap



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# The Economist

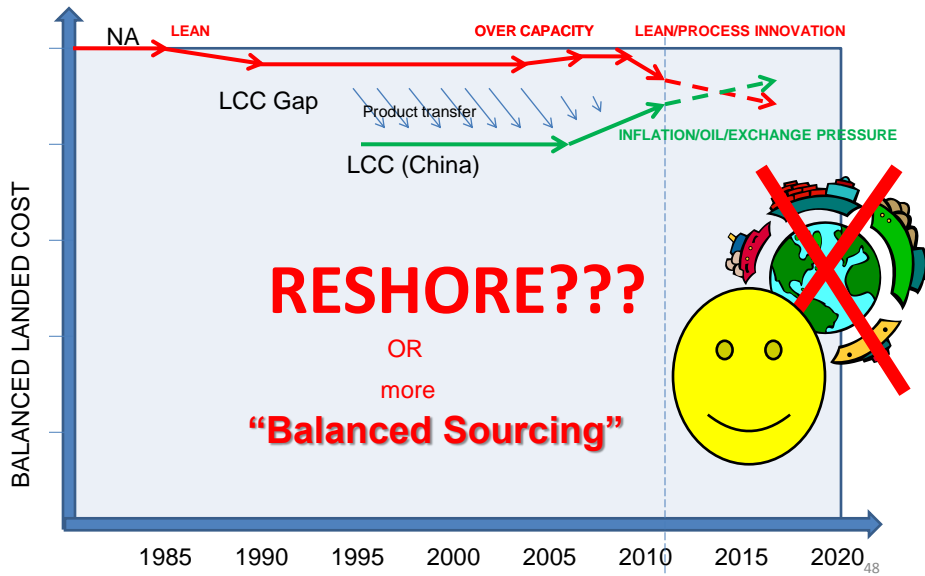
The end of cheap China

## What do soaring Chinese wages mean for global manufacturing?

Mar 10th 2012 | HONG KONG AND SHENZHEN | from the print edition



### The Global Competitive gap





# What is happening South of the border? .

## Re-shoring !!!



Harry Moser

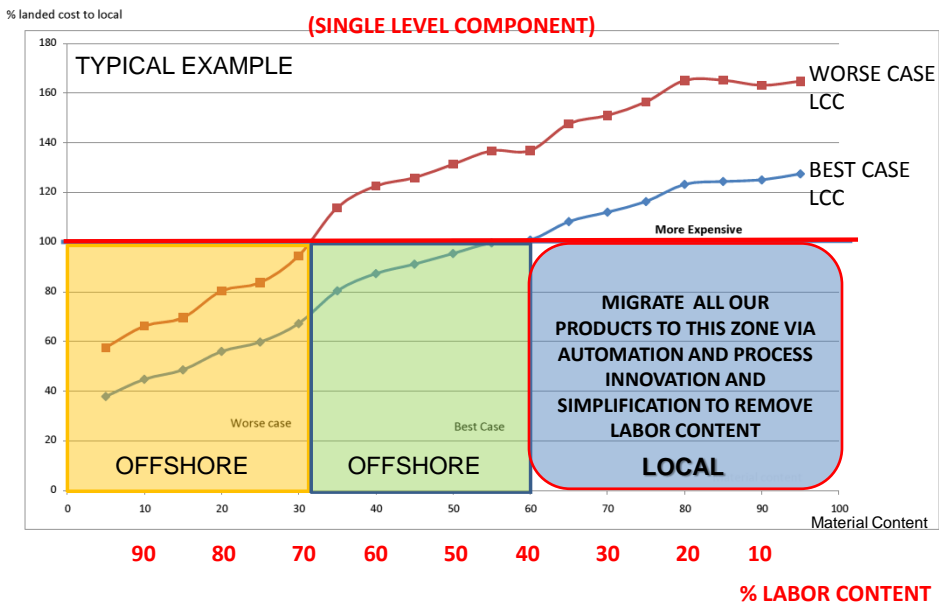
<http://www.reshorenw.org>

- 2 Million jobs lost in USA in last 3 years and got back just 10%...  
(MUCH Larger ratio here in Canada..need to get them back!!)
- A resurgence of manufacturing in USA  
via
  - lower exchange rate
  - Rethinking of globalized supply
  - Re-shoring cost trade-off modeling and discussions.

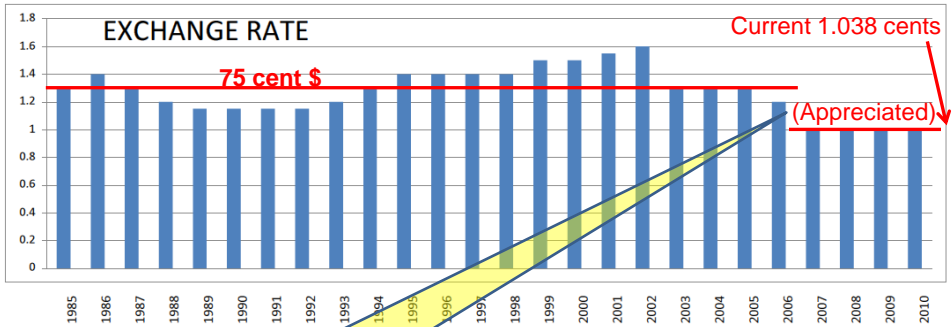
- *Canada needs to participate!!!*
- *Need to do at least more "Balanced Sourcing"*



### OFFSHORE VERSUS LOCAL MANUFACTURING BY % LABOR CONTENT



**CANADA/US(Reserve) EXCHANGE**



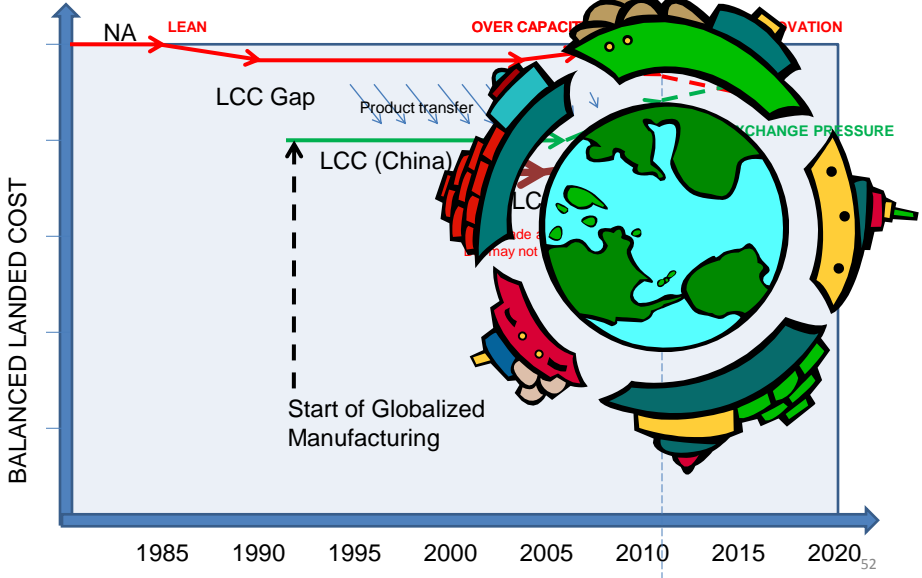
**Created by a resource boom..  
 Appreciates Currency  
 Reduces ability to Export  
 Reduces balanced manufacturing  
 Increases exposure to global instability**

We need to understand that we have been exposed to commodity speculation not true growth in \$ value And it will not pay our bills in the long term.

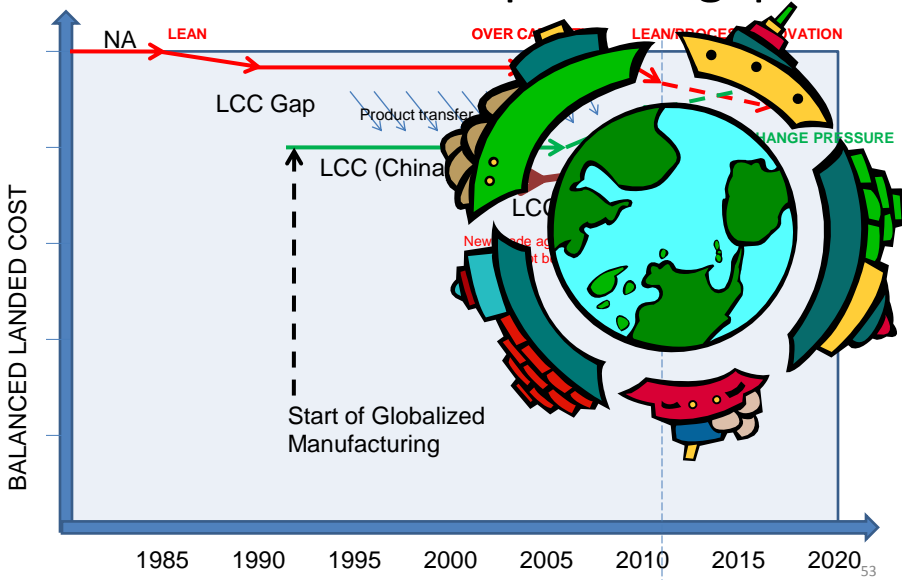
**It is creating lost prosperity!!**



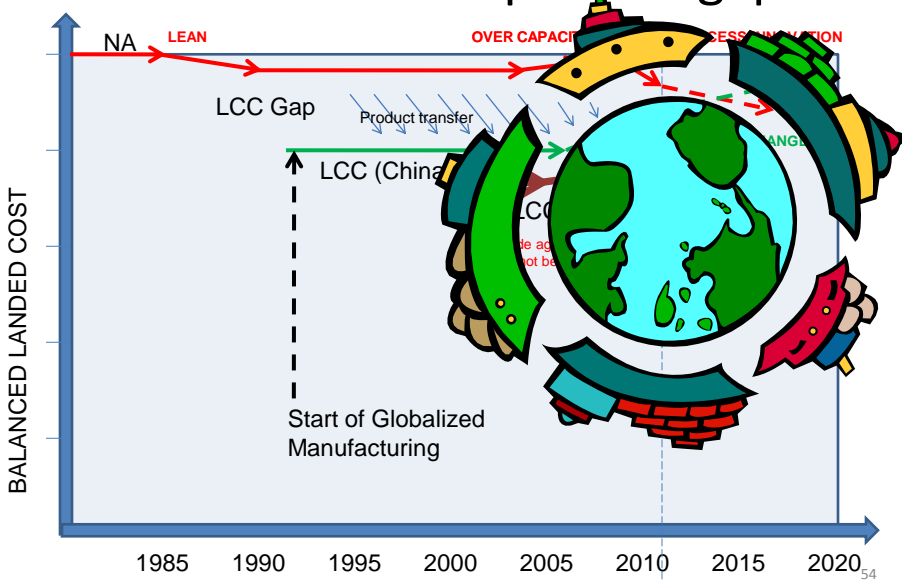
**The Global Competitive gap**



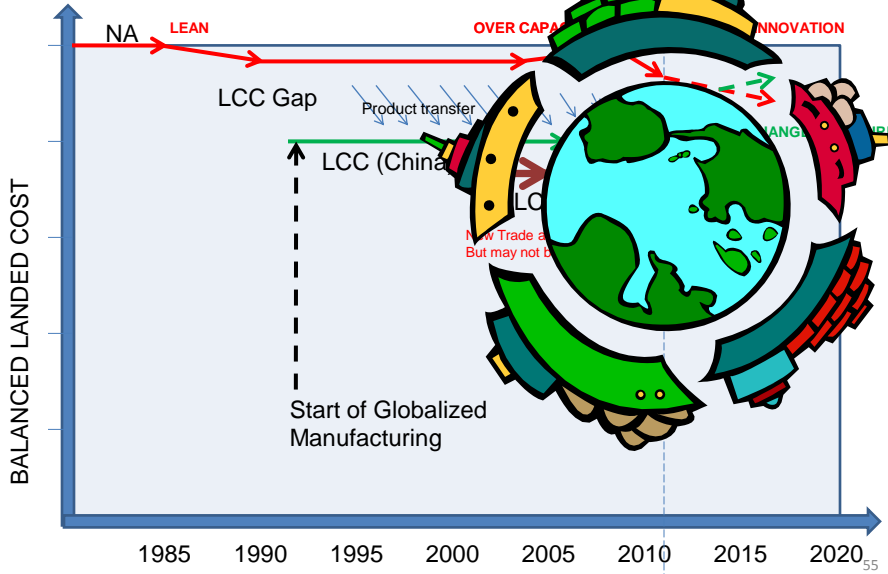
# The Global Competitive gap



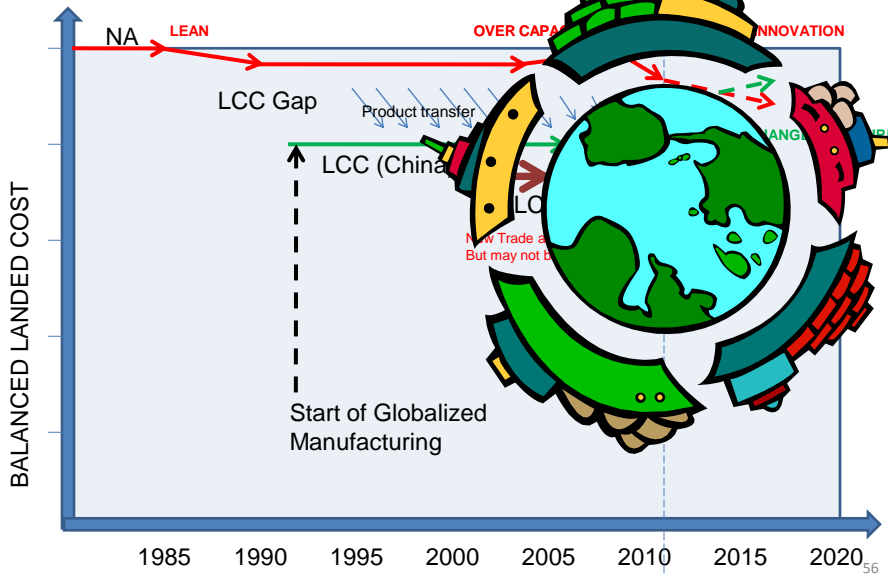
# The Global Competitive gap



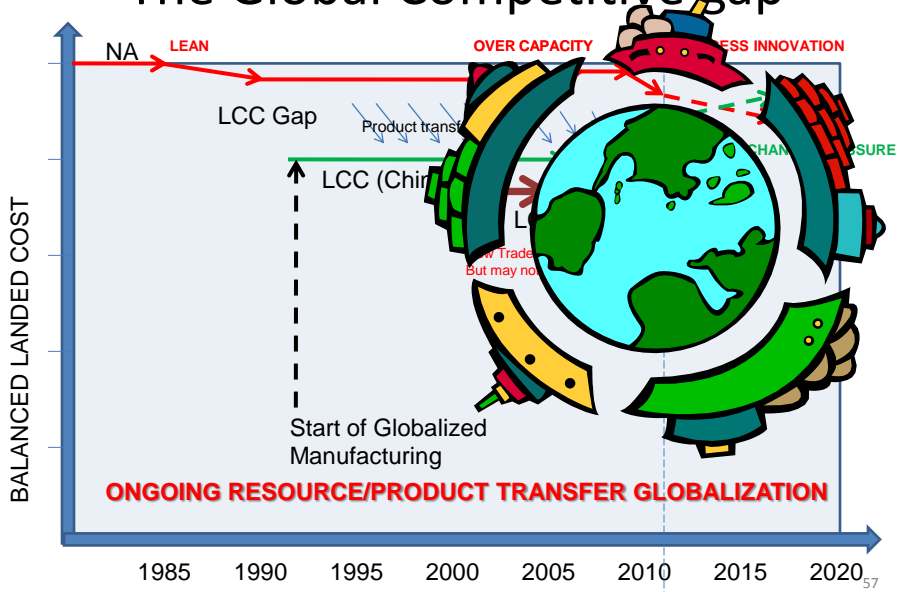
# The Global Competitive gap



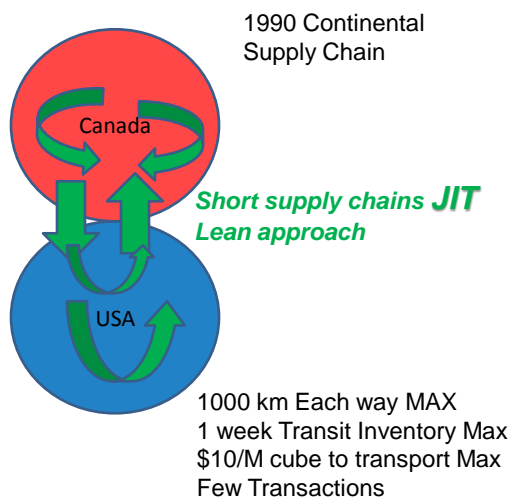
# The Global Competitive gap



# The Global Competitive gap

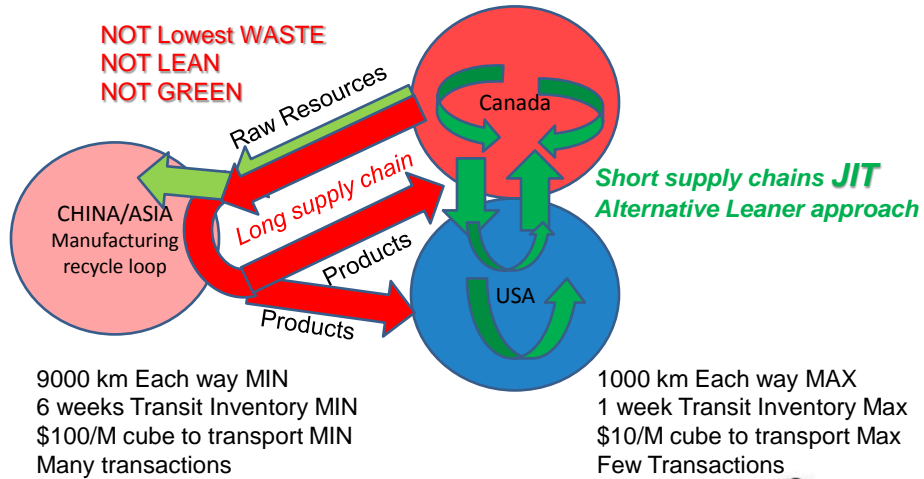


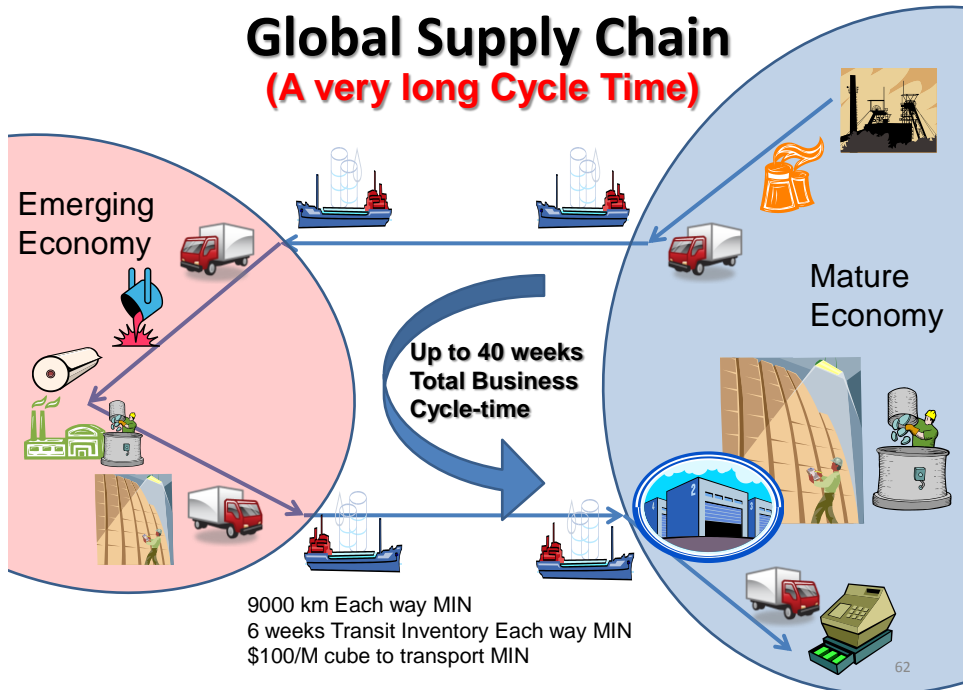
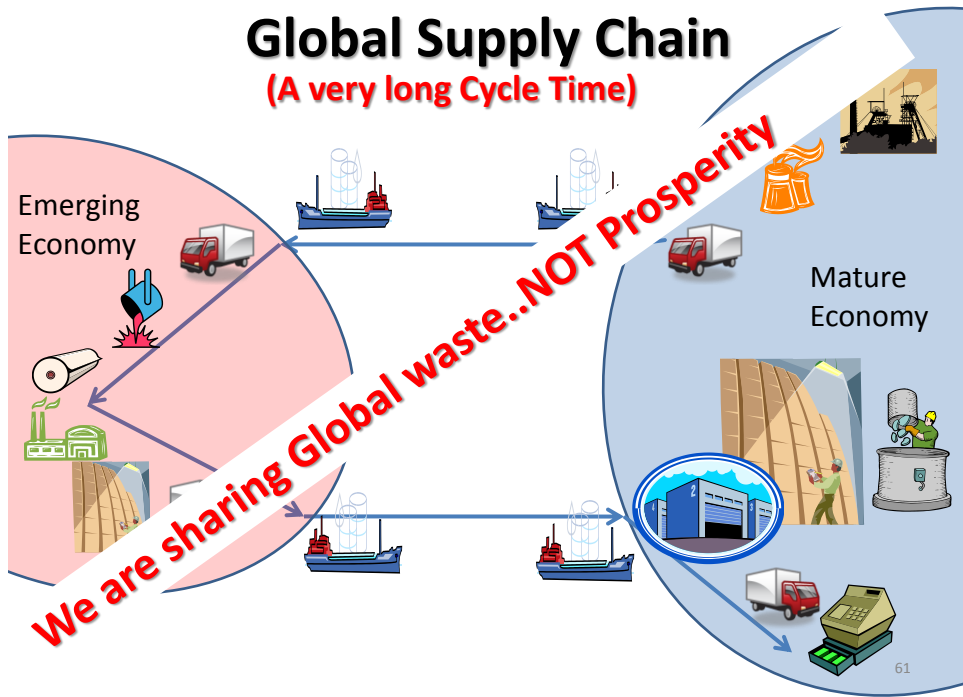
## Latest Raw Resource Exporting/Importing Model



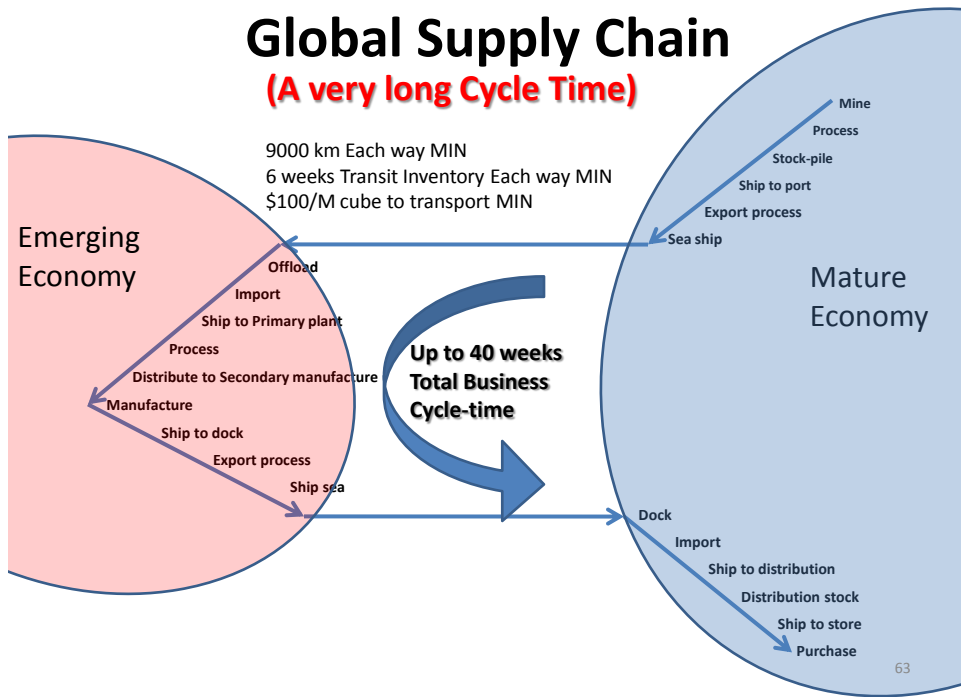
## Latest Raw Resource Exporting/Importing Model

(NOT the lowest cost or LEAN or Green Global solution)

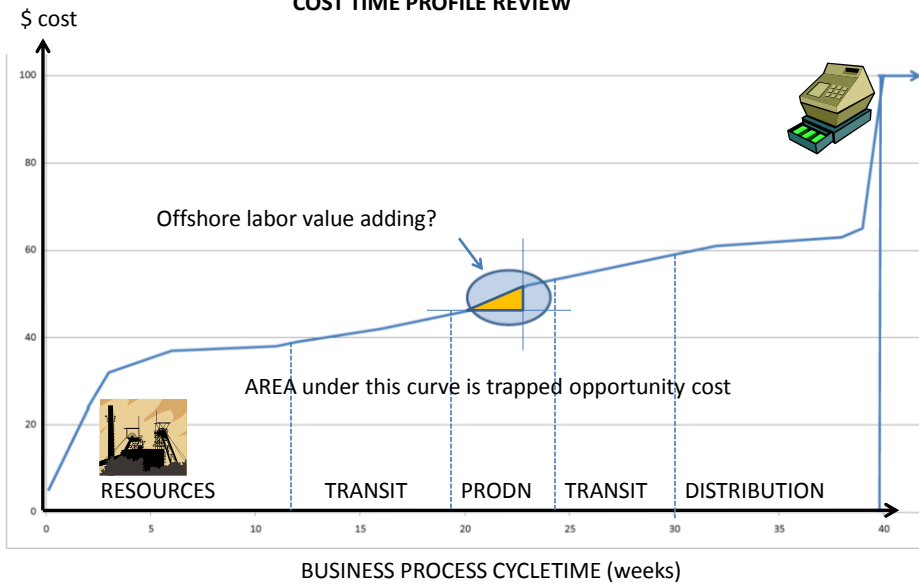




# Global Supply Chain (A very long Cycle Time)

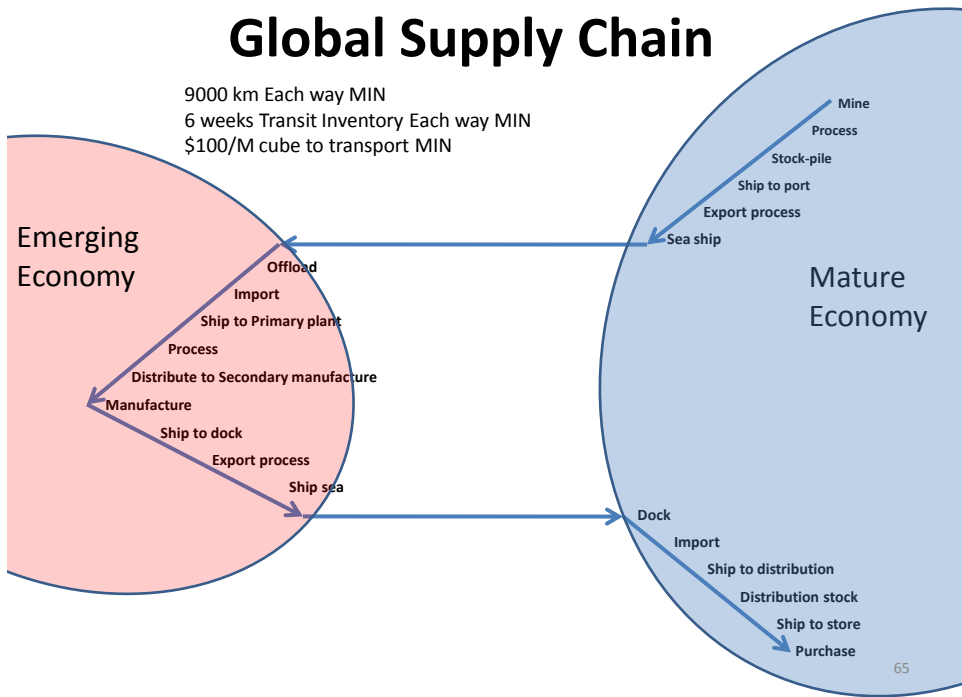


## COST TIME PROFILE REVIEW





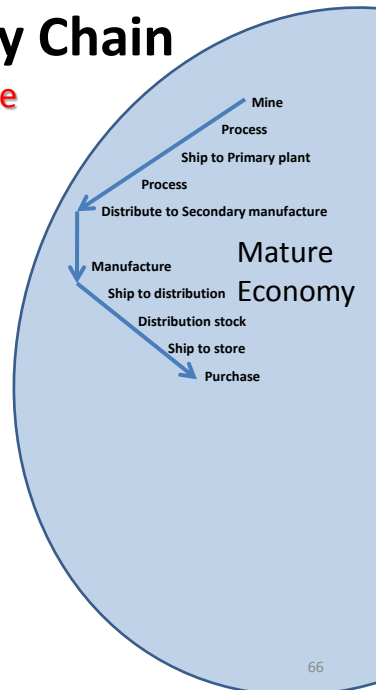
# Global Supply Chain



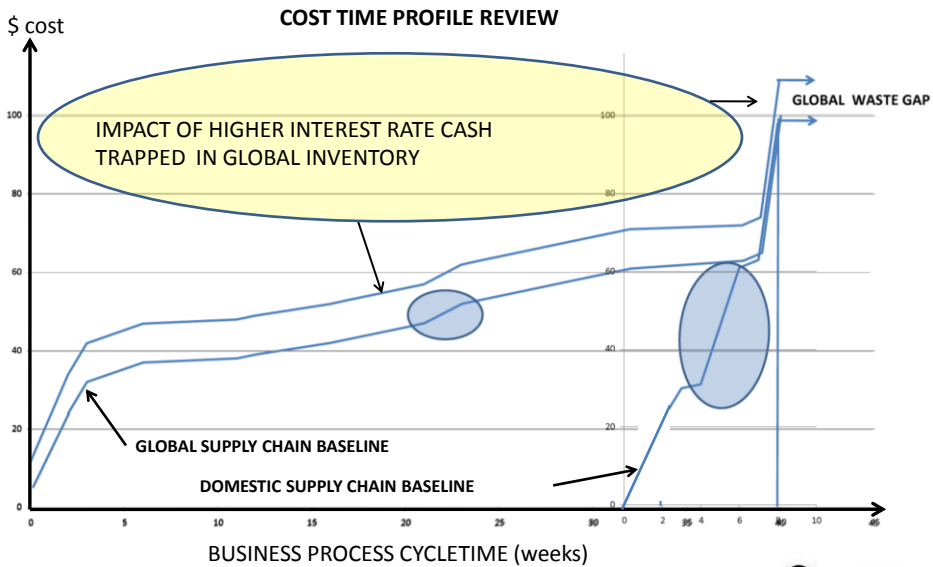
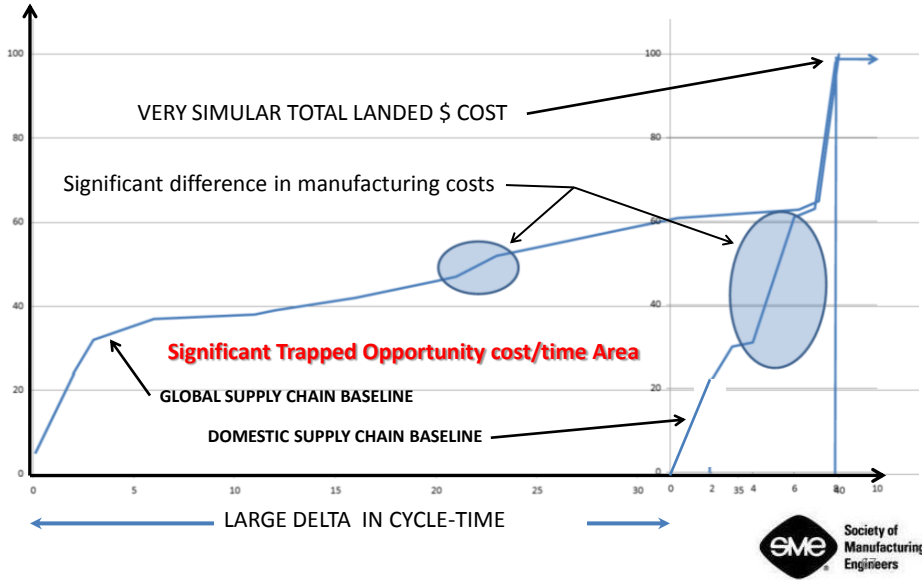
# Domestic Supply Chain

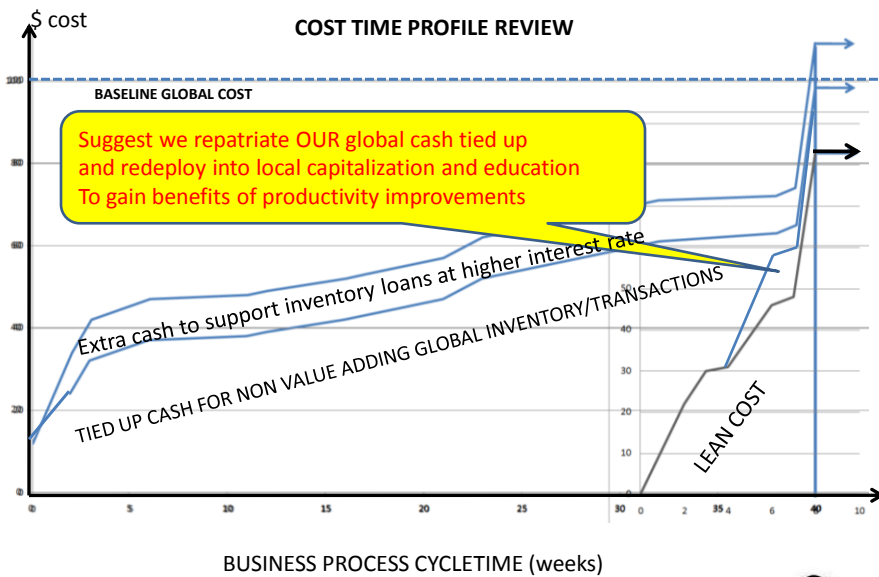
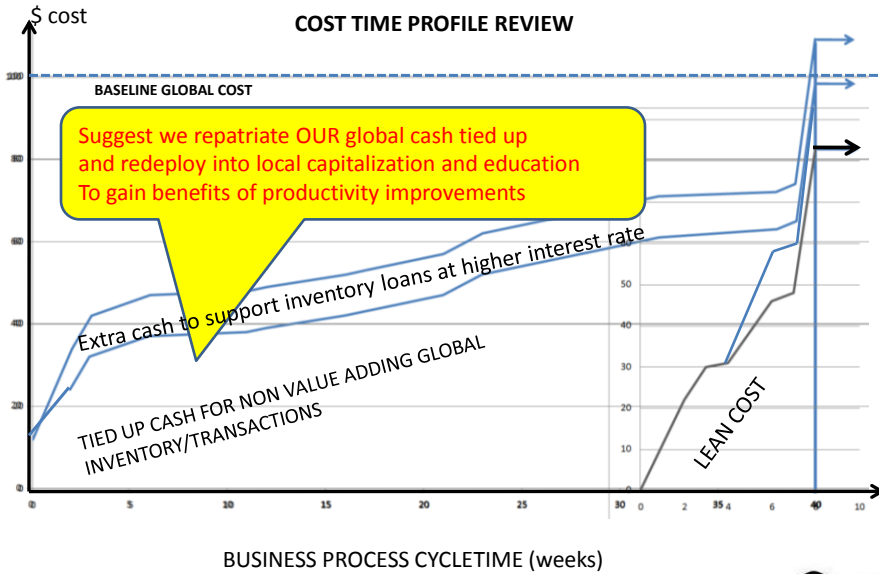
## VERY Short Cycle Time

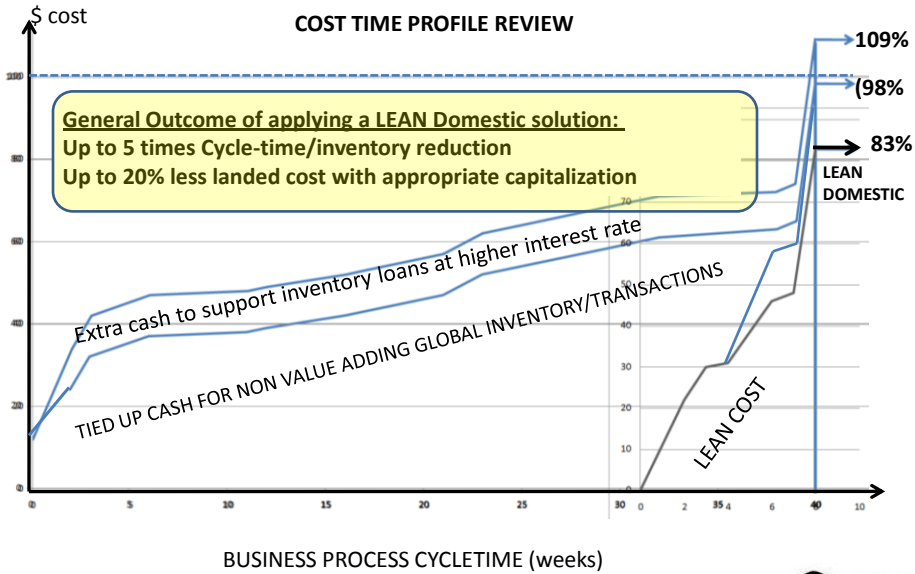
1000 km Each way MAX  
5 days Transit Inventory Max  
\$10/M cube to transport Max  
Much Fewer Transactions



**COST TIME PROFILE REVIEW**







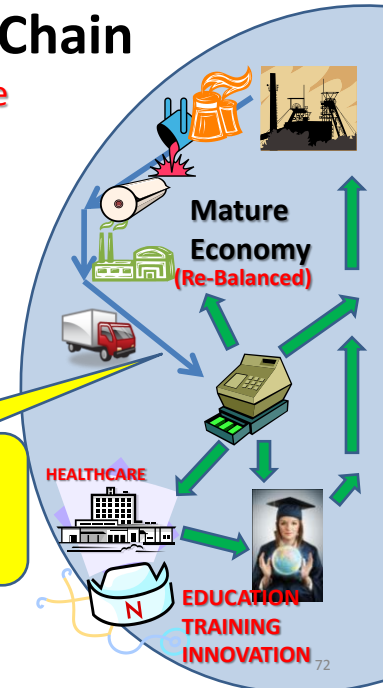
## Domestic Supply Chain

**VERY Short Cycle Time**



**BALANCED TRADE**

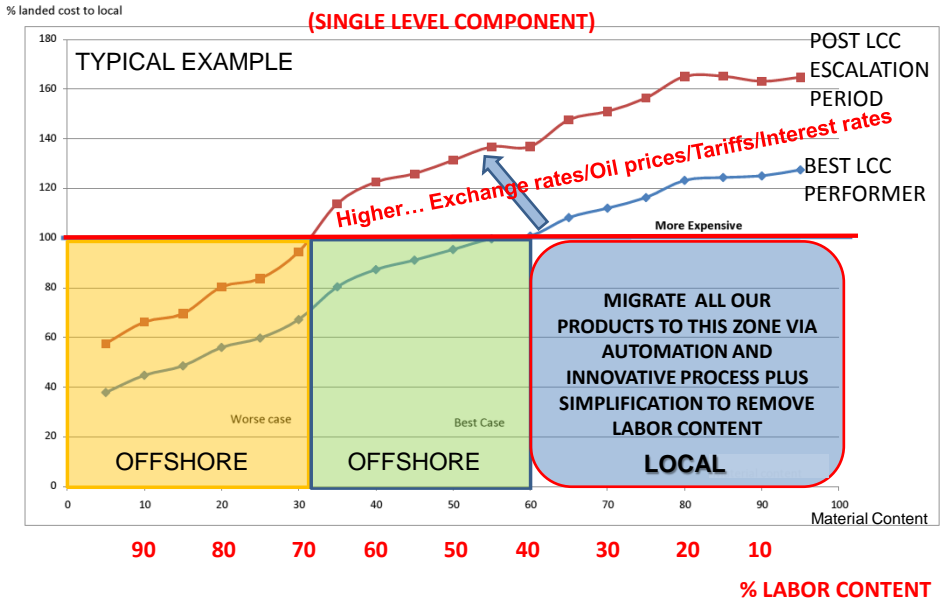
**BALANCED SOURCING**



1000 km Each way MAX  
 5 days Transit Inventory Max  
 \$10/M cube to transport Max  
 Much Fewer Transactions

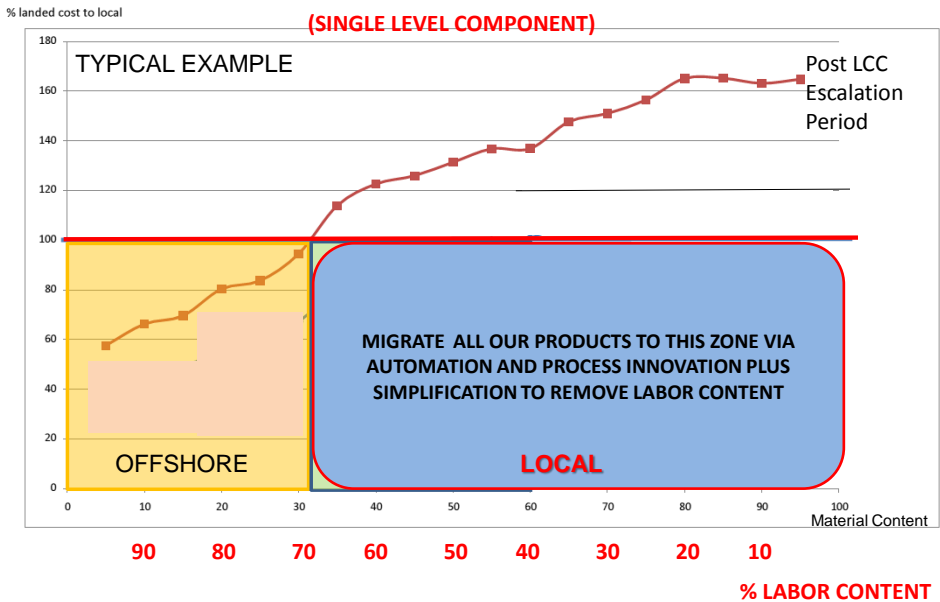


### OFFSHORE VERSUS LOCAL MANUFACTURING BY % LABOR CONTENT



73

### OFFSHORE VERSUS LOCAL MANUFACTURING BY % LABOR CONTENT



74

# THE FUTURE

(The Near future)

75



Society of Manufacturing Engineers Toronto  
Advancing Manufacturing in Ontario

## Take Back Manufacturing The Now situation

(Measured over the last 10 years + .... USA and Canada)

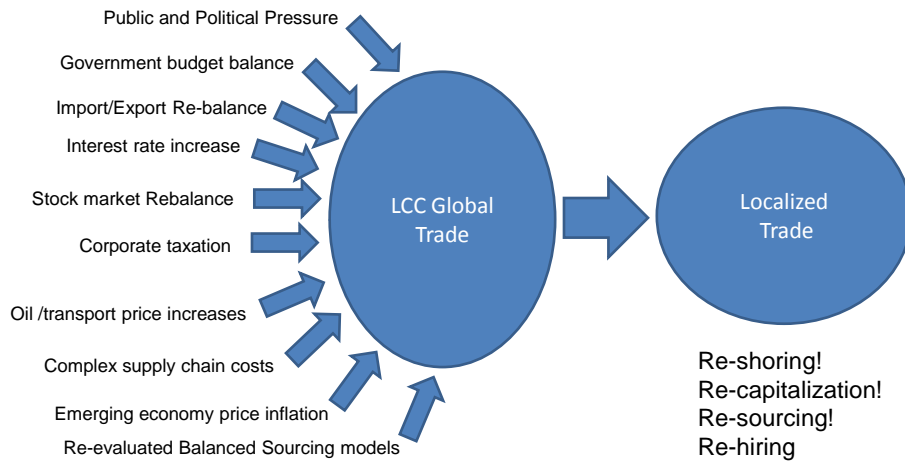
<b>Stock market instability</b>	<b>Government budget deficit</b>
<b>Corporate cash (Excess)</b>	<b>Growing North American Trade deficit</b>
<b>Very Low Interest rates</b>	<b>Increased resource based economy</b>
<b>Diminishing Technical education</b>	<b>Unemployment up</b> (Certainly in value adding sectors)
<b>Increasing Cost of oil</b>	<b>Less Career opportunities for next generation</b>
<b>Increasing Commodity prices</b>	<b>Increased Cost of living</b>
<b>Mid to low Industrial investment</b>	<b>Prosperity dropping</b>
<b>Reduced Consumer confidence</b>	<b>Faith that Canada is a good place to live</b>

76

**Not so good**



## New Pressures on LCC Globalization (Resource & Product Transfers)



77

**Looks like TBM !!!**

***BUT***

***Are we ready???.....***

## WHY NOT?

- We already have the resources here
- We still have the know-how and skills.
- We have our consumers here.
- We have our investments here
- We have our futures here
- Why should we import ALL the manufactured goods and export all our value added wealth and prosperity?



## THE JOURNEY...NOT EASY BUT NESSESARY AND WORTHWHILE

- Will require strong focus by business leaders
- Strong support from:
  - » Educators
  - » Government
  - » Associations
  - » Investors
  - » General Public

We need to create a clear VISION of this new manufacturing recovery environment!!

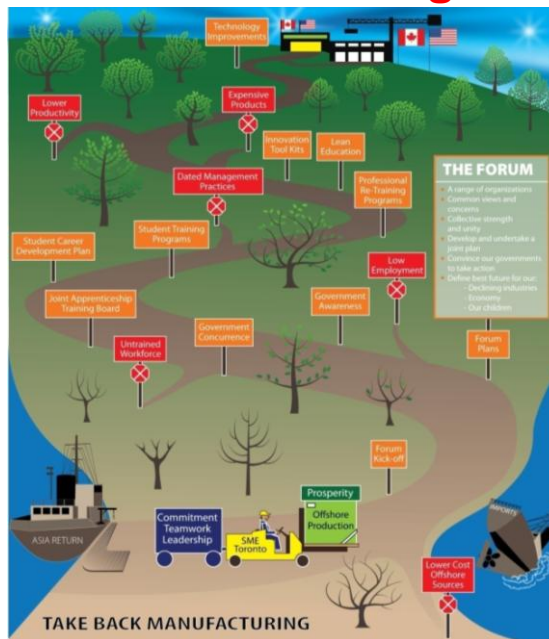


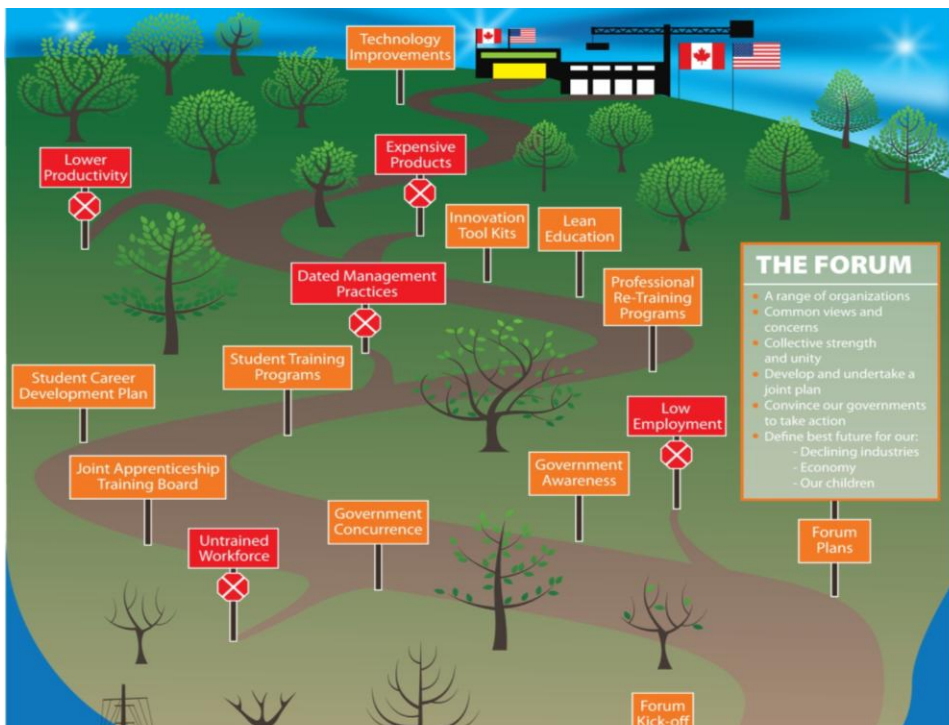
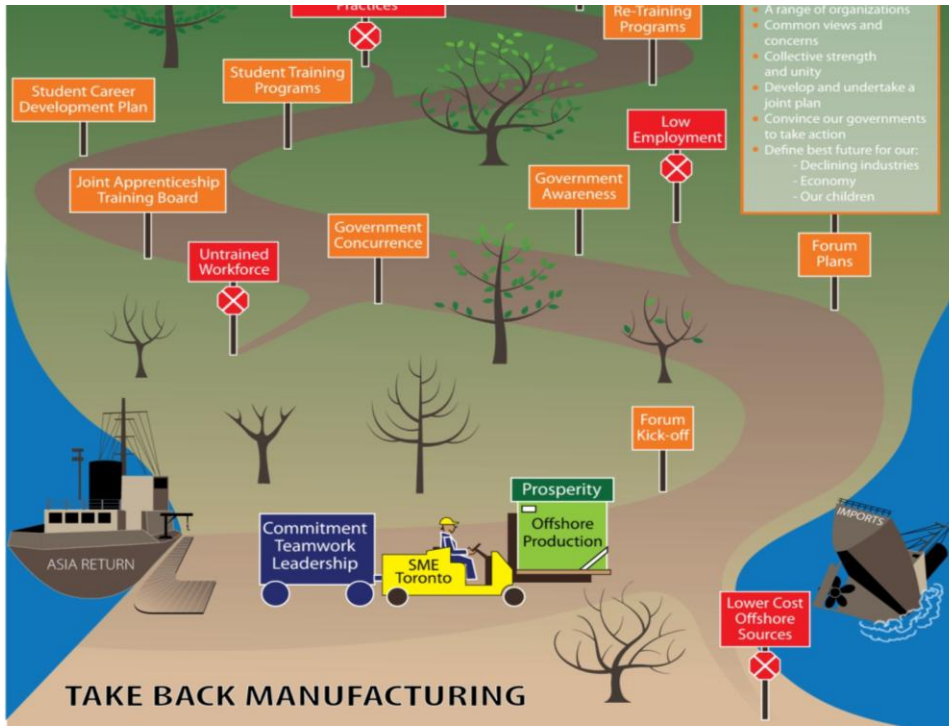


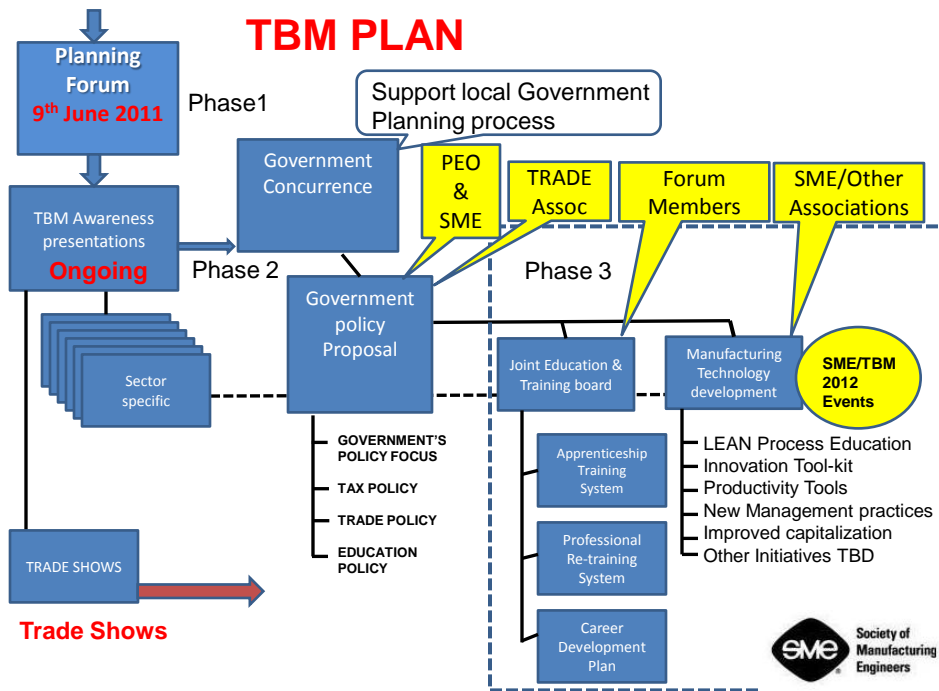
# THE TBM ROADMAP



## Take Back Manufacturing ROADMAP







## Take Back Manufacturing

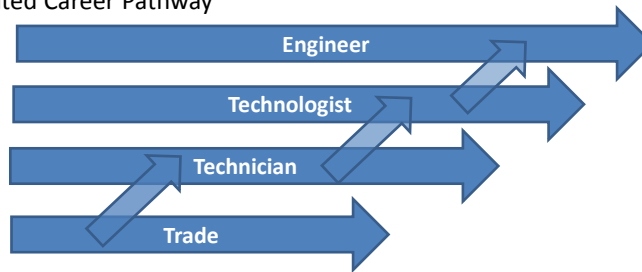
**Become "Entitled" with government support to Take Back Manufacturing.**

Explain to the public that:

- Governments cannot spend or budget their way out of this..
- Everyone **MUST** Reduce IMPORTS and Earn more EXPORTS
- We cannot continue to rely on our natural resources for economic stability.
- Government policies need to promote and sustain local business.
- Re-direct and gain an aptitude for manufacturing...
  - Re-focus education and training with integrated Apprenticeship programs.
  - Implement Advanced Manufacturing Know-how and Technology.
  - Improve our social attitude toward manufacturing.

## Recommend: New Apprenticeship Training VISION

- Integrated Career Pathway



- Industry Recognized Skills Development Progression
- Apprenticeship Pool From The Best, the Brightest And The Most Talented
- Starts In High School And Recognized As Most Valuable Component Of Workforce Development By Industry And Community
- Become The Learning/Occupation Destination Of Choice By High School Students
- Corp Apprenticeship Courses Are Transferrable And Articulated To Other Post Secondary Colleges And Universities, Supporting Lifelong Progression In Learning As Shown In Career Pathway Above

## Take Back Manufacturing

### Win back

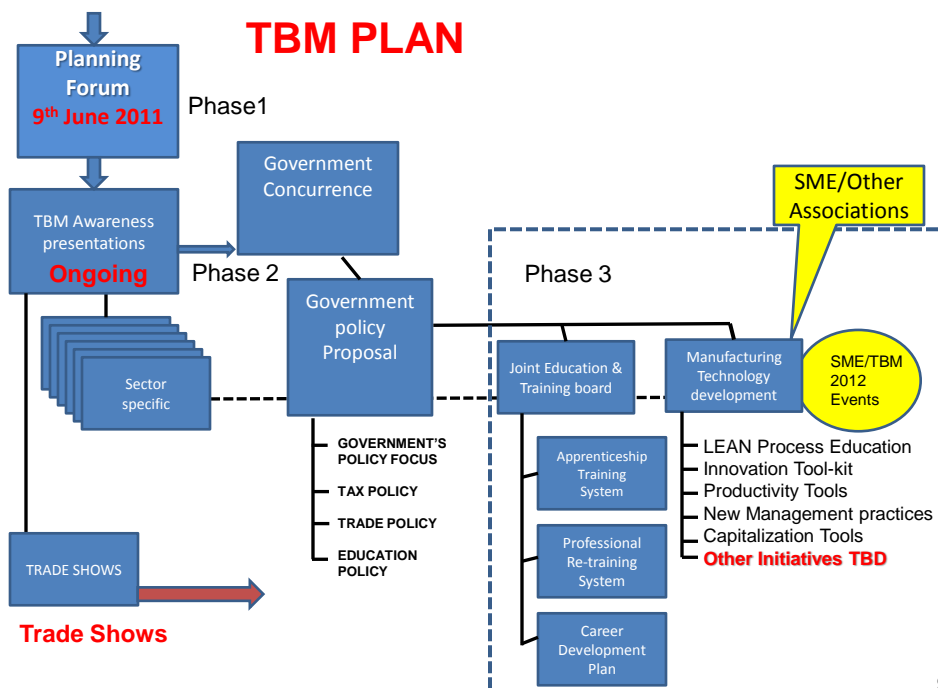
- **Productivity improvements.....**  
Via latest manufacturing strategies, concepts and technologies
- **Innovation and competitiveness...**  
Use manufacturing as a strong incubator for innovation.
- **Careers..** Be excellent at all aspects of Manufacturing and Product Design
- **Jobs...** Encourage a return to manufacturing as the place to be!!!
- **Prosperity...** Recognize the power of adding value to the economy.

### Entitle and Empower the Next Generation!!!



## SUMMARY

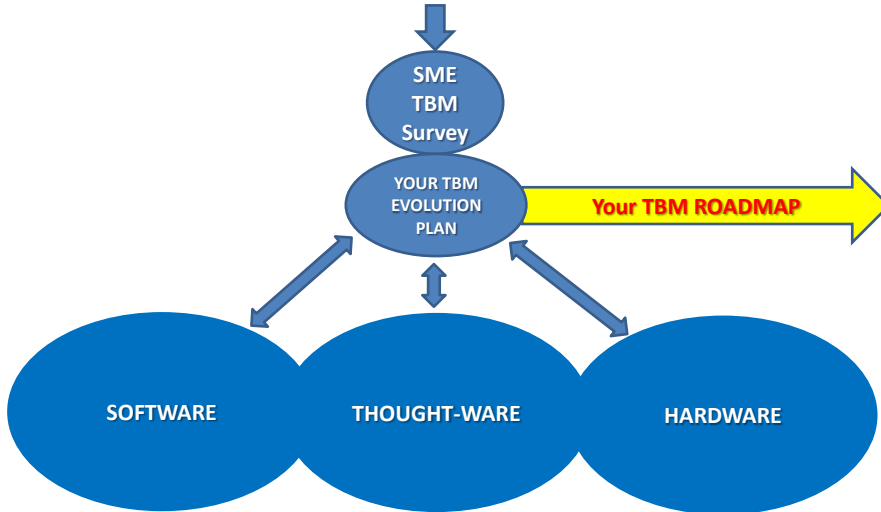
- We want to balance country level Imports and Exports. (without over reliance on natural resources)
- Earn the right to boost value adding Exports.
- This means Engineered Manufactured products.
- This means that we will need a strong domestic Redeveloped manufacturing base to provide the strength to undertake this.





# The SME Knowledge Roadmap.....

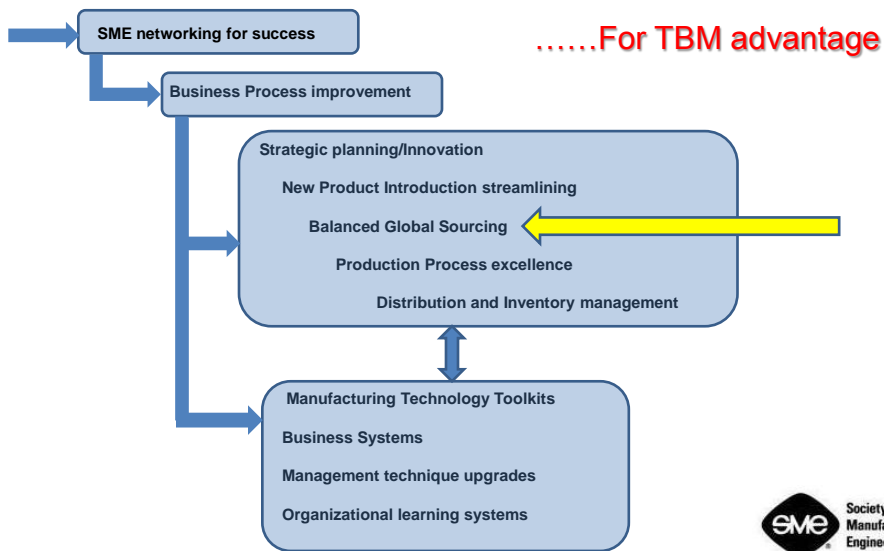
**MEET KNOW GROW**



91

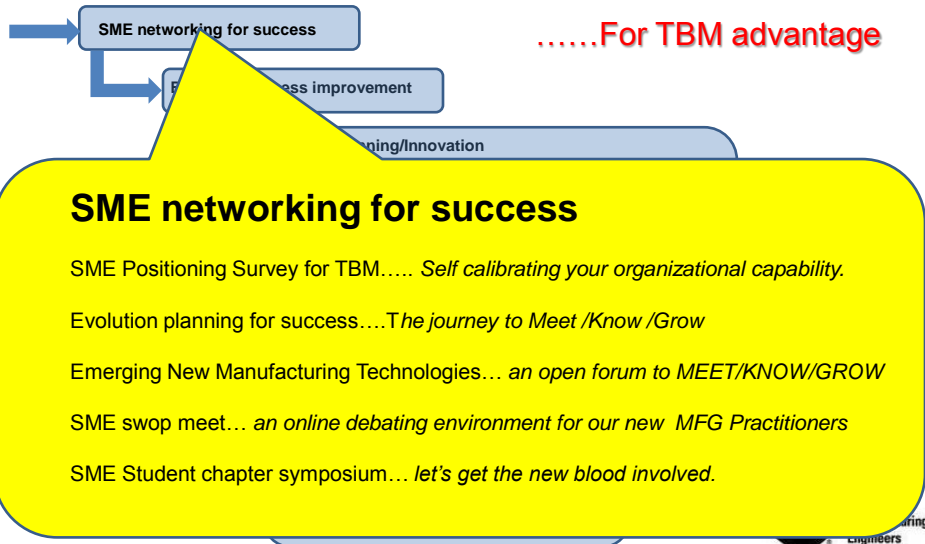
## The SME Knowledge Evolution Plan

Organizing your : Thought-ware Software and Hardware.....



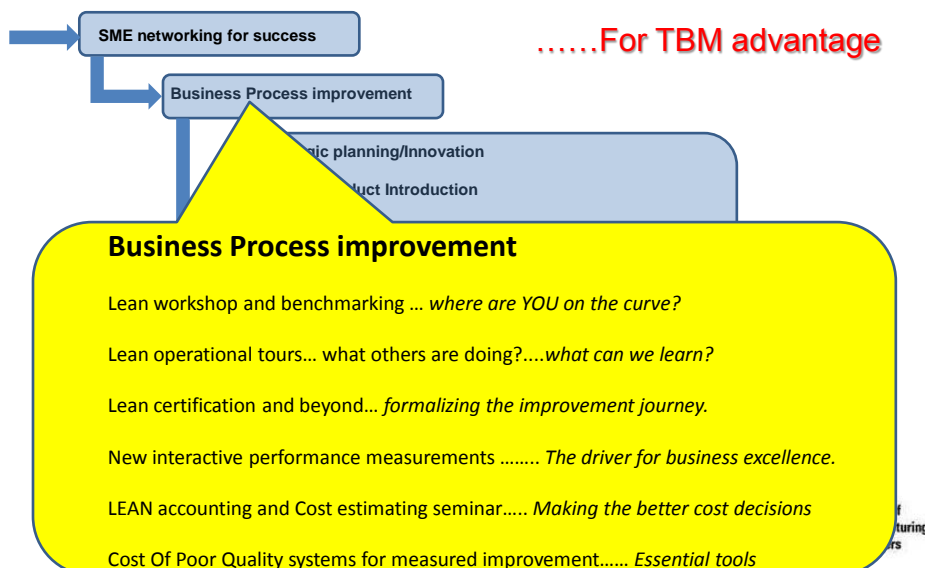
# The SME Knowledge Evolution Plan

Organizing your : Thought-ware Software and Hardware....



# The SME Knowledge Evolution Plan

Organizing your : Thought-ware Software and Hardware....



# The SME Knowledge Evolution Plan

Organizing your : Thought-ware Software and Hardware....

.....For TBM advantage

**Strategic planning/Innovation**

Executive workshop for Global success.... Join others to hone your own strategic plans.

Market and business planning.... a way of life across the organization

Innovation 101 .....and how to implement.

Innovation incubation.....Integrating the internal organizations together

Recapitalizing the business process for flexibility and maximum payback

# The SME Knowledge Evolution Plan

Organizing your : Thought-ware Software and Hardware....

.....For TBM advantage

**New Product Introduction**

NPI collaboration and control systems..... The forgotten yet critical business process

New product/New manufacturing process integration.. A step by step process

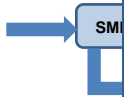
Six Sigma/DFM .....getting results but keeping it simple!!

Rapid prototyping and product launch systems..... Essential to beat the competition.



# The S... n

Organiz



**Balanced Global Sourcing**

Balanced Sourcing.... *Getting it right..This time!*

Re-shoring trends in the Tooling Industries

Supply-chain Management and optimization

Supplier certification and scoring systems.

Balanced Global Sourcing

Production Process excellence

Distribution and Inventory management

Manufacturing Technology Toolkits

Business Systems

Management technique upgrades

Organizational learning systems



# THE SME K... PLAN

**Production Process Excellence**

LEAN Manufacturing Process design and simulation workshop

Total Productive Maintenance... the essential for reliability

Process flexibility design and improvement workshop

Point meetings / 5S

Introduction

Global Sourcing

Production Process excellence

Distribution and Inventory management

Manufacturing Technology Toolkits

Business Systems

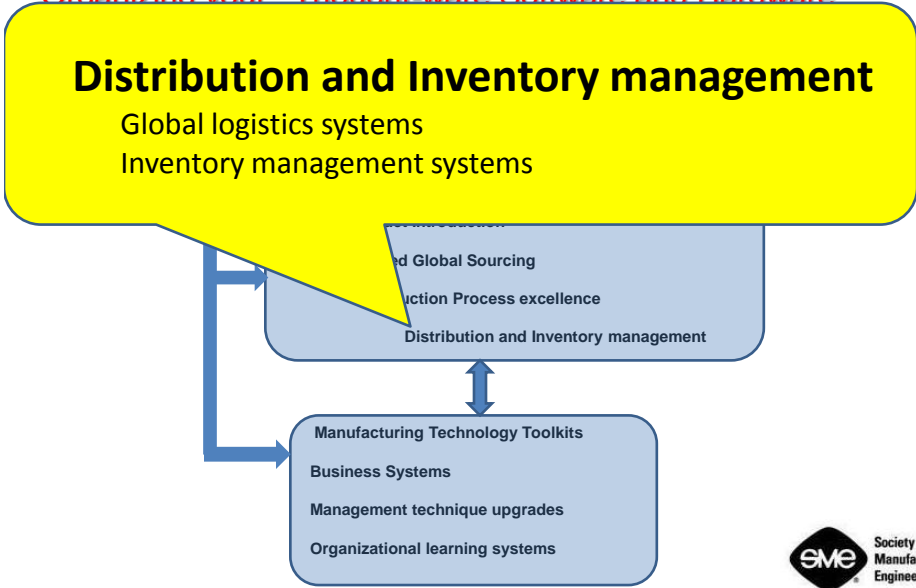
Management technique upgrades

Organizational learning systems



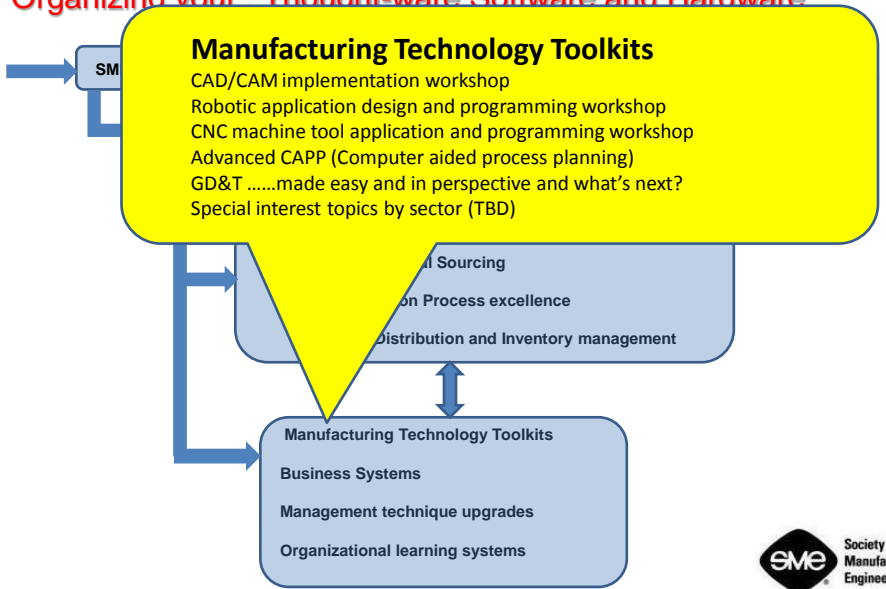
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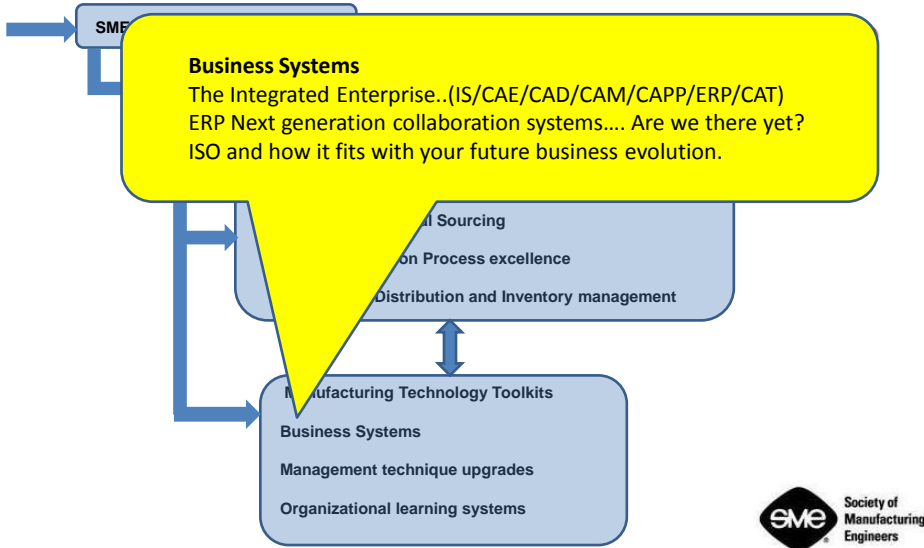
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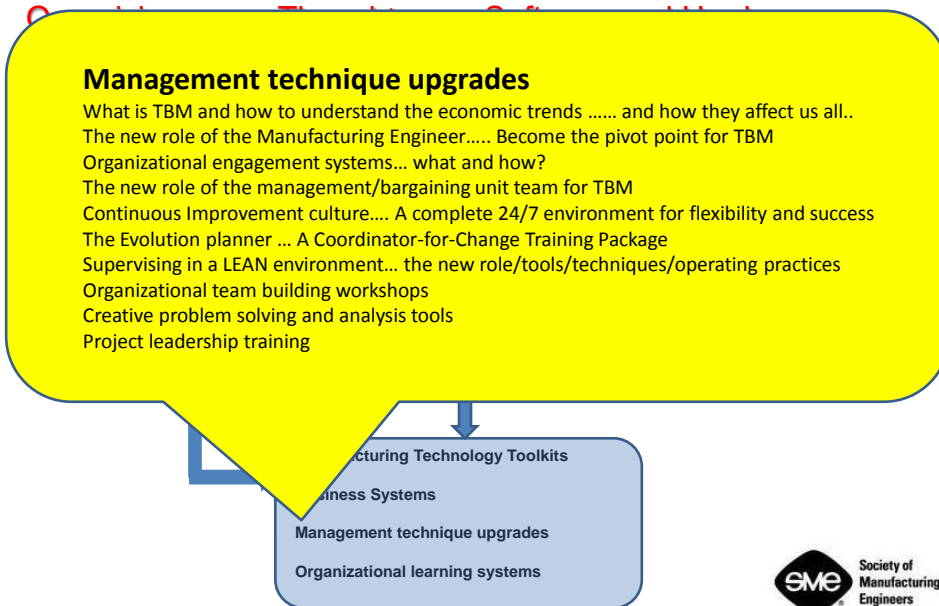


# The SME Knowledge Evolution Plan

Organizing your : Thought-ware Software and Hardware....



# The SME Knowledge Evolution Plan

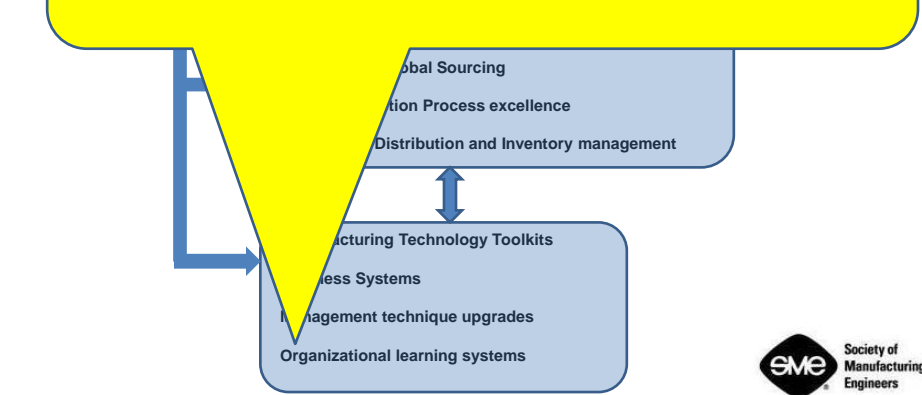


# The SME Knowledge Evolution Plan

Organizing your : Thought-ware Software and Hardware

## Organizational learning systems

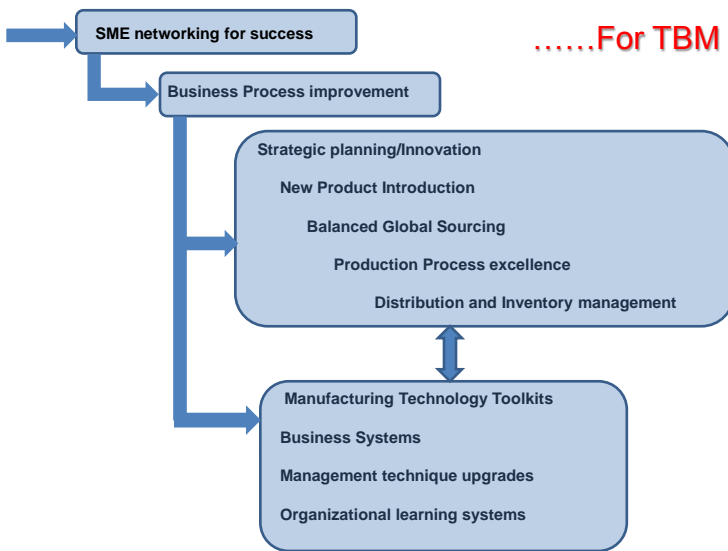
How to approach and utilize an apprenticeship system for your business  
 How to build a formal employee training program.  
 Understanding the latest government assistance programs for industry.



# The SME Knowledge Evolution Plan

Organizing your : Thought-ware Software and Hardware....

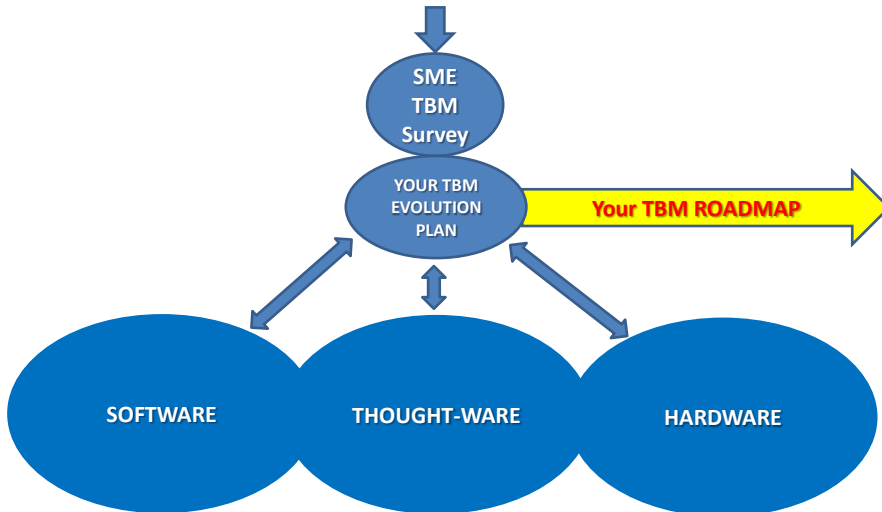
.....For TBM advantage





## The SME Knowledge Roadmap.....

**MEET KNOW GROW**



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**TBM.... STEP 1.**

Take the .....

**TBM Self Positioning Survey**

*Help us to Help you!*



Society of Manufacturing Engineers Toronto  
*Advancing Manufacturing in Ontario*

## Why do the TBM Survey?

Help us to help you through SME and TBM Forum support.

Allow us to further learn the issues the industry is facing.

Publish feedback to all of us on the results....

Generate a Petition data base for government attention.

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Society of Manufacturing Engineers Toronto  
*Advancing Manufacturing in Ontario*

# WWW.SME-TBM.org





# Take Back Manufacturing

- HOME
- TBM Roadmap**
- TBM Press Release
- TBM Mission
- The TBM Forum
- TBM Forum Plans
- TBM Information
- Chat about TBM
- About SME Toronto Chapter
- Contact Us



## SME Talks to the Toronto Star about the health of Manufacturing!

Manufacturing's Grim Battle to Survive....

"How are we going to pay for everything in Ontario when we traditionally paid for everything with manufacturing? We don't have a resource sector in Ontario," said Nigel Southway, chair of the Toronto chapter of the Society of Manufacturing Engineers. "Manufacturing has a multiplier effect. It's one of the best ways to spur other activity. For every job in manufacturing, there's probably three indirect jobs. ...."

More at <http://www.thestar.com/business/article/1145753--manufacturing-s-grim-battle-to-survive>

## Take Back Manufacturing at FABTECH.

Come and join the SME team at **FABTECH** 20<sup>th</sup> to 22<sup>nd</sup> March (Booth # 1020)

*Complementary to all show ticket holders*

We will explain how YOU can TAKE BACK MANUFACTURING.

[Join SME today!](#)

[Get the TBM Roadmap and Tool Kit.... Get started on your own TBM roadmap!!](#)

SME TORONTO website  
[www.smetoronto.ca](http://www.smetoronto.ca)



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## TBM ROADMAP AND TOOLKIT

If you believe in what we have outlined, share our concern for the health of our manufacturing sectors and see the value in following our TBM road map then...

Please follow any or all of these initial steps for action...

Complete our **FREE TBM SELF POSITIONING SURVEY**.

.....to help us help you!

This is very useful data and will allow us to understand the needs of the industry. (All information will be held as confidential)

When your survey is completed, and If you are an SME member, we will sign you up for your TBM Roadmap and introduction to our TBM toolkit.



[Join SME today!](#)

[Get the TBM Roadmap and Tool Kit.... Get started on your own TBM roadmap!!](#)

SME TORONTO website  
[www.smetoronto.ca](http://www.smetoronto.ca)



## TBM Initiative

## SME Survey

SME Toronto is conducting this survey to assist our understanding of how we may better serve you and your organization into the future. We hope you will take the time out of your busy schedule to do this survey and help us help you. Go to <http://chapters.sme.org/026/> for more information on The Society of Manufacturing Engineering in Toronto.

Thank you very much for all the help!

There are 40 questions in this survey.

Load unfinished survey

Next >>

Exit and clear survey



# TBM Self Positioning Survey

*Help us to Help you!*

**Organizational Information?** ..... *Sector/size/business type etc*

**Global Competitiveness?** ..... *What are your issues and your needs?*

**Business Performance and the Imperatives?** ..... *Now and for the Future*

**Exposure to SME?** ..... *Improvement concepts and initiatives*

**Education Needs?** ..... *In your sector*

**How do you need the help?** ..... *Format of support preferred.*



# THANKS

“Thumbs up” for TBM???



Study the Information package. *(more at <http://sme-tbm.org> )*

Sign up for the TBM Survey and TBM Roadmap

Get Others who need help to sign up!!!

Get your sector Society/Association to join the  
TBM Forum.

**HELP US HELP YOU!!!**



**Take Back Manufacturing**

# TBM