

# TPS – A Lean Approach

Sustainability Excursions  
for  
Lean Business  
Leaders and Entrepreneurs



*“We Simplified Our Universe...  
So That You Could Improve Yours”*



A division of CMA Enterprise  
Incorporated



## Greetings

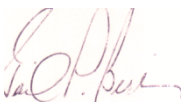
We are proud to introduce our Innovation Center. **The Breakthru Institute (TBI)** is designed to serve as your Conduit to reducing and/or eliminating roadblocks that occasionally arise in our clients' business, talent base, leadership (any level), or processes. Our training experiences focus on best practices, techniques. We also bring into your universe practical tools that are easy to implement in your organization.

Our Training Institute is a wholly owned subsidiary of CMA Enterprise Incorporated and is called The Breakthru Institute. It houses approximately six academies of which one of them is our Lean Six Sigma Academy. Descriptions of the Lean courses follow this correspondence. It is an expansion of our current 25 year old brand and it gives us the latitude to "Explore the Obvious" through Edu-tainment.

We are in the classroom... We are virtual... And We are here to coach you when you want independent study. Our TBI website is [www.breakthruinstitute.biz](http://www.breakthruinstitute.biz)

We look forward to your favorable response and if you have any questions, please contact the undersigned at 954-476-3525 or Oliver Williams at 786-286-0010.

Kindest regards,



Gail P. Birks, EMBA, LMBB, IATA  
Managing Director  
Mediator

# Who is TBI?

**The Breakthru Institute, (TBI)** is a subsidiary of CMA Enterprise Incorporated, a Performance and Process Improvement Consulting Firm headquartered in Davie, Florida.

TBI serves as our training division. Through TBI, we specialize in raising your levels of maturity and enhancing your capability and capacity through performance and process improvement consulting and training that delivers AHA Moments™ again and again.

We are in the classroom... We are virtual... and We are here to coach you when needed. Our training through our academies and ala carte excursions. The academies are...

- Lean Six Sigma
- Leadership and Managerial Excellence
- Entrepreneurial Excellence
- Diversity and Inclusion
- Strategic Implementation Planning
- Practitioners' Academy (Train the Trainer)
- Board Governance and Enterprise Risk Management

Our training and consulting teams are experienced professionals who bring the practical knowledge and experience to our client engagements. We are your global resources committed to bringing Adult Edu-Tainment to your workforce and stakeholders.





## Why Train with TBI?

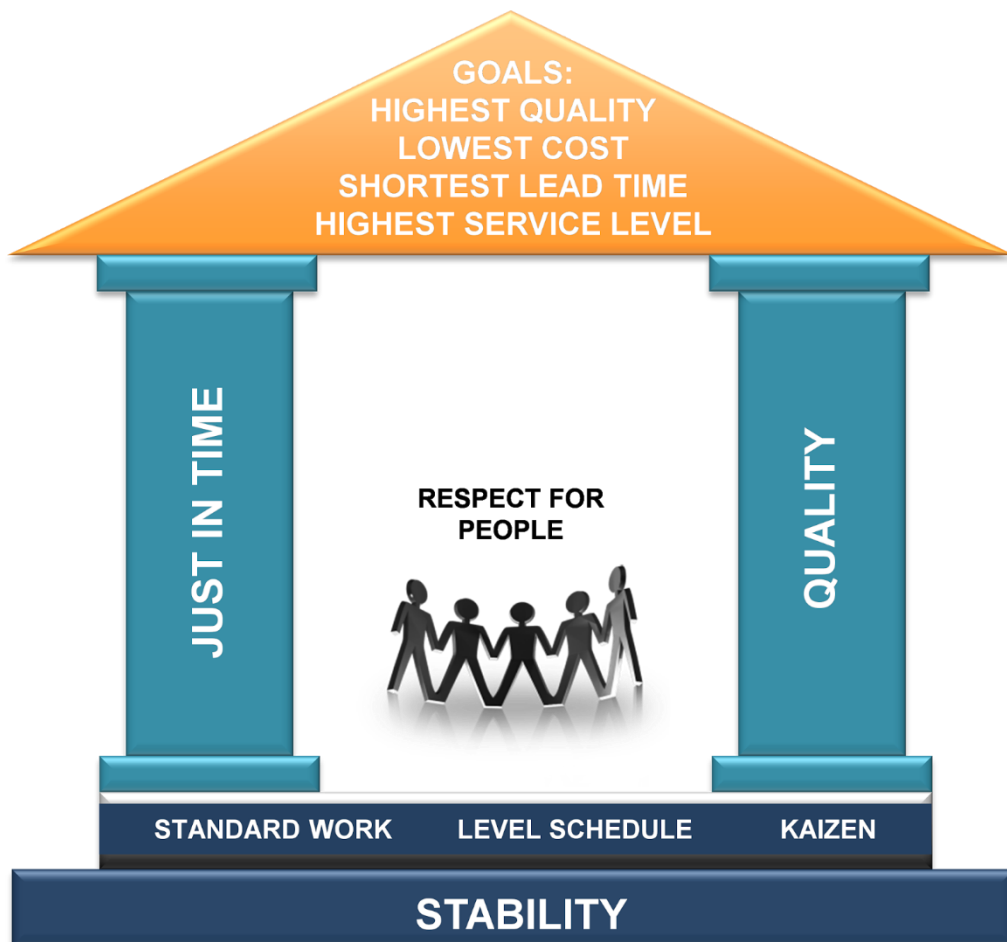
TBI offers a unique remedy that provides our clients with the ease of understanding the concepts and methodologies introduced. By simplifying our universe, we have been able to help you improve yours with sustainable results. Your ROI is immediate because with we provide you with the support you need to be successful in your Lean Certification Journey. We guide you through your “wilderness” with techniques that include but are not limited to...

|  |   |
|--|---|
| <ul style="list-style-type: none"><li>• TBI separates Lean Six Sigma by experience levels which ensures that you are able to walk before you run</li></ul> | <ul style="list-style-type: none"><li>• TBI brings Lean Six Sigma to you translated into everyday business language</li></ul>   |
| <ul style="list-style-type: none"><li>• If you have completed the certificate course, we can coach you through your projects</li></ul>                     | <ul style="list-style-type: none"><li>• Participants are provided with a toolbox that provides all the working components of leaning their organizations</li></ul>  |
| <ul style="list-style-type: none"><li>• Our training team is comprised of certified professionals in the Lean Six Sigma universe.</li></ul>                | <ul style="list-style-type: none"><li>• Project Coaching is included in the fee for the full certification training. The certification project aids in bringing a faster ROI to you and your organization because results are realized.</li></ul> |

# What is a TPS?

According to Wikipedia, “The **Toyota Production System (TPS)** is an integrated socio-technical system, developed by Toyota, that comprises its management philosophy and practices. The TPS organizes manufacturing and logistics for the automobile manufacturer, including interaction with suppliers and customers. **Taiichi Ohno and Eiji Toyoda, Japanese industrial engineers**, both men are trailblazers in the Lean Universe, developed the system between 1948 and 1975.”

TPS was originally called “**just-in-time production**,” it builds on the approach created by the founder of Toyota, Sakichi Toyoda, his son [Kiichiro Toyoda](#), and the engineer Taiichi Ohno.





This training focuses specifically on the principles and tools used in this universe of “Lean Manufacturing” as created by Mr. Toyoda and Mr. Ohno. This Lean Course, while originating in the manufacturing climate is not just for professionals in that industry. The tools and critical thinking can translate across industry lines.

This **3 day course** is designed to assist you in understanding how to drill deeper using Kaizens and small improvement initiatives that tell the story of your business case. Most important, you will be able to obtain solutions for sustainable success.

#### **What Will I Learn?**

- How to Manage Errors and Defects
- Balance Manual vs Automated Activity
- Reduce cycle times and change over
- Manage Customer Demand and Fluctuation
- Understand the cost to carry inventory
- Increase ROI and efficiency

#### **Intended Outcomes**

- Innovative strategies for improving businesses of any size or industry
- Exposure to the universe of process and performance improvement
- Lean management tools that can be used in any decision scenario
- Building and /or expanding your vocabulary

#### **Is there a Candidate Criteria?**

No Criteria

# TPS

## Methodology

### Human Development

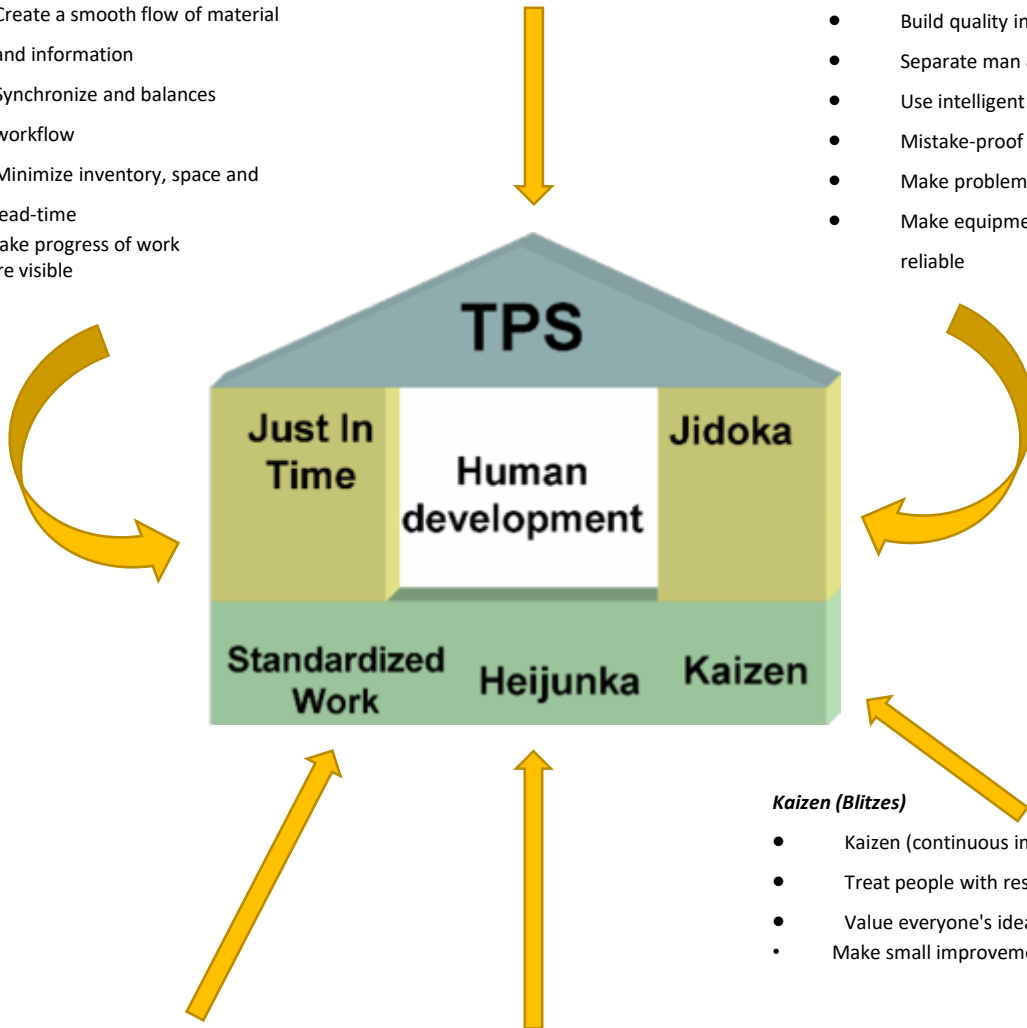
- Key elements of human development within TPS include:
- Team design, teamwork and team leader roles & responsibilities
- Training Within Industry (TWI)
- Practical problem solving
- Suggestion system

### Just-in-Time (Takt-Flow-Pull)

- Eliminate the 7 types of wastes
- Create a smooth flow of material and information
- Synchronize and balances workflow
- Minimize inventory, space and lead-time
- Make progress of work more visible

### Jidoka (Autonomation)

- Build quality into the process
- Separate man & machine work
- Use intelligent low-cost automation
- Mistake-proof equipment
- Make problems more visible
- Make equipment safer and more reliable



### Standardized Work

- Document the best current method
- Set foundation for improvement
- Make standard visible

### Heijunka (Leveling)

- Average mix and volume
- Stabilize production schedule variability
- Reduce total Lead-time
- Coordinate sales, scheduling, and customer needs

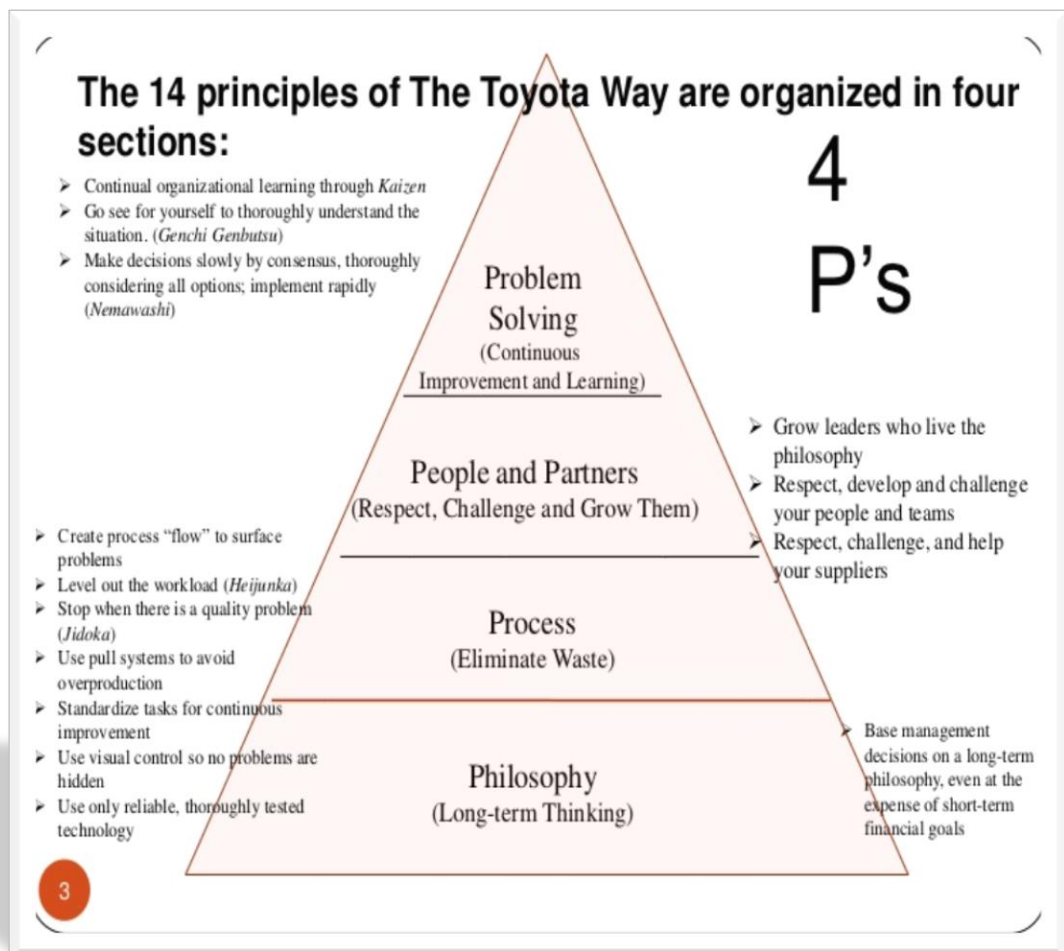
### Kaizen (Blitzes)

- Kaizen (continuous improvement)
- Treat people with respect
- Value everyone's ideas
- Make small improvements every day

Excerpt from <https://us.kaizen.com/knowledge-center/toyota-production-system.html>







# Basics of TPS





# TPS Toolbox

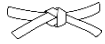
Designed in accordance with the 14 principles of the “Toyota Way” and organized into the “4Ps.”

| <b>Problem Solving</b><br>  | <b>People and Partners</b><br>   | <b>Process</b><br>  | <b>Philosophy</b><br>  |
|---|---|--|---|
| <ul style="list-style-type: none"> <li>• Project Issues Flow Chart</li> <li>• Corporate Diagnosis</li> <li>• Prioritizing Projects Grid</li> <li>• Cues and Clues</li> <li>• Diagnosis Compass</li> <li>• Project Sizing</li> <li>• SME Requirements</li> <li>• Deming System of Work Diagram</li> <li>• Genchi Genbutsu</li> <li>• Value Stream Mapping</li> </ul> | <ul style="list-style-type: none"> <li>• Project Team Charter</li> <li>• Team Development Chart</li> <li>• Lean Leader Coaching Grid</li> <li>• Individual Team Member Assessment</li> <li>• Project Team Evaluations</li> <li>• Team SWOT Analysis</li> <li>• Learning Leadership Quadrant</li> <li>• The Fellowship Diagram</li> <li>• Technical Reviews</li> </ul> | <ul style="list-style-type: none"> <li>• Time Tracking Grid</li> <li>• Time Value</li> <li>• Takt Time and NVA/VA</li> <li>• CTQ</li> <li>• Value Stream Mapping</li> <li>• Hazard Analysis</li> <li>• Relationship Segment Profitability</li> <li>• Operating and Project Cost Analysis</li> <li>• 8 Elements of Waste</li> <li>• Fail Point Analysis</li> <li>• Yamazumi</li> <li>• COPQ</li> <li>• Customer ROI</li> <li>• COPQ Prevention</li> <li>• TY &amp; RTY</li> <li>• DPMO/DPU</li> </ul> | <b>Lean Flow Systems</b> <ul style="list-style-type: none"> <li>• Poke Yoke</li> <li>• Kanban</li> <li>• Push/Pull System</li> <li>• Project Selling Points</li> <li>• Messaging Worksheet</li> <li>• Production Leveling (Smoothing)</li> <li>• Total Production Maintenance</li> <li>• SMED</li> <li>• SWOTT/ PEST</li> <li>• Environmental Plan</li> <li>• Standardization               <ul style="list-style-type: none"> <li>• Visual Factory/Controls</li> <li>• 5S</li> <li>• SCAMPER</li> </ul> </li> <li>• Failure Prevention</li> <li>• Kaizen (Blitz)</li> <li>• PDCA</li> <li>• Strategic Development Plan</li> <li>• Milestone Chart</li> <li>• 7 Measures of Lean Performance</li> </ul> |

**Leveling Standardization Visual Controls**  
**Total Production Maintenance Kaizen**

**Customer First Respect People Continuous Improvement**

# TBI Lean Six Sigma Training Universe



**White Belt:** Assists with process mapping



**Yellow Belt:** Front line Team Members handle The data collection



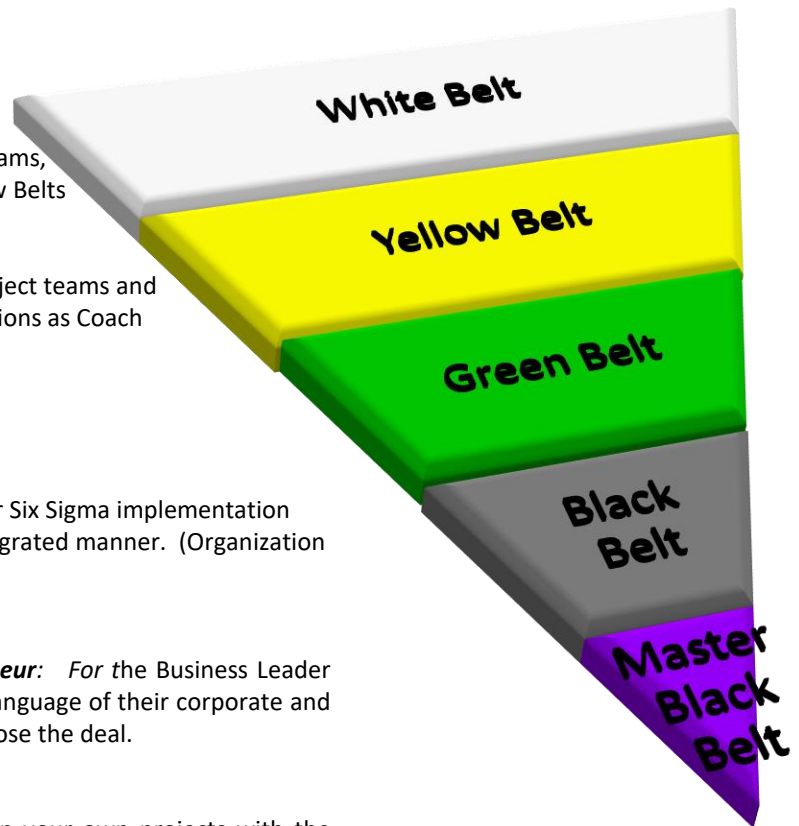
**Green Belt:** Lead Teams, focus on analysis



**Black Belt:** Solutionists, Lead Teams, Train and Coach green and Yellow Belts



**Master Black Belt:** Oversees Project teams and associated Team dynamics, functions as Coach to other levels



## Other Certificate Training



**Champions** take responsibility for Six Sigma implementation across the organization in an integrated manner. (Organization Leadership)



**Lean Business Leader/Entrepreneur:** For the Business Leader who must be able to speak the language of their corporate and government clients in order to close the deal.



**Lean Practitioner (Kaizens):** Run your own projects with the tools that will assist you in mobilizing project teams, project management, handoff and monitoring for sustainable integration



**Lock-step Program:** For the Company who is on an accelerated timeline to transform your culture, this is for you. In 6-8 months, our candidates will go from yellow to black belt. If you seek your master black belt designation, it is 12-15 months.



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