Original Invitation and Post Session Report

You are invited
to participate in our
first Asian
Multi-Industry
Benchmarking &
Best Practices
Sharing Opportunity

SHANGHAI, CHINA

At the Hyatt on the Bund

May 10-11, 2017

Facilities, Engineering & Real Estate Benchmarking / Best Practices Program

(Post Session Executive Summary - Pages 5, 6 and 7)

Two-Day Roundtable
Knowledge Exchange and Plant Visit to

∠Morimatsu





Join this special invitation program!

Includes Plant Visit to:





Morimatsu is a Japanese fabrication and modularization company with major facilities in Shanghai.



Assemblies and products fabricated here for many industries are shipped worldwide and provide insights on the growing trend for modularization.



Please R.S.V.P. soon.

Contact
Bill Linton
to explore your
interest:
864-901-5398

Bill@LintonConsulting.com

Benchmarking & Best Practices Forum

- Facilities, R.E., Engineering, and Project Focus
- Global & Regional Perspectives, Resources, H.R., More...
- Executive Roundtable; Manufacturing Plant Tour

As a leader in Facilities, Engineering, Project Management, Real Estate or related functions, you face many financial technical, geographic, resource, H.R. and regulatory challenges.

To be successful and constantly improve, consider how you can accelerate your team's learning and process improvement through *Best Practices* sharing.

Linton Consulting has been bringing company leaders together for knowledge exchange and benchmarking for years. This is our first Asia-based industrial *Best Practices* program. (more...)

Shanghai, China is a global financial and business hub for much activity regionally and globally. While multinational firms have been investing and performing work in Asia for decades, condi-

tions are changing and there is much to be learned for improving efficiency and effectiveness. Modularization is one focus of various strategies and tactics we will explore in this session.

Since 2014. we have brought together participants from many competitive industrial and energy companies for these sessions including AstraZeneca, Amgen, BMW, Chevron, Coca-Cola, Intel, J&J, Michelin, Pharmadule Morimatsu, Sealed Air. Texas Instruments and others. We expect participants from multiple industries, companies, cultures and countries in Shanghai at this session.

If doing business—or doing better—in Asia, China or globally is an objective for you, please consider this program. This knowledge

exchange, Roundtable and Tour will bring new insights, ideas and options to your organization and enable performance breakthroughs.

We invite you to meet your peers in Shanghai to share experiences. This will be a small, yet unique group of leaders from a cross-section of global industrial companies. We will develop specific topics from interviews and customize the knowledge exchange for maximum value to your Engineering, Facilities, Project Management, Real Estate and related business functions.

Why not join us for this program?

For information on requirements, fee and benefits and to explore your prospective role, contact: **Bill Linton**

at 864.901.5398 or Bill@LintonConsulting.com

Key Benchmarking / Best Practice Topics

- Big picture statistical comparisons
- Country / regional challenges, export / import challenges
- Facilities and Real Estate challenges
- Protecting IP throughout design, construction and asset life cycle
- Engineering & Construction methodologies & resources in Asia
- Executing globally, leveraging locally; linking dispersed expertise
- In-house competencies versus outsourcing strategy & project control
- Modular techniques & applications

- Global procurement of fabricated equipment and modules
- Business process improvement challenges: Capital & Project management
- HR & cultural challenges: developing competencies, leaders & talent
- Knowledge retention; innovation
- Technology: 3D, standard design platforms, content & data management, rapid prototyping, modular mfg.
- Departmental scope, missions, organizational structure, funding models
- Service provider experiences, evaluation

Agenda Topics / Past Participants

Selecting from These and Other Agenda Topics

Personal / Company Introductions

Department Missions, Organization, **Funding Model**

Department Strengths / Weaknesses

Statistical Comparisons

Business Process Improvement

Capital Efficiency / Management

Project Management / Control

Improving Engineering Processes

Developing & Maintaining Talent: Leaders & Technical Competencies

Outsourcing Philosophies & Practices

Improving Expertise Utilization

Linking Global Expertise

Operations & Maintenance

Integrating Acquisitions

Doing Business in Emerging Regions /

Asia / China

Global Procurement

Modularization

Team Evaluation & Scoring

Knowledge Retention

Business Continuity

Technologies

Managing Regulations

Design Simulation, Visualization (3D)

Standard Design Platforms vs. Cus-

tomization

Content & Data Management

Protecting IP thru asset life cycles;

Security / Cyber Security

Facility / Factory of the Future

Automation, I&C

Internet of Things (IoT)

Rapid Prototyping

Sustainability / LEED

Energy Management

EH&S

Engineering's role in NPD

University Collaborations

Others

Past Participants for Our Programs



















































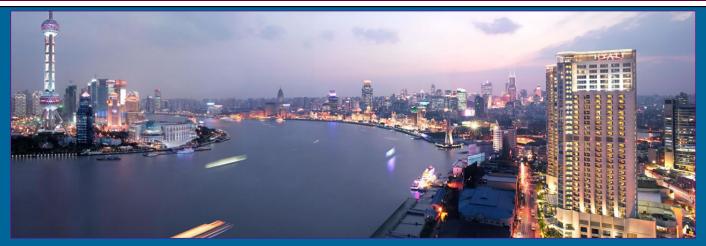








Venue: Hyatt on the Bund—Shanghai



Shanghai China is one of the world's largest cities with a population of some 25 million. Shanghai is a global financial center, industrial complex and the world's busiest port. The city has unique architecture and is an ideal location for Linton Consulting's 4th Benchmarking & Best Practices Roundtable. We have chosen this location for our first program in Asia to take





advantage of an offer from Morimatsu to tour one of their primary Modular and Pressure Vessel manufacturing facilities and to explore doing business better in Asia.

Our venue for this program is the Hyatt on the Bund (above-right). It is a recognized hotel ideally situated on the river, while near key business and downtown sites.



Past Benchmarking and Best Practices Sessions

STONE MOUNTAIN, GA (2014)

Our first Benchmarking and Best Practices session was held at the Evergreen Conference Center in beautiful



Stone Mountain, GA. This first of a kind multi industry session identified areas to explore and initiated a balanced, qualitative and quantitative approach.

GREENVILLE-SPARTANBURG, SC (2015)



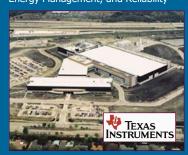
Our 2015 session added an industrial tour to the knowledge exchange and we visited BMW's Spartanburg, SC



facility where we learned about the company's growth and sustainability achievements.

DALLAS, TEXAS (2016)

In 2016 we ventured to Dallas, TX where we explored key Facilities and Engineering themes; Sustainability and Energy Management; and Reliability



and Maintenance. These themes fit well with our tour of Texas Instruments' modern Richardson FAB where microelectronic chips are manufactured.

Post Session Executive Summary

Linton Consulting's 4th *Benchmarking and Best Practices* session for Facilities, Real Estate, Engineering, Construction and Project Management leaders was held in Shanghai China at the Hyatt-on-the-Bund on May 10 - 11, 2017.

Companies participating included Amgen, Avery Dennison, Caterpillar, Clemson University Center for China Studies, Lilly & Company, Morimatsu, MSD (Merck), Texas Instruments (TI), and Walmart Asia Realty.

Themes focused on *Doing Business Better in Asia and Capital Efficiency*. While mostly American/U.S. firms were represented, 10 of 13 delegates from these companies were Asia-based personnel.

The program kicked off with introductions and Bill Linton's "Benchmarking and Best Practice Challenge" presentation. The agenda for the 2-day session included:

Day 1

- Roundtable introductions from each participant including their personal and professional, company and departmental backgrounds and roles
- Discussion of organizational structures and strategies
- Asia/China overview of opportunities and challenges
- A tour of the Morimatsu Pudong Fabrication and Modular Manufacturing Facility
- Presentations and Discussions on Modularization Concepts and varied Country Experiences
- Networking Dinner



Day 2

- Overview of Capital Efficiency Levers
- Avery Dennison Capital Management Processes and Best Practices
- How Amgen Leverages Global Expertise
- Walmart China's Best Practices in Permitting, Design, Bidding and Construction
- How Eli Lilly & Company Supports Asian / Regional Operations
- How MSD Views Facilities Management in a Time of Changing Workplace Strategies
- How Caterpillar Manages Engineering and Facilities Through Business Cycles
- Roundtable discussions on Real Estate, Siting, Security, Maintenance, Protecting Intellectual Property and Others
- Networking breakfasts, lunches, and breaks fostered additional interactions and sharing

Highlights

Purpose: We convened in Shanghai to network with professionals in similar or complementary roles, to hear how they do business and to share best practices. Each participant came together to search for new and better ways to organize and conduct business; and to take back new ideas and a vision leading to better and more profitable operations

Overview of Asia/China and Opportunities & Challenges: Xiaobo Hu, Clemson University Professor and Director for its Center for Chinese Studies provided an overview of Asia and China illustrating growing opportunities as well as challenges. After showing overall statistics on Asia, he painted a picture of increased trade between the world's first and second largest economies. Every day there are 10,000 people flying between the U.S. and China. It is an amazingly robust and growing country. He also illustrated that while there has been a flattening of U.S. investment in China in recent years, investment by China in the U.S. is now growing through acquisitions and direct investments in manufacturing.

Morimatsu Tour: Delegates walked through an advanced, world-class modularization facility and learned about modularization from skids to superskids to *extreme* modularization. Modularization is a design and construction strategy providing quality, schedule and cost benefits for a variety of industries. Discussions led by Morimatsu leaders: Li Xin, Global Business Director; Scott Kaplan, Senior Director of Project Development; and Kimi Chen, Section Manager / Project Director explored the range of issues.

Capital Management Processes: This session, led by Avery Dennison's Global Director of Capital Projects, illustrated how the company manages capital planning and approval, project execution and acceptance by Operations. A cloud-based system is utilized to facilitate capital planning and project tracking globally. Approvals, processes, procurement and contracting were explained with variations noted for project sizes. Avery Dennison has seen that by doing a better job in the planning phase, less time and cost are required in implementation.

Leveraging Global Expertise for International Projects: Amgen's Executive Director of Capital Projects shared how a U.S. centric company has been able to implement projects in Asia while keeping staffs lean. He discussed the use contractors supplemented by a limited number of home office SME's and Expats. He touched on standardization, modular, global sourcing and working with cultural differences in execution and workforce.

Best Practices in Permitting, Design & Construction: Walmart Asia Realty's Vice President of Design & Construction provided a "boots on the ground" perspective of real estate development and design & construction in China. It takes 300 permits/approvals to build a Walmart in China! He shared a number of experiences showing how clear communications, understanding cultural differences, permitting and approvals processes, safety practices and related skills can make or break success.

Supporting Regional Operations Through Global & Local SMEs: Lilly & Company's Director of the Asia Technical Hub explained how they support Asian manufacturing and office operations. Discussions explored how foreign corporations support international and regional offices and plants; and how companies can use local and global resources for greater efficiency and effectiveness.

Facility Management in a Time of Changing Workplace Norms: Financial pressures, increased travel, changing work styles, technology and cultures are changing the workplace, and thus facility management today. MSD's (Merck's) Director of Facilities Management oversees numerous facilities in Asia Pacific. They are introducing change to achieve increased productivity, collaboration and improved morale, as well as improving facility costs. Open office concepts, paperless work, standard technology platforms and others are being incorporated into workplace designs. Discussions associated with this topic were intense as each participant discussed their own company experiences and perspectives.

Managing Business Cycles: Caterpillar Asia's Major Projects Leader related how work activities for their Asia team have changed over the past five to seven years due to first business expansion, then contraction. By leveraging Caterpillar leaders with contractors and later shifting leadership people to other functions they have been able to cope with a lengthy downturn while retaining key expertise. CAT also has a lean system covering capital deployment and mature systems for assuring efficiency. They are now exploring new maintenance strategies to improve efficiency without hindering operations.

Others: Amgen, Avery Dennison, Texas Instruments, Clemson, Morimatu and others discussed Intellectual Property (IP) protection and the challenges in Asia. Insights included: Determining where critical IP is, and protecting it; starting by educating your team and putting procedures in place. What to do in-country and what not to do; how you should work with partners and vendors. There was also discussion of confidentiality issues that are not strictly IP-how these also must be guarded appropriately. Environmental and sustainability issues briefly discussed included the fact that Walmart has started an environmental development council with its China supply chain. Finally, the improved liberalization of the Chinese economic system was applauded as a very favorable for economic development.

Conclusion

Linton's 4th *Benchmarking and Best Practices* session, our first in Shanghai, followed past sessions in Stone Mountain (Atlanta), Georgia; Greenville, South Carolina; and Dallas, Texas. To date, each session has been developed for Facilities, Real Estate, and Engineering & Construction leaders, though with varying themes and industry tours. They have included visits to the BMW Auto Manufacturing Facility near Greenville/Spartanburg and Texas Instrument's Richardson Semiconductor Manufacturing Facility near Dallas and Morimatsu's advanced Modularization Facility in Shanghai, China.

Future sessions planned include themes ranging from Facilities, R.E., Engineering/Const., to Capital Management, to Energy Management & Sustainability to Reliability & Maintenance.

See: http://www.lintonconsulting.com/Benchmarking-and-Best-Practices-Roundtables.html Contact Bill Linton at Bill@LintonConsulting.com or +1 864 901 5398.

