

Michigan's Industry 4.0 Knowledge Center™



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SARIO SLOVAK INVESTMENT AND TRADE DEVELOPMENT ACENICY



Integr8 Global Business Roundtable:
A Global Roadmap to Digital Transformation

(revised 10/15/19 nhn)

Tuesday, November 5, 2019 12:00-5:00 p.m.

TCF Center
1 Washington Boulevard
Detroit, Michigan 48226 USA

<u>Session Abstract and Desired Outcome(s):</u> The purpose of this session is to compare and contrast how the leading advanced manufacturing nations are assisting their small and medium-sized enterprises (SMEs) overcome the challenges of adopting and implementing Industry 4.0 processes and technologies within their enterprises and throughout their supply chains, too.

Primary hurdles include financial, technological and cultural resistance to change in the face of disruption. The latter also applies to manufacturers with vested interests in their legacy systems and processes and enterprises with highly capitalized physical assets (i.e., the sunk cost fallacy) that may stand the way of digitally transforming their enterprises to face the rapid changes in the industrial landscape.

The desired outcome of the session is to: 1) identify solutions that SMEs can immediately apply within their enterprises aimed at driving down their costs while improving their efficiency, productivity and product quality; and 2) propose meaningful ways in which business and industry, government and academia can work together to enhance the global competitiveness of manufacturers worldwide.

Speakers include the following manufacturing leaders from around the world:

- Dr. John Carrier, Senior Lecturer of System Dynamics, MIT Sloan School of Management, Cambridge, Massachusetts (<a href="https://mitsloan.mit.edu/">https://mitsloan.mit.edu/</a>)
- His Excellency Ivan Korcok, Ambassador of Slovak Republic to the United States of America-Washington, D.C.
- Mr. Oto Pisoň, Deputy Head of Department and Innovation Manager of Investment Projects Department, Slovak Investment and Trade Development Agency (SARIO), Ministry of Economy of the Slovak Republic, Bratislava, Slovak Republic (<a href="https://www.sario.sk/en">https://www.sario.sk/en</a>)
- Mr. Ian Cronin, Project Lead, Future of Advanced Manufacturing and Production, World Economic Forum- Geneva, Switzerland (https://www.weforum.org/)
- Mr. Abraham Tijerina Priego, Head of Industry 4.0 Strategy, Secretary of Economy and Labor, State of Nuevo Leon-Mexico; and Coordinator of Innovation Management Process at Metalsa SA de CV, Monterrey, Mexico (<u>www.nuevoleon.gob.mx</u> and <u>www.metalsa.com</u>)
- Ms. Clara Tu, Business Unit Manager Executive Education, Fraunhofer Academy-Munich, Germany (<a href="https://www.fraunhofer.de/en.html">https://www.fraunhofer.de/en.html</a>)
- Mr. Sanjeev Malhotra, CEO, Centre of Excellence for IoT and Artificial Intelligence, National Association of Software and Service Companies (NASSCOM)-Bangalore, India (<u>www.nasscom.in</u>)
- Mr. Clay Phillips, Executive Advisor, SRI International, Menlo Park, California
- Speaker TBD from the Ministry of Finance and Commerce (MOFCOM) (<u>www.mofcom.gov.cn</u>);
   or Ministry of Science and Technology (<u>www.most.gov.cn</u>), Beijing, China
- Noel H. Nevshehir, Director of Industry 4.0 Strategic Partnerships and International Business Services, Automation Alley-Troy, Michigan (automationalley.com)

# **Session Agenda**

#### 12:00 p.m. Luncheon Reception

#### 12:45 Welcome and Introductions

Messrs. Noel H. Nevshehir, Director of Industry 4.0 Strategic Partnerships and International Business Services, Automation Alley-Troy, Michigan; and Ian Cronin, Project Lead, Future of Advanced Manufacturing and Production, World Economic Forum- Geneva, Switzerland

# 1:00 Session Purpose, Themes and Desired Outcomes

Dr. John Carrier, Senior Lecturer of System Dynamics, MIT Sloan School of Management, Cambridge, Massachusetts (<a href="https://mitsloan.mit.edu/">https://mitsloan.mit.edu/</a>) (session moderator)

1:20 Open Discussion and Q&A
2:00 Break
2:15 Breakout Sessions
3:00 Breakout Sessions Share Their Observations and Propose Solutions
4:00 Final Thoughts, Next Steps and Closing Remarks
Dr. John Carrier

### **SPEAKER BIOGRAPHIES**

Dr. John F. Carrier, Senior Lecturer, System Dynamics Group, Massachusetts Institute of Technology (MIT) Sloan School of Management-Cambridge, Massachusetts

<u>Biography:</u> Dr. John F. Carrier is a Senior Lecturer in the System Dynamics Group at the MIT Sloan School of Management. He has spent over 20 years diagnosing and eliminating hidden factories in



**Session Adjourns** 

4:30 p.m.

the oil & gas, petrochemical, discrete manufacturing, and research laboratory facilities, saving these organizations hundreds of millions of dollars while reducing operating risk. He also works with companies to successfully integrate the technology of the Industrial Internet of Things into their existing organization, with a distinct focus on developing front line leaders in the culture of improvement.

He currently runs a popular MIT Executive Education course on Implementing IIoT through Continuous Improvement Leadership (<a href="https://tinyurl.com/yafmbdqe">https://tinyurl.com/yafmbdqe</a>). Dr. Carrier also co-teaches an MBA course with Professor John DC Little (Little's Law). In addition, he is developing a 52-week hybrid/online course for first year front-line leaders.

Dr. Carrier holds a BS in Chemical Engineering from the University of Michigan, an ScD in Control Systems from MIT, and an MBA from the Harvard Business School.

Originally from Detroit, he now lives in Arlington, MA (birthplace of Uncle Sam and the spreadsheet) with his wife and two children.

His Excellency Ivan Korcok, Ambassador of Slovak Republic to the United States of America-Washington, D.C.

### **Biography:**

#### **Professional Career**

2015 - August 2018 State Secretary of the Ministry of Foreign and European Affairs of the Slovak Republic

2016 – 2017 Ministre délégué for the Slovak Presidency of the Council of the EU

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Plenipotentiary of the Government for the Slovak Presidency in the Council of the EU
Ambassador, Permanent Representative of the Slovak
Republic to the EU, Brussels
Ambassador Extraordinary and Plenipotentiary of the Slovak
Republic to the Federal Republic of Germany, Berlin

Head of the Delegation of the Slovak Republic on the Accession

2002 – 2003	Member of the European Convention, Brussels
2002 – 2005	State Secretary, Ministry of Foreign Affairs of the Slovak Republic
2001 – 2002	Director General, Division of International Organizations and Security
	Policy, Ministry of Foreign Affairs of the Slovak Republic
1999 – 2001	Deputy Head of Mission of the Slovak Republic to NATO, Brussels
1998 – 1999	Counsellor, Chargé d'affaires, Embassy of the Slovak Republic in Bern,
	Switzerland
1997 – 1998	Acting Head of the Department for Policy Planning and Analysis, Ministry
	of Foreign Affairs of the Slovak Republic
1996 – 1997	Spokesman of the Ministry of Foreign Affairs of the Slovak Republic
1993 – 1996	2nd Secretary, Political Affairs, Embassy of the Slovak Republic in Bonn,
	Germany
1992 – 1993	Ministry of Foreign Affairs of the Slovak Republic, Department of Bilateral
	Relations
Education Education	

1991 – 1995 Eco	nomic University, Bratislava, Slovakia
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1983 – 1987 Comenius University, Bratislava, Slovakia, Postgraduate Institute for

International Relations

Talks to NATO

Other Activities Founding Member of the GLOBSEC Tatra Summit Conference

Member of the Scientific Council of the University of Economics,

Bratislava

Language Skills English, German

Hobbies Sports, Culinary

Mr. Oto Pisoň, Deputy Head of Department and Innovation, Manager of Investment Projects Department, Slovak Investment and Trade Development Agency (SARIO)-Bratislava, Slovak Republic

<u>Biography:</u> Mr. Pisoň's roles include helping incoming investors with their cost-related due diligence process, supplier search, site selection and investment aid consultancy.

He also heads up SARIO's new Innovation Services, a sales platform for Slovak technology companies, which aims to optimize and improve facilities, internal processes and workflow related matters of SARIO's major international clients.

Previously, Pisoň worked for an international corporation in logistic optimization and lead a non-profit initiative. He has two master degrees, both in the field of

international relations and economics.

Mr. Ian Cronin, Project Lead, Future of Advanced Manufacturing and Production, World Economic Forum- Geneva, Switzerland

**Biography:** 



Mr. Abraham Tijerina-Priego, Coordinator, State of Nuevo Leon's Industry 4.0 Strategy-Monterrey, Nuevo Leon. Mexico

<u>Biography:</u> Mr. Abraham Tijerina-Priego coordinates the State of Nuevo Leon's Industry 4.0 Strategy, and industry led initiative supported by government and academia to foster the leadership of Nuevo Leon Fourth Industrial Revolution.



Previously, Mr. Tijerina was leading the Innovation Management process at Metalsa SA de CV, a leading global corporation for design, development and manufacturing of automotive structural components. He has been working at Metalsa since 1992 where he occupied different positions in engineering, technology and innovation---in addition to launching and managing of three of Metalsa's technical centers in Mexico and the USA.

Mr. Tijerina has served as Member of the Technical Board of Mexico's National Technology Award Foundation, the Nano-Technology Cluster, the Automotive Cluster and the Industrial Chamber in the estate of Nuevo Leon, the Mexico's Auto Part and OEM innovation committees, and Chairman of the international organization Intelligent Manufacturing System (IMS).

He received his M.Sc. degree in Mechanical Engineering from the Tecnologico de Monterrey (ITESM) and his Mechanical Engineering degree from the Universidad Autonoma de Nuevo Leon, Mexico

Ms. Clara Tu, Business Unit Manager Executive Education, Fraunhofer Academy-Munich, Germany <u>Biography:</u> Clara Tu heads the business unit Executive Education, one of four business units of the Fraunhofer Academy. The Fraunhofer Academy is part of the German based Fraunhofer Gesellschaft,



the leading organization for applied research in Europe. The Fraunhofer Academy provides continuing education and part-time trainings made by Fraunhofer researchers for executives and specialist in the industry.

Clara's business unit organizes over 40 different technical training programs with more than 4000 participants each year. Her team is responsible for creating new technology specific trainings like human robot collaboration, data science and additive manufacturing. Clara's

scope of responsibility includes strategic business development, marketing, portfolio and stakeholder management with universities and Fraunhofer research institutes.

In addition, she leads the internationalization of the Fraunhofer Academy with leading training projects in Asia and the US (recently: Industry 4.0 training for SMEs in Korea). From 2015-17 she was a research associate at Fraunhofer Academy for a project in lifelong learning in STEM fields sponsored by the Federal Ministry of Education and Research (BMBF) Germany. The project supported the development of national and international training programs in alliance between German universities and Fraunhofer research institutes.

From 2011 until 2015 she was working at the School of International Business and Entrepreneurship (SIBE) of the Steinbeis University Berlin in the team of International Programs. During that time, in October 2013, she became the program manager of all MBA programs. There she was responsible for the internationalization of the MBA programs in cooperation with the University of California San Diego and Tsinghua University in Beijing.

Clara holds a Master of Science degree in international management from the Steinbeis University in Berlin, Germany and a German accredited Diploma of Business Administration of the University of Applied Science in Regensburg, Germany. She was invited as a keynote speaker and panelist to several national and international conferences. Most recently she was the moderator of the second open discussion, a major event of the Fraunhofer Academy with more than 100 participants

Mr. Sanjeev Malhotra, CEO, Centre of Excellence for IoT & Artificial Intelligence, National Association of Software Service Companies (NASSCOM)-Noida, Uttar Pradesh, India <u>Biography:</u> As a head of the NASSCOM Center of Excellence IoT & AI spanning three locations in Bangalore, Gurgaon and Ahmedabad, Sanjeev is currently building the innovation ecosystem with



startups, business and industry, government and academic institutions focusing on emerging technologies like IoT, artificial intelligence, and robotics and their applications to manufacturing, auto and transport, and healthcare. India is becoming a hub of innovative digital solutions covering the entire gamut of industries and powering the digital strategies for global companies.

Sanjeev has spent many years leading product strategy, development and global operations in large and mid-size companies at Intel and Qualcomm and

has setup Indian centers for global companies for innovation and development. He started his career as a designer of Pentium processor in Intel at Santa Clara and has an MBA from Duke University. He believes that "we need to create the collaborative ecosystems of domains and technology to drive more innovation". When he is not experimenting with different technologies, Sanjeev is trying out new cuisines.

Mr. Clay Phillips, Executive Advisor, SRI International, Menlo Park, California **Biography:** Clay Phillips is an experienced executive in the fields of open innovation, intelligence, business development, strategy, and alliance management. For the past five years he has been an



innovation and growth strategy advisor for numerous startups, large companies and non-profits. He has worked with clients the automotive, mobility, energy, IT, health care, materials, financial services, and specialty chemicals industries.

He is currently the Mobility Technology Lead for the Michigan Small Business Development Center to support public and private sector stakeholders in the advanced mobility ecosystem and cultivate successful startups in the mobility

sector. He serves as Executive Advisor to Silicon Valley based SRI International for bring their advanced technologies and applied research to automotive OEMs and supplier. He is also a long-time mentor for the NSF Innovation Corps program, TechStars, and several Michigan-based accelerator programs.

Prior to 2014 Clay was an executive at General Motors R&D where he held leadership positions in corporate intelligence and strategy, alliance management, and innovation commercialization. He was a founding member and VP of GM's corporate venture capital arm, GM Ventures, and led commercialization due diligence for the R&D Center's open innovation and internal startup program.

Earlier in his career he managed international product and portfolio planning and new business development initiatives.

Clay holds a BA from Trinity College and an MBA from Columbia University. In between degrees he served as an intelligence officer with the U.S. Navy. For fun, he plays guitar in a band, composes, and enjoys sailing whenever possible.

Mr. Noel H. Nevshehir, Director of International Business Services and Industry 4.0 Strategic Partnerships Automation Alley-Troy, Michigan

<u>Biography:</u> As director of Automation Alley's International Business Services, Noel's responsibilities include assisting SMEs become globally competitive by expanding their markets overseas. He



identifies countries with a high demand for Michigan-made products, services and technologies and leads trade missions around the world where U.S. companies have an opportunity to meet with potential buyers, end users and joint-venture partners. Noel is also director of Industry 4.0 Strategic Partnerships and helps companies bridge the gap between the digital and physical world's and keep pace with the rapid transformation in manufacturing today.

Under Noel's leadership, Automation Alley received both the President's "E Star" Award from President Obama in 2013 and the President's "E" Award from President George W. Bush in 2008---the nation's highest, most prestigious international trade awards granted to organizations in recognition of their accomplishments in global trade and economic development. Companies participating on Automation Alley trade missions worldwide have generated \$1.32 billion in export sales while creating 6841 local jobs.

Noel's other responsibilities include marketing and promoting Michigan as a diverse high-tech powerhouse and global center of innovation to potential investors worldwide. This has led to 28 foreign companies setting up their operations in Michigan and generating \$210M in foreign direct investment and 1193 high value added, well-paying jobs in our region. As a result of these successes, Automation Alley "best practices" in the areas of international trade and foreign direct investment were ranked among the nation's top ten in a study commissioned by the Economic Development Administration of the U.S. Department of Commerce.

A citizen' of the UK and US, Noel graduated with distinction from the University of Michigan with bachelor degrees in Economics and Russian Studies. He also received a master's degree with honors from the London School of Economics in International Relations; and a doctorate in Chinese-Russian Studies from the University of Michigan. Nevshehir's cross-cultural experiences include having worked, studied, lived, and/or traveled to 82 countries. Language skills include Russian and conversational Spanish.

Married to Kim, they have a twenty-six-year-old daughter Victoria.