

# The 9th International Symposium on Operations Management and Strategy 2019

## JOMSA 第 11 回全国研究発表大会

【Conference Theme】  
“Value Chain Strategy and IoT”

September 4 – 6, 2019, Tokyo Keizai University, Japan

【統一論題】  
価値連鎖戦略とIoT  
2019年9月4日-6日 東京経済大学

Dates: September 4 - 6, 2019  
Venue: Tokyo Keizai University, Kokubunji Campus  
1-7-34 Minamichou, Kokubunji City, Tokyo 185-8502 Japan

Registration: September 4: 17:45-18:30, University Restaurant 1<sup>st</sup> Floor  
September 5: 9:00-16:00, Forward Hall, Lobby 1<sup>st</sup> Floor  
September 6: 9:00-12:00 Building No.5, Lobby 1<sup>st</sup> Floor

Access to the campus: <https://jomsa.org/このサイトについて/isoms2019-3/venue/>

開催日: 2019年9月4-6日  
会場: 東京経済大学 国分寺キャンパス  
〒185-8502 東京都国分寺市南町1丁目7-34

受付: 9月4日: 17:45~18:30 大学生協食堂  
9月5日: 9:00~16:00 進一層館1階ロビー  
9月6日: 9:00~12:00 5号館1階ロビー

アクセス案内: <https://www.tku.ac.jp/access/kokubunji/>

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**Japanese Operations Management and Strategy Association**  
**オペレーションズ・マネジメント&ストラテジー学会**  
**Tokyo Keizai University**  
**東京経済大学**  
**Greetings**

**Welcome to the 9th International Symposium  
on Operations Management and Strategy (ISOMS) 2019**

Osam Sato (Conference Organizer)  
Tokyo Keizai University, Tokyo, Japan

Japanese Operations Management and Strategy Association (JOMSA) as the hosting organization is privileged to hold the 9th International Symposium on Operations Management and Strategy (ISOMS 2019) in Tokyo, Japan. The 11th JOMSA Annual Conference will be held jointly with ISOMS 2019.

The theme of this symposium is “Value Chain Strategy and IoT”. In the circumstance of supply chain management becoming complicated and decentralized increasingly, with rapid development of IoT-related technologies such as big data, cloud computing and block chain, the agility and visibility (traceability) of the supply chain have advanced by leaps and bounds. It makes many supply chain participants find breakthroughs in innovation and solutions of their operational bottlenecks. We need to leverage the opportunity to create value chain, and value chain strategy is important to realize the goal. More architectural frameworks centered on distributed and artificial intelligence are constantly infiltrating into Operations Management, which also provides novel key components and direction for the realization of more diversifiable and resilient supply chains. However, with many manufacturing firms gradually changing their management models and operational disciplines to service-oriented mode, the operating mechanism of the value chain and its design philosophy have been critically challenged in the fierce market competition.

In this conference, we are looking forward to having cutting-edge thoughts and achievements shared academically and practically. Through the collective brainstorming and the collision of ideas, we can strive for further improvement to innovate and develop new value chain and operations management.

## ご挨拶

### JOMSA 第 11 回全国研究発表大会および総会の開催にあたって

大会実行委員長  
東京経済大学 経営学部 教授 佐藤 修

オペレーションズ・マネジメント&ストラテジー学会(JOMSA)の第 11 回全国研究発表大会を東京経済大学国分寺キャンパスで開催することとなりました。まずこの場をお借りして、本学会を会場校にお選びいただきましたことに感謝申し上げます。

本大会は、IoT 等の最新の情報技術が産業界の付加価値戦略にどのように貢献しうるかを、ご参加の皆様と一緒に考える機会として開会しました。今日の世界は高度情報社会となり、世界中の知識・情報を簡単にコミュニケーションできる社会になりました。しかし同時にこのことが、世界中の産業競争環境をより厳しくしています。急速な技術革新による製品寿命の短命化、世界中の生産者による競争の激化、サプライチェーンの世界化と複雑化、高度な消費者コミュニケーションに基づく需要の急速な変化と振れ幅の拡大等、今日の便利で豊かな社会を支える産業界の競争環境はますます厳しくなってきました。

しかし他方、人工知能・IoT・ロボットなどの新しい情報技術が、生産技術の革新をもたらしつつあります。更にビッグデータ、クラウドやブロックチェーンなど IoT 関連技術の進歩に伴って、サプライチェーンの俊敏性と可視性(トレーサビリティ)改善の可能性は高まって来ております。オペレーションズ・マネジメントの分野において分散型や人工知能技術を中心とするシステム構築が注目され、サービス指向型の製造業への転換の動きも出ており、企業変革の契機に直面しています。我々はこの機会と可能性を活用して、新たな価値連鎖戦略を検討する必要があります。産業界はこれらの新しい可能性を的確に捉えて活用しなければ、これからの競争環境で生存することはできません。

今回、学術研究センターとオペレーションズマネジメントアンドストラテジー学会の共催により開催する国際シンポジウムを大会二日目に挟んで、海外からも第一線の研究者を招聘して、オペレーションズ・マネジメントをはじめとする様々な領域の実務家・研究者等の専門家にも御参集頂き、上記の課題について議論し、現在最新の構想と最先端の研究成果・応用の知見を共有できることを期待しております。

# ISOMS/JOMSA Program ①

## ISOMS/JOMSA 2019 Time Table: Wednesday, September 4, 2019

Time	Event
	<b>Factory Tour</b>
13:30~15:20	<p style="text-align: center;"><b>1. Suntory Musashino Brewery</b>  <a href="https://www.suntory.co.jp/factory/musashino/">https://www.suntory.co.jp/factory/musashino/</a>  <b>Address: 3-1 Yazaki-cho, Fuchyu-shi, Tokyo, Japan</b>  <b>Features of the company: Suntory is one of three big beer brewers and whiskey distillers in Japan. Suntory has some factories in Japan and Musashino brewery is main supplier of beer and related products in eastern region in Japan.</b>  <a href="https://youtu.be/3K7TxSSJjE?t=35">https://youtu.be/3K7TxSSJjE?t=35</a>  <b>Limitation of possible participants: :27 (FIFO base) (English interpreter available)</b>  <b>The meeting place: Participants are requested to arrive at JR Nambu Line or Keio Line, Bubaigawara Station by 13:00 (must). Bus service is provided by the factory from the station to the factory and from the factory to the station. The time of train ride from Shinjuku Station to Bubaigawara Station is about 30 minutes by Keio express train. Or the time of train from Yokohama Station to Bubaigawara Station via Kawasaki Station is about 1 hour by JR Line.</b>  <b>Return bus leaves at 15:20 from the factory.</b>  <b>Application email address: osamsato@tku.ac.jp</b></p>
15:37-15:58	<p><b>JR train from Bubaigawara st. through Tachikawa (arrive at 15:47 change to platform 3, orange line, eastbound to Tokyo, leave at 15:50) to Kokubunji st.. Buy JR ticket your own.</b></p>
16:00~16:45	<p style="text-align: center;"><b>2. Tonogayato Japanese Park</b>  <a href="https://www.tokyo-park.or.jp/park/format/about036.html#googtrans(en)">https://www.tokyo-park.or.jp/park/format/about036.html#googtrans(en)</a>  <b>Address : 2 Minami-chou, Kokubunji-shi, Tokyo, Japan</b>  <b>Features of the Park: Here is developed as a villa of 1913 to four years in Eguchi TeiJo (after the full-iron Vice President of), in 1929 it became the villa of the Iwasaki family of the Mitsubishi conglomerate. Showa residents exercise becomes beginning to protect this garden to the development plans of the 1940s, the city has acquired in 1974, after the development was opening of the park as a paid garden.</b>  <b>Application email address: osamsato@tku.ac.jp</b></p>
17:00~18:30	<p>Reception (Buffet style) @University Cafeteria</p>

## ISOMS/JOMSA Program ②

### ISOMS/JOMSA 2019 Time Table: Thursday, September 5, 2019

Time	Event
9:30~9:40	<b>【開会式】</b> <b>Opening Ceremony</b> 進一層館ホール Forward Hall
9:40~10:30	<b>【基調講演 1】</b> <b>ISOMS/JOMSA Plenary Lecture 1</b> “Digital First Strategy: Value Creation and Capture in Digital Economy” Youngjin Yoo, Ph.D., Case Western Reserve University
10:30~10:40	<b>休憩 break</b>
10:40~11:30	<b>【基調講演 2】</b> <b>ISOMS/JOMSA Plenary Lecture 2</b> “Foreign Ownership and Domestic Supply Base of Manufacturing Plants: Implications for Performance under Different Environmental Conditions” Prakash J. Singh Ph.D., University of Melbourne
11:30~13:00	<b>休憩 break</b>
13:00~13:50	<b>【基調講演 3】</b> <b>ISOMS/JOMSA Plenary Lecture 3</b> “Strategic Management Orientation and Operations Management” Hideaki Kitanaka, Takushoku University
13:50~14:00	<b>休憩 break</b>
14:00~14:50	<b>【特別講演】</b> <b>ISOMS/JOMSA Special Lecture</b> “Status and prospects of smart manufacturing driven by industrial revolution based on IoT/AI technology” Koji Yasui, Mitsubishi Electric Corp.
14:50~15:00	<b>休憩 break</b>
15:00~17:00	<b>【特別セッション】</b> <b>ISOMS/JOMSA Special Session</b> “IoT and Manufacturing” Kakuro Amasaka, Aoyama Gakuin University Masanori Fugioka, Mitsubishi Hitachi Power Systems, Ltd. Tsutomu Shimizume, Fuji Xerox Corp.
17:15~19:00	Banquet (Buffet style) @Forward Hall

## ISOMS/JOMSA Program ③

### ISOMS/JOMSA 2019 Time Table: Friday, September 6, 2019

Time	Event		
	ISOMS (E201)	ISOMS (E202)	JOMSA (E203)
9:00~10:40	<b>ISOMS/ Session 1 Invited Session “Value Creation Process renovation and information technologies”</b>  Chair: Michiya Morita (Gakushuin University)	<b>ISOMS / Session 2 “OM Research Issues in India”</b>  Chair: Munehiko Itoh (Kobe University)	<b>JOMSA/ Session 1 “Value Chain Strategy I”</b>  Chair: Junichi TOMITA (Toyo University )
10:40~10:50	<b>Break</b>		
10:50~12:30	<b>ISOMS/ Session 3 “Decision Models in OM”</b>  Chair: Kakuro Amasaka (Aoyama Gakuin University)	<b>ISOMS/ Session 4 “Supply Chain Management”</b>  Chair: Shota Ohmura (Momoyama Gakuin University)	<b>JOMSA/ Session 2 “Value Chain Strategy II”</b>  Chair: Park Young Won (Saitama University)
12:30~13:30	<b>Lunch Time Break</b>		
Room	ISOMS (E201)	ISOMS (E202)	JOMSA (E203)
13:30~15:10	<b>ISOMS/ Session 5 “New Research Issues in OM”</b>  Chair: Hirofumi Matsuo (Kobe University)	<b>ISOMS/ Session 6 “Supply Chain Strategy”</b>  Chair: Masaharu Ota (Osaka Gakuin University)	<b>JOMSA/ Session 3 “Competitiveness”</b>  Chair: Ryo Sato (Yokohama National University)
15:20~16:50	Steering Committee Meeting (E104)		

# ISOMS/JOMSA Program ④

## Sessions for Friday, September 6

Time	Event		
	ISOMS (E201)	ISOMS (E202)	JOMSA (E203)
9:00~10:40	<b>ISOMS/ Session 1</b> <b>Invited session: “Value creation process renovation and information technologies”</b>  Chair: Michiya Morita (Gakushuin University)	<b>ISOMS / Session 2</b> <b>“OM Research Issues in India”</b>  Chair: Munehiko Itoh (Kobe University)	<b>JOMSA/ Session 1</b> <b>“バリューチェーン戦略I”</b>  座長: 富田純一 (東洋大学)
	<b>“Contributions of Supply Chains Concepts and Frameworks to Innovation Ecosystems”</b>  Laoucine Kerbache (Hamad Bin Khalifa University (HBKU) and HEC Paris)	<b>“Analysis of key factors for performance in humanitarian operations in Indian context”</b>  Kanchan Joshi (National Institute of Industrial Engineering), Binay Patawari (Siemens Ltd), Ashish Gupta (National Institute of Industrial Engineering), Neha Srivastava, (National Institute of Industrial Engineering)	<b>“プロセス産業の生産現場における工程管理”</b>  辺成祐 (近畿大学), 富田純一 (東洋大学)
	<b>“Sustenance of Collaborative Relationships”</b>  Masayasu Nagashima (Ritsumeikan University)	<b>“Factors affecting adoption of industry-4.0 on Indian manufacturing industries”</b>  Shreyanshu Parhi (National Institute of Industrial Engineering), Kanchan Joshi (National Institute of Industrial Engineering), Milind Akarte (National Institute of Industrial Engineering)	<b>“外来における服薬支援サービスのオペレーションに関する実証研究”</b>  櫻井秀彦 (北海道科学大学), 岸本桂子 (昭和大学), 森藤ちひろ (流通科学大学)
	<b>“Towards Adaptive Cyber Physical Systems”</b>  Michiya Morita (Gakushuin University, Emeritus), Jose A. D. Machuca (University of Seville), Yukari Shirota (Gakushuin University)	<b>“Social entrepreneur driven supply chain to increase responsiveness and value creation: A case from India”</b>  Kanchan Joshi (National Institute of Industrial Engineering), Niranjana U V (National Institute of Industrial Engineering), Kriti Chaudhary (National Institute of Industrial Engineering)	<b>“製品戦略と特許戦略の統合マネジメント”</b>  宮澤 亘 (新電元工業株式会社)
			<b>“再生可能エネルギー産業における国際競争力、アーキテクチャ、産業政策の相互作用モデルの検討: 太陽光発電産業と風力発電産業の比較分析”</b>  富田純一 (東洋大学)

Room	ISOMS (E201)	ISOMS (E202)	JOMSA (E203)
10:50~12:30	<b>ISOMS/ Session 3 "Decision Models in OM"</b>  Chair: Kakuro Amasaka (Aoyama Gakuin University)	<b>ISOMS/ Session 4 "Supply Chain Management"</b>  Chair: Shota Ohmura (Momoyama Gakuin University)	<b>JOMSA/ Session 2 "バリューチェーン戦略 II"</b>  座長: 朴英元 (埼玉大学)
	<b>"Application of Decision Model under Different Scenarios Considering Uncertainties for New Product Development (NPD)"</b>  Thanyatorn Fongsatitkul (Tokyo Metropolitan University), Yasutaka Kainuma (Tokyo Metropolitan University)	<b>"Impact of Absorptive Capacity on Achieving Congruence between Environmental Uncertainty and Organizational Mechanisms: A Contingency View on Japanese Manufacturing and Service Industry"</b>  Ylias Razafindrazaka (Yokohama National University), Yoshiki Matsui (Open University of Japan and Yokohama National University)	<b>"自然災害による経済的被害伝搬の可視化"</b>  山口 健二(お茶の水女子大学), 白田 由香利(学習院大学経済学部)"
	<b>"Optimization of Production and Transportation scheduling using an MILP"</b>  Tracey Tshivhase (Tokyo Metropolitan University), Yasutaka Kainuma (Tokyo Metropolitan University)	<b>"Uncertainties of supply chain management 4.0"</b>  Phan Dinh Manh (Yokohama National University), Yoshiki Matsui (Open University of Japan and Yokohama National University)	<b>"サービタイゼーションの競争優位についてのシミュレーション評価"</b>  砂口洋毅 (国立研究開発法人新エネルギー・産業技術総合開発機構 技術戦略研究センター)
	<b>"Developing Automobile Optimal Product Design Model"</b>  Kakuro Amasaka (Aoyama Gakuin University)	<b>"Supply Chain Contract between Department Stores and Apparels in Japan: Wholesale, Buyback, and Revenue Sharing Contract"</b>  Shota Ohmura (Momoyama Gakuin University)	<b>"ビジネスプロセスの統合とIoT 活用の事例"</b>  中澤菊男 (富士フィルムホールディングス) 吉井実 (オムロン) 藤井佳代子 (GE ヘルスケア・ジャパン) 梶江亮介 (埼玉大学)
			<b>"バリューチェーンにおけるIT システム活用の実証分析: ものづくり企業4社の事例"</b>  福澤光啓(成蹊大学), 梶江亮介(埼玉大学), 朴英元(埼玉大学), 石瑾(埼玉大学)
Room	ISOMS (E201)	ISOMS (E202)	JOMSA (E203)



13:30~15:10	<p><b>ISOMS/ Session 5 “New Research Issues in OM”</b></p> <p>Chair: Hirofumi Matsuo (Kobe University)</p>	<p><b>ISOMS/ Session 6 “Supply Chain Strategy”</b></p> <p>Chair: Masaharu Ota (Osaka Gakuin University)</p>	<p><b>JOMSA/ Session 3 “オペレーション戦略”</b></p> <p>座長: 佐藤亮 (横浜国立大学)</p>
	<p><b>“Trends and themes of corporate mission statement: a content analysis”</b></p> <p>Gang-Hoon Seo (Kobe University), Munehiko Itoh (Kobe University)</p>	<p><b>“Possibilities of Statistical Learning Approaches Applications in identifying adaptive patterns of Japanese manufacturing companies over time”</b></p> <p>Michiya Morita (Gakushuin University), Yukari Shirota (Gakushuin University), Kenji Yamaguchi (Ochanomizu University)</p>	<p><b>“A Systematic Study on a Diagnostics of Quality-Creating Management Focused on Good Understanding Sharing Process at a Manufacturer”</b></p> <p>Atsuko Ebine (Surugadai University)</p>
	<p><b>“Increased company performance through macroeconomics sales forecasting - A case study”</b></p> <p>Pirmin Schwarenthorer (Austrian Center for Digital Production), Alfred Taudes, (Vienna University of Economics and Business), Johannes Hunschofsky (Vienna University of Technology), Christoph Magnet (FH Joanneum University of Applied Sciences), Martin Tschandl (FH Joanneum University of Applied Sciences)</p>	<p><b>“Identifying Omnichannel Strategies from a Business Process Modeling Perspective”</b></p> <p>Ayako Kawai (Gakushuin University), Jinwei Jiang (Gakushuin University)</p>	<p><b>“Will startups have more chances in the new IoT value chain? Business strategy for startups”</b></p> <p>Simon Liu (Sophia University)</p>
	<p><b>“The Mark of Industry 4.0 Era: How Managers Respond to Key Revolutionary Changes”</b></p> <p>Erlinda Nusron Yunus (Sekolah Tinggi Manajemen PPM)</p>	<p><b>“Building consensus formation Mechanism for Improving Supply Chain Resilience”</b></p> <p>Yu Cui (Otemon Gakuin University), Masaharu Ota (Osaka Gakuin University), Hiroki Idota (Kindai University)</p>	<p><b>“AI/IoT 活用による産業構造改革と企業に求められるDX”</b></p> <p>澤田 博光 (東京経済大学/NRIワークプレイスサービス)</p>

	<p><b>"Research Issues on Servisizing of Gas Turbine Manufacturing"</b></p> <p>Hirofumi Matsuo (Kobe University)</p>		<p><b>"環境の複雑性に対するビッグデータベースの経営戦略"</b></p> <p>佐藤亮 (横浜国立大学)</p>
15:20-16:50	理事会 (E104)		