

Application: 4539

The Industry 4.0 Transformation and Emerging Technology Development Team in IMS (IBM Manufacturing Solutions Pte Ltd)

Page: General Information

Provide information about the company to be considered for the award. If you will be nominating an individual, specify the nominee's employer.

Name of Organization/Company

IBM Manufacturing Solutions Pte Ltd

Additional Contacts

I do not wish to list additional contacts

Page: Entry Information

Entry Title

The Industry 4.0 Transformation and Emerging Technology Development Team in IMS (IBM Manufacturing Solutions Pte Ltd)

Category

E08. Technology Team of the Year - Artificial Intelligence

Technology Team Submission Format

Written Answers

a. Briefly describe the nominated technology team: its history and past performance (up to 200 words). Required

The Industry 4.0 Transformation and Emerging Technology Development Team in IMS (IBM Manufacturing Solutions Pte Ltd) spearheads Industry 4.0 transformation solutions globally and has consistently demonstrated a strong commitment to innovation, creativity, and excellence in the field of technology.

From 2022 till 2024, this team won multiple industry awards because of their innovation and technological achievements. Each of these achievements are unique as they straddle across multiple domains – business operational executions; transformational technologies in artificial intelligence, analytics, cloud; automation, AR/VR, and excellence in technical leadership.

Their track record of successful innovations, coupled with their passion for pushing boundaries and embracing new challenges, makes them highly recognized by the Singapore Government. Several grants were specially awarded to this team to help accelerate industry transformation and contribute to the country's Smart Nation vision to transform the Singapore ecosystem for the future of 5G.

This team has successfully implemented various innovative projects that have not only improved IBM's internal Supply Chain processes but also had significant impact on clients and stakeholders. The Team's ability to think outside the box allowed them to come up with creative solutions. Their adaptability to changing technologies sets them apart as a truly innovative and forward-thinking team.

b. Outline the technology team's achievements since the beginning of 2022 that you wish to bring to the judges' attention (up to 250 words). Required

Internal transformations

This Team leads the "Human-Centric Industry 4.0 Transformation" across IBM Supply Chain Manufacturing Operations globally. Utilizing an Industry 4.0 framework, they implemented cobot automation, mobile robots, AI visual inspection, and process digitization across three manufacturing sites, resulting in annual savings and cost avoidance of approximately US\$3 million.

To stay current with industry trends, this Team initiated the "Emerging Technology Initiative" to research and incubate cutting-edge technologies aligning with Industry 4.0 and IBM strategies. This initiative continuously evaluates new technologies, creating a catalogue of proven innovations for future adoption, including AR smart glasses, digital twin, 5G, mixed reality, and edge computing.

These projects promote continuous transformation through upskilling and staying updated with technological advancements.

External engagements

This Team leveraged their internal deployment expertise to assist external clients. Notable projects include improving quality at Ford with AI automation using Maximo Visual Inspection, and automating equipment inspection and remote assistance at the Singapore Civil Defence Force using smart glasses, AI, and AR technologies. Additionally, the Industry 4.0 Transformation Framework that was developed by this technology Team has been incorporated into course materials, enriching the curriculum for postgraduates and professionals with practical examples.

This Team does not stop at being exceptional at work, they actively contribute to the community through sharing and collaborating with institutions and industry organizations demonstrating their willingness to give back. They are frequently sought after to share their expertise on media platforms, as keynote speakers or panellists at technical conferences, business and technical leadership events.

c. Explain why the achievements you have highlighted are unique or significant. If possible compare the achievements to the performance of other players in your industry and/or to the team's past performance (up to 250 words). Required

This Technology team is the team of the year as they have successfully navigated the evolving technological landscape, integrated new technologies for IBM Supply Chain and IBM Clients as well as instilled a culture of lifelong learning and growth.

The team spearheaded the industry 4.0 transformation framework with a clear vision, supported by three robust pillars and nine key elements. It prioritized digital driven methodologies that place customers at the forefront. This team also established an emerging technology framework to ensure continuous focus to staying ahead and be proactive. They took the strategic approach of 3 phases: explore and research, incubation and deployment.

With these 2 frameworks, this team delivered extensive transformations to IBM's supply chain operations and elevated unprecedented levels of efficiency and effectiveness. Ten key innovations were implemented, namely immersive technology, generative AI, digital avatar, digital twin, and these resulted in a significant savings of US\$3million for the global manufacturing operations.

This technology team's achievements stands out because their contributions not only optimised IBM's supply chain operations, they have also set exceptional standards in the industry for both enterprise and individual . Some highlights are: Award for Excellence in Innovation for Tech Industries, Singapore Business Review Technology Excellence Awards in Augmented and Virtual Reality as well as Top 100 SG Women in Tech, Women in ICT Awards for Innovation and Technical, Digital Transformation leader.

With growth mindsets, learning agility and outstanding collaboration, this team embrace new opportunities and definitely a role model team in this dynamic environment.

d. Reference any attachments of supporting materials throughout this nomination and how they provide evidence of the claims you have made in this nomination (up to 250 words). Optional

The IBM Industry 4.0 Studio in Singapore was setup by this technology Team in 2021, it provides the latest platform to showcase new and exciting IBM technologies to clients and prospects. Visitors can have a close-up look and hands-on experience of IBM's innovative solutions and capabilities for digitalized manufacturing. The "i4" moniker depicts our focus to help our clients embrace and transform to Industry 4.0 through our unique fusion of inspiration, innovation, information and intelligence which has garnered significant achievements and publicities since its inception.

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