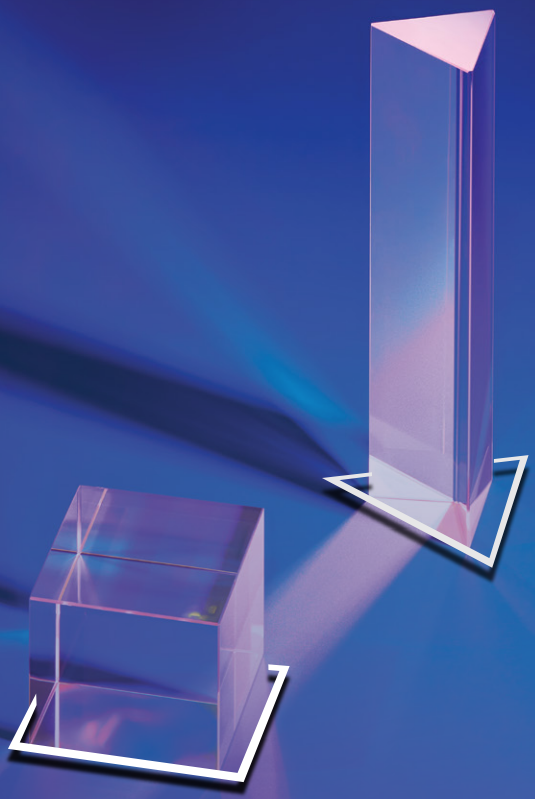
DIGITAL ENGINEERING AWARDS

Digital Engineering Awards 2023

Finalists Booklet



In association with

ISG | L&T Technology Services | CNBC TV18

The Digital Engineering Awards 2023

The Digital Engineering Awards, in association with ISG, L&T Technology Services, and CNBC TV 18, is a first-of-its-kind venture. We are honoring the achievements of business and technology leaders who have championed the cause of sustainable change within the industry - for a better planet and a better tomorrow.

The Awards

The Awards are categorized into team and individual awards a.k.a. 'Engineering The Change' and 'Engineer At Heart' respectively - further divided into nine categories.

Innovation and collaboration have been an integral part of our core values since the very beginning. The Digital Engineering Awards is a pioneer attempt to celebrate those whose oeuvre reflects these values above anything else.

To sum it up, we have

Engineering The Change - Team Awards

Engineer At Heart - Individual Awards

One Amazing Experience

in-store for you.

Engineering The Change (Teams Awards)

Digital Transformation of the Year

CN

CN One - Supply Chain Integration and Orchestration

CN is a global supply chain enabler, transporting approximately $250 billion worth of goods annually. The CN One digital transformation initiative consists of 4 phases: Plan, Ship Track, and Pay. CN One is scheduled to replace 20+ legacy e-business platform tools to help realize a new digital customer experience paradigm. Our unified platform provides seamless and near real-time information – solving numerous long-standing customer pain points and realizing several business opportunities.

The CN One platform adopts a Cloud First, API First, and AI First Approach, which is recognized in the **Digital Transformation of the Year** category.

ExxonMobil

Reality First Project - Optimizing Energy Sector Operations by creating a visual working environment

The Reality First program at ExxonMobil, addressing the need for an open interoperable asset digital twin, focuses on eliminating the dependency on the tools to get the most out of the available data. It leverages reality capture to deliver a higher fidelity of contextualization, enabling an asset owner to integrate everything they see in the picture in a sustainable manner.

For helping drive new efficiencies and learnings and unlocking untapped value streams, the Reality First Project is recognized in the category of **Digital Transformation of the Year**.

Honeywell

End-To-End Emissions Management: Helping to Zero In On Net Zero

Honeywell's End-to-End Emissions Management solution is a cost-effective, automated, end-to-end, enterprise level, technology agnostic solution that rapidly detects, measures and locates methane leaks. With plant-wide and enterprise-wide visualization and reporting, it empowers operations to control and reduce greenhouse gas scope 1 emissions. Leveraging its wireless methane detectors for continuous emissions monitoring with intuitive software, the solution enables operators to identify, prioritize, and address the costs of fugitive emissions.

For fostering rapid reconciliation or comparisons between measurement methods for verification, enabling auditability and helping instill confidence for stakeholders in emission profiles, it is recognized in the category of **Digital Transformation of the Year**.

Johnson & Johnson MedTech

J&J MedTech: Digital Surgery Platform (DSP)

Philips

Embracing Predictive Design

The Predictive Design initiative covers the design transformation of development lifecycles – from user need identification to end-of-service support. It enables the digitization of system architecture, design requirements and establishing traceability for effective digital communications across the organization. The initiative helps to drive the virtual release of proven concepts for prototyping, verification using HIL, and leveraging cloud services to monitor field product logs.

Philips' initiative also creates dynamic traceability at any point of the product life cycle for V model applicability and reduces design cycle iteration with improved product quality and patient safety. It also enables R&D efficiency and Root Cause Analysis during the design phase, enhances Predictive Remote Analysis and Resolution, proactively monitors product reliability, and minimizes the Life Cycle Management time and costs.

For its deep impact across the digital transformation landscape, the Predictive Design Initiative is recognized in the category of **Digital Transformation of the Year.**

Vestas Wind Systems

Unlocking a New Era of Excellence with Vestas "BladeRunner": Elevating Wind Turbine Blade Innovation

Vestas' "BladeRunner" initiative addresses the scenario by developing a digital twin of the turbine blade for verifying product and process failure modes digitally. The unified digital twin and digital thread helps achieve an impressive +92% alignment accuracy, reducing the number of prototypes from six at present to just one. Its digitally connected architecture ensures precision, efficiency, and unmatched quality at every stage.

For enabling renewed confidence in the renewables sector, and driving exceptional quality and innovation, Vestas' "BladeRunner" is recognized in the category of **Digital Transformation of the Year.**

Digital Engineering Project/ Program of the Year

Caterpillar Inc.

Digital Twin Powered by Physics-Based Reduced Order Models

The Caterpillar team has developed a cost-effective digital twin model to monitor Motor Grader brakes, overcoming the challenge posed by limited sensors. It uses physics-based reduced order modeling techniques that adapt to operation of the physical brake. The model's computational efficiency allows it to scan tens of thousands of machines daily without dedicated sensors, providing real-time brake health monitoring.

Currently deployed on over 4,000 machines, the digital twin model has proven effective in detecting brake service needs, reducing ownership and operating costs for customers while generating revenue for the company and dealers. Capable of focusing on both new and aging machines and reducing prediction errors in operation, it is recognized in the category of **Digital Engineering Project/ Program of the Year.**

Chevron

Innovation: The Digital Twin Scaling to Several Assets at Chevron

Chevron's Digital Twin Program is revolutionizing asset management through the use of digital twin technologies. The program, started as an MVP at a century-old refinery, has scaled to seven assets in its first year, improving data quality, performance, safety measures, and maintenance predictability. It has had a profound impact on operations, promoting cost savings, operational efficiency, safety, sustainability, and data-driven decision-making while reducing labor requirements and disruptions.

The Chevron team plans to scale the program to over 15 strategic assets within three years using an agile methodology for rapid adaptation. The cross-disciplinary initiative, for setting benchmarks in digital engineering, and driving continuous improvement and innovation, is recognized in the category of **Digital Engineering Project/Program of the Year.**

Doosan Group

Smart Electric Arc Furnace Controlled by AI

Doosan Group successfully drives sustainable growth through 'AI Transformation for Sustainability.' The AI-based model developed by Doosan Group has delivered notable achievements in predicting steel production capacity in Doosan Enerbility, resulting in a remarkable improvement in steel production efficiency compared to conventional methods. This has led to various benefits, such as reduced rework, process optimization, cost savings, and greenhouse gas reduction through energy savings. Doosan Group has also ensured the long-term performance of the AI models by implementing a corporate-wide standardized MLOps system.

Epiroc

Autonomous Mining Domination!

Epiroc's state-of-the-art mining offering, with its 6th Sense technology, is transforming the mining industry by enabling scalable levels of automation from operator assistance to full autonomy. The Epiroc control system (RCS) enables advanced software functionalities like AutoLevel and Hole Navigation System for machine leveling and accurate hole placement. Additional functionalities and capabilities enable process automation systems for remote control room operations and full autonomous drilling cycles.

Increased automation also helps enhance safety with obstacle and proximity detection and offers rich data, reporting, and situational awareness solutions. The project has had a significant impact across increasing productivity, safety, and overall efficiency in mining operations. A Western Australia-based user has relocated autonomous drill control from physical mines to their offices in Perth, improving access to quality for employees and enhancing their quality of life. The autonomous mining system is recognized in the category of **Digital Engineering Project/Program of the Year.**

GE HealthCare

Digital Transformation - Portrait Mobile

GE HealthCare's Portrait Mobile is a wearable, continuous patient monitoring solution designed for post-operative wards. It tracks vital signs in real-time, reducing unmonitored periods and potential health complications. The device, built on the Edison HealthLink platform, supports scalability and integrates seamlessly with existing EMR systems and network infrastructures.

The solution's unique Byndr™ transmission protocol ensures reliable data transmission from the wearable sensors, and features robust cybersecurity practices and a centralized configuration feature, saving nurses' time in adjusting parameters facility-wide. For helping minimize alarm fatigue, promoting proactive care, shortening hospital stays, lowering ICU transfer and code blue rates, and the potential for saving over 4 million lives annually, the Portrait Mobile initiative from GE HealthCare is recognized in the category of **Digital Engineering Project/ Program of the Year.**

Microsoft

Connected Airport - Conveyance Awareness Solution

The Connected Airport - Conveyance Awareness Solution from Microsoft is an IoT-based system that addresses operational challenges at busy airports. It retrofits existing assets like elevators and walkways with sensor technology, enabling real-time monitoring and automated alerts for performance issues. The solution provides a consolidated dashboard view for executives, enhancing airport operations, customer experience and safety.

The Conveyance Awareness solution, developed on Microsoft's Azure platform, digitizes airport operations, streamlines processes, and is a scalable and reusable offering that underscores the potential of integrating smart technology into existing infrastructure, aligning with the trend towards digitalization in facility management. For helping make global airports more efficient, sustainable, and cost-effective, the Connected Airport solution is recognized in the category of **Digital Engineering Project/Program of the Year.**

CYFIRMA

External Threat Landscape Management (ETLM) Platform - category-defining cybersecurity product

DeCYFIR, the External Threat Landscape Management (ETLM) platform by CYFIRMA, is a unique cybersecurity platform providing comprehensive threat intelligence. It offers seven threat views on one platform – Attack Surface Discovery, Vulnerability Intelligence, Brand Intelligence, Digital Risk Discovery, Situational Awareness, Cyber-Intelligence, and Third-party Risk. The platform provides early warnings of cyberattacks and enables swift action to prevent breaches that can have deep consequences for the business.

The solution has proven instrumental in countering significant cyber threats, such as those by the Lazarus Group. DeCYFIR's proactive approach to cybersecurity helps mitigate financial losses, reputational damage, and even risks to human life associated with cyberattacks. By enhancing visibility and understanding of the external threat landscape, DeCYFIR aids organizations in moving from reactive to proactive defense strategies, and is recognized in the category of **Engineering Product of the Year.**

Delta Flight Products

New Wheelchair Accessible Seat for Passengers with Reduced Mobility

Delta Flight Products' wheelchair-accessible airplane seat for passengers with reduced mobility (PRM) is an innovative product that allows customers using powered wheelchairs to stay in their own chairs throughout their journey. The seat enhances the flying experience for PRMs by providing safe and comfortable travel, facilitating smoother boarding and disembarking. Its other unique features include adjustable headrests, center console tray tables, and a cocktail table.

For ensuring equal access to comfort, safety, and dignity for all passengers, Delta Flight Products' efforts are recognized in the category of **Engineering Product of the Year.**

Henkel AG & Co. KGaA

Revolutionizing Industrial Maintenance Through LOCTITE Pulse IIoT Solutions Leveraging Chemical Expertise

Henkel's LOCTITE Pulse, an Industrial Internet of Things (IIoT) solution, is transforming industrial maintenance paradigms by redefining 24/7 monitoring of critical assets. Using patented technology, it enables early leak detection, failure prediction and proactive maintenance from a single platform. This supports reduction of downtime, optimizes costs and minimizes environmental impact. The system's ease of installation and quicker ROI make it a preferred choice for industries, underscored by the Company's commitment to democratizing IoT access by collaborating with IoT startups to expand LOCTITE Pulse's capabilities.

Having successfully implemented the system in its own Henkel plants as well as SMEs and major Oil & Gas and Chemical Groups, Henkel aims to scale access to smart maintenance globally for both static & rotating assets, contributing to the digitalization of industrial processes. Recognized for redefining paradigms in the Maintenance, Repair, and Operations (MRO) domain for more than 70 years, the LOCTITE Pulse from Henkel is recognized in the category **Engineering Product of the Year.**

Marelli

Fully Active Electro-mechanic Suspension System

The Fully Active Electro-mechanic Suspension System from Marelli is a breakthrough in automotive technology – enhancing vehicle safety and comfort, and paving the way for autonomous driving. The system processes dynamic vehicle behavior information in milliseconds, allowing for its smart algorithm to determine further actions under different driving conditions. It delivers up to 80% energy efficiency in both active and passive phases, and occupies less volume than any other available technologies, ensuring greater freedom in vehicle interior design.

For helping redefine the standards of existing suspension systems, the Fully Active Electro-mechanic Suspension System from Marelli is recognized in the category of **Engineering Product of the Year.**

Pontosense Inc

Pontosense In-Cabin Wireless Intelligence Sensing

Pontosense In-Cabin Wireless Intelligence Sensing is an innovative AI-sensing solution in market today, revolutionizing vehicle driver and passenger safety. By leveraging mmWave RADAR innovations and proprietary AI algorithms, this coin-sized sensor captures vitals including heart rate, breathing, and heart rate variability wirelessly. By analyzing this in-cabin data, Wireless Sensing provides real-time insights into health, presence, and emotional states of drivers and passengers, empowering vehicles with crucial information about driver intoxication, fatigue, motion sickness, child presence detection (CPD), and more, with medical-grade precision.

Demonstrating exceptional adaptability in technology, Pontosense Wireless Intelligence Sensing aligns with Euro NCAP regulations, supports the advancement of autonomous driving, and allows for seamless integration with each vehicle's unique requirements. By eliminating the need for multiple sensors, the system also helps drive significant cost savings, and is recognized in the category of **Engineering Product of the Year.**

Qualcomm Technologies, Inc.

Qualcomm Aware Platform

Qualcomm's Aware Platform is a comprehensive IoT solution designed to accelerate engineering transformation across industries. With an API-first architecture for seamless integration, power-optimized transmissions, sensor fusion, and end-to-end security, the Qualcomm Aware platform simplifies the process of deploying scalable and secure connected intelligence solutions, thereby propelling digital transformation. The platform's unified solution architecture, with built-in connectivity and services, also provides real-time visibility for asset management, precise positioning, and monitoring of both mobile and stationary assets.

The Qualcomm Aware Platform is recognized in the category of **Engineering Product of the Year.**

Top Sustainability Initiative

AT&T

Revolutionizing Communications Networks: A Sustainable and Energy-Efficient Approach

AT&T's sustainability initiative, led by the AT&T Labs, leverages extensive data collection, machine learning algorithms, and closed-loop automation to reduce energy consumption at cell sites without compromising customer experience. The automated system also identifies irregularities in energy use, automatically issues tickets, and dispatches technicians to correct the anomalies, enabling proactive measures to check wastage and contribute to overall sustainability objectives. The initiative has saved over 160 million kilowatts of energy annually – equivalent to powering 15,000 households for a year – demonstrating significant cost savings and environmental conservation.

AT&T's efforts in this direction, scheduled to help the company achieve carbon neutrality by 2035, is recognized in the category of **Top Sustainability Initiative**.

Eaton

LCA Program: Empowering Sustainable Products & Operations

As the global demand for sustainability accelerates, Eaton's Life Cycle Assessment (LCA) approach is helping identify environmental hotspots, measure the benefits of circular business models, and assess the impact of zero waste actions. The company has developed its LCA capabilities over the past 15 years, contributing to the MIT-SHINE Handprinting Framework and the WBCSD Avoided Emissions Standard. They have also published over 85 Environmental Product Declarations covering over 5000 products, helping customers understand their carbon footprints in an effort to promote sustainability initiatives.

Eaton's comprehensive LCA program approach to sustainability aids in meeting corporate greenhouse gas targets and driving decarbonization efforts, and is recognized in the category of **Top Sustainability Initiative**.

Grundfos

PLM Program - Drive a sustainable agenda by leveraging digital capabilities

Grundfos' Product Lifecycle Management (PLM) program focuses on four key sustainability ambitions: energy saving, water conservation, circular economy principles, and providing water access to those in need. The E-to-E PLM program impacts sustainability by facilitating data-driven resource efficiency, improving supply chain transparency, educating consumers on environmental impact, and enhancing product lifecycle tracking. Leveraging digital simulations, modeling, and tracking, Grundfos aims to optimize resource use, reduce waste, and recover valuable materials.

For its out-of-the-box efforts toward promoting sustainability, Grundfos' PLM Program is recognized in the category of **Top Sustainability Initiative.**

Patna Smart City Limited

Transforming Waste Management Practices in Patna Through Innovative Technology

The Intelligent Solid Waste Management (ISWM) System launched by Patna Smart City Ltd., is helping redefine sustainability initiatives in Patna. This system is integrated with Integrated Command & Control Center (ICCC) for real time monitoring of performance matrix of ISWM. It leverages IoT technologies to optimize waste collection and disposal. Unique QR codes are provided to each household and scanned by waste collectors to ensure accountability and efficiency. Real-time GPS tracking of waste collection vehicles allows for route adherence monitoring, triggering alerts for any deviations.

To ensure streamlined operations, RFID readers at dump yards record the weight of collected waste, further enabling accurate performance measurement. The system has resulted in a 20% reduction in manpower needs and significant fuel savings of 75 thousand litres of fuel (diesel) in just one month. From Sept. to Dec in 2021, total 3.64 Lac litres of fuel was saved whereas, 2.61 Lac litre of fuel was saved in year 2022 (Sept to Dec) contributing towards the pollution free environment and promotes recycling, reduces waste, and improves public health. For serving as a model to other cities grappling with waste management issues, the ISWM System is recognized in the category of **Top Sustainability Initiative**.

Philips

Redefining Your Digital Radiography with Sustainable Solutions

As a part of its sustainability commitments, Philips is looking to generate 25% of its revenue from circular products, services, and solutions and reduce CO2 emissions in line with a 1.5°C global warming scenario. The company's Radiography 7000 C – DigitalDiagnost C90, awarded EcoHero status, uses 39% less energy than its predecessor, potentially saving up to 1,300 kWh annually. It also reduces the need for retakes, improving patient care and reducing overall energy consumption.

The company is also working with its partners worldwide to improve the lives of 1 million workers in its supply chain and reduce its environmental footprint. Their initiative serves as a model for sustainable innovation in the healthcare sector, and is recognized in the category of **Top Sustainability Initiative**.

Rockwell Automation

Sustainability Calculator for Repairs: Quantifying the Environmental Impact of Repair vs. Buying New

Rockwell Automation (RA) has developed a sustainability calculator that quantifies the environmental impact and savings of repairing and remanufacturing automation assets rather than replacing them. The initiative helps customers achieve their sustainability goals, transitioning from linear production to continuous-use loops, and promoting the circular economy. The calculator provides insights into energy, water, waste, and carbon emissions savings. For instance, repairing 1560 units could result in a 47% reduction in CO2 emissions, 24% less energy consumption, 68% waste minimization, and a 15% fall in water usage.

The solution dashboard enhances decision-making and encourages a "repair first" strategy, reducing waste and carbon emissions. Its data-driven approach, providing customers with tangible insights into the environmental benefits of repair and remanufacturing, has led to the solution being recognized in the category of **Top Sustainability Initiative.**

American Honda Motor Co., Inc.

Extended Reality Technologies: A new Paradigm for Model-less Vehicle Development in the Honda Design Studio

American Honda Motor Co., Inc's use of virtual reality (VR) in its Automotive Design studio has helped revolutionize their vehicle development process. The VR application allows for real time evaluation and refinement of designs by global teams, a crucial feature whose importance was underscored by the impact of the pandemic. By leveraging innovative technologies, the company has been able to drive a 22% reduction in development time, 35% cut in prototype model costs, and a significant decrease in non-recyclable materials usage.

The unique aspects of this initiative include the creation of a "VR arena" for free-roaming experiences, the use of advanced hardware and software for lifelike scenarios, and the integration of video game technology for realistic, dynamic scenes. The Extended Reality initiative is recognized in the category of **Value Realization.**

BMW Group

Alphabet 360 Fleet Portal

BMW's Alphabet 360 Fleet portal is a comprehensive platform for fleet customers, providing access to a range of new age mobility solutions. The digital platform simplifies, accelerates, and transforms customer experiences through its intuitive design, mobile responsiveness, and streamlined touchpoints. The Single Sign-On feature helps enhance user interaction, reducing login times by 80%. Since its launch, the portal has significantly reduced administration costs by 30% and improved productivity by 50%, transforming the fleet management landscape.

The portal has been successfully rolled out across 13 countries, providing a one-stop-shop for all Alphabet products and services, enabling faster access for customers to the Alphabet Mobility Ecosystem. The 360 Fleet Portal is proving to be a game-changer in fleet management, and is recognized in the category of **Value Realization.**

Caterpillar Inc.

Unleashing Value Realization with Demand Driven Material Requirements Planning

Caterpillar's implementation of the Demand Driven Material Requirements Planning (DDMRP) methodology has revolutionized their inventory management and material flow. The unique approach combines elements of MRP, Theory of Constraints, Lean, and Six Sigma, creating a dynamic buffer that adjusts to business environment changes. Within five months, the pilot deployment has led to a 30% reduction in inventory and ongoing reductions of about $1 million each month.

The initiative is further characterized by its gradual implementation process and the use of an ERP-agnostic software solution. Additionally, it has helped improve material planning effectiveness, reduced training time by two-thirds, and enhanced employee engagement. For driving the transition toward a truly resilient supply chain, the initiative from Caterpillar is recognized in the category of **Value Realization.**

Collins Aerospace

Integrated Lab Network and Research Development Cloud Initiatives

The Collins Aerospace Integrated Lab Network and Research Development Cloud Initiatives are revolutionizing Collins' approach to research and development, through a common digital working environment, and standardized common data access across global research labs to compliantly unlock, share, and capture information from projects normally overlooked.

Integrated Lab Network and Research Development Cloud infrastructures are facilitating the creation of virtual aircraft datasets, based on unique internal company data, while accelerating and standardizing access controls and governance. These approaches, with support of our Digital Technologies teams, have helped drive significant cost reductions by automating processes, saving engineers up to 70 hours per project, and optimizing resource usage, and projected to save typical R&D projects between $40k-$70k per iteration.

These initiatives amplify Collins Aerospace's capabilities across its global scale by providing seamless collaboration tools to an international team of engineers and researchers, positioning Collin to better exploit its data and enable Value Realization through faster R&D based on unique data to enable the future of Sustainable, Connected and Safe Aviation.

Delta Air Lines

TDaaS Driving Value for Delta TechOps

Delta Air Lines' TechOps Data as a Service (TDaaS) platform is an innovative solution, centralizing all Delta TechOps data and revolutionizing data accessibility within the aviation industry. The platform democratizes data access, while ensuring quality and fostering trust among stakeholders. The platform enables advanced forecasting, aircraft health diagnosis, predictive maintenance, and other advanced analytics. TDaaS has played a pivotal role in several projects with one project expected to yield $50 million in annual benefits.

For demonstrating significant operational benefits and promise for continued positive impact, Delta Air Lines' TDaaS is recognized in the category of **Value Realization.**

Xylem

Live Tooling in Machine Trim Operations

Xylem's Live Tooling in Machine Trim Operation introduces a new machine with live tooling to deburr during the trimming cycle, eliminating the need for manual deburring and reducing the number of touches, thereby enhancing safety and productivity. By consolidating the tools used and eliminating the deburring process, the project is set to save around 20-30 minutes per part per month, leading to considerable cost and time savings. The move is expected to significantly decrease part cycle time, increase production, and reduce labor costs.

For its potential to increase efficiency, optimize costs, and promote sustainable, the live tooling program at Xylem is recognized in the category of **Value Realization.**

Engineer At Heart (Individual Awards)

The Distinguished Digital Engineer

Dr. Luiz Fernando Huet de Bacellar, Eaton

Dr. Luiz Fernando Huet de Bacellar is Vice President of Engineering & Technology, Eaton. He has led key digital transformation initiatives across his career, with a focus on IoT-based intelligent power management solutions. Highlights from his illustrious career include creating innovative digital solutions for connected products, developing optimization algorithms for managing distributed energy systems, and ensuring cybersecurity and sustainability standards. He has helped deploy the Eaton Electrical Sector Center of Excellence, focusing on Distributed Energy Resource Management Systems (DERMS), product stewardship and sustainability, power electronics, product cybersecurity, and battery management systems, and is responsible for the Centers of Excellence to drive Eaton's strategy in codes and standards, and component engineering. Dr. Bacellar's work promotes self-sufficiency in power production using renewable resources which has broad impact across various industries.

At Eaton, Dr. Bacellar was also instrumental in setting up the Eaton Americas Innovation Center, overseeing the development of advanced energy transition solutions. For his pioneering efforts that have resulted in significant contributions to power management and resilience against outages, Dr. Bacellar is recognized as **The Distinguished Digital Engineer of the Year.**

The Digital Engineer of the Year

Edward Smith, Jaguar Land Rover

Edward Smith is a Product Owner at Jaguar Land Rover (JLR). Under his guidance, his team has developed a new Digital Vehicle Configurator for aligning the digital customer experience with the company's 'Modern Luxury' strategy. The interface mirrors JLR's iconic vehicle designs, and ensures a streamlined customer journey through the tool by removing complicated steps to improve experiences, making vehicle customization enjoyable. Delivered within six months by a small team of digital specialists, the configurator has since been optimized and enhanced, leading to a significant increase in test drive requests and a direct impact on vehicle sales.

The 2024 Range Rover Velar was the first to go live on the platform built by Smith, with plans to transition all other vehicles by year's end. The new configurator has significantly improved user engagement and reduced the time and clicks needed for vehicle configuration, directly boosting vehicle sales. For his contributions toward helping redefine user journeys in the experience economy, Edward Smith is recognized as **The Digital Engineer of the Year.**

Shamik Shah, Samsung Electronics America

Shamik Shah is Senior Director of RAN Systems Engineering at Samsung Electronics America. He has led a milestone project for Samsung by supplying 5G NR Standalone products and solutions to Dish Wireless. The initiative, worth over $1 billion, was completed in a record time of 16 months, significantly faster than the usual 2-3 year timeline.

Shah was instrumental throughout the process, from responding to the RFP to product development, testing, and nationwide deployment across over 10,000 sites. He also played a key role in negotiating the project KPIs and ensured compliance, both in the lab and at over-the-air sites in Atlanta. For driving the project, distinguished by its cloud-native, ORAN-based architecture, and automated deployment model using orchestration for rapid large-scale deployments, Shamik Shah is recognized as **The Digital Engineer of the Year.**

Toks Omoniwa, Chevron

Toks Omoniwa is a Subsea Systems Engineering Subject Matter Expert at Chevron. He is helping revolutionize the digitalization of early-concept and front-end engineering design for deepwater offshore developments with DigiSubsea, a subsea design twin product that optimizes and automates subsea field architectures and equipment configurations by leveraging machine learning and other digital technologies. The tool is significantly reducing concept development timelines and upfront costs, leading to faster delivery of feasible concepts. Integrated into Chevron's field development planning business process, Toks' solution offers a comprehensive view of project value and performance. Toks has over 25 years of experience and demonstrated success with deepwater technologies and is a digital transformation leader in the field of subsea engineering for oil and gas fields in deepwater offshore acreages. He has led product development for applications that standardize designs, improve efficiency, facilitate cross-domain collaboration, and allow for faster estimation, thereby enhancing decision-making. For contributing toward the realization of a groundbreaking initiative in the O&G industry, Toks Omoniwa is recognized as **The Digital Engineer of the Year.**

The Innovator of the Year

Amit Jain, Chevron

Amit Jain is a Simulation Advisor at the Chevron Technical Center, and plays a key role in driving the company's digital innovation landscape. He has developed the "Console Operator Co-Pilot," a part of the Digital Twin Program at Chevron, which leverages significant volumes of operational data to provide real-time insights for enhanced decision-making. The solution enhances safety, reliability, and efficiency across Chevron's assets worldwide.

Amit's efforts have helped demonstrate the transformative potential of digital technologies in improving operational productivity, breaking information silos, and streamlining industry workflows. For his contributions toward revolutionizing the digital asset management landscape, Amit is recognized as **The Innovator of the Year.**

Krushna Chandra Mohapatra, Philips India Ltd

Krushna Chandra Mohapatra and team of Philips healthcare has been instrumental in the development of an innovative modular solution in radiography . The digital innovation combines state-of-the-art hardware, Embedded and image chain processing capabilities including software defined systems, with adaptive modules that scale to different customer needs. The solution offers numerous benefits including on-demand applications, increased diagnostic confidence, reduced downtime, technology upgrades throughout its lifetime and reuse of modules across radiography and fluoroscopy segments.

This Modular innovation, which has led to the filing of three new invention disclosures, helps boost efficiency, improve serviceability, and potentially total cost of ownership saving up to 20% YoY. Leveraging an integration of AI and cloud-based systems, the innovation unlocks real-time data streams for improving patient outcomes and care provider productivity. For his contributions toward enabling value-based healthcare delivery, Krushna is recognized in the category of **The Innovator of the Year.**

The Woman Engineer of the Year

Alla Franklin, Rockwell Automation

Alla Franklin is Director, Ecodesign Sustainable Products Program, at Rockwell Automation. She is responsible for driving sustainable product design and circular production processes across the company. She is focused on the design of products that considers environmental impact throughout a product's lifecycle – everything from how a raw mineral is extracted from the earth through how parts of that product are recycled.

Throughout her career, Alla held roles that progressed in scope and leadership responsibility within engineering (software and systems design) and program management. She is known for her leadership, problem-solving skills, and contributions to sustainability in the manufacturing industry, and has held significant roles across key innovation projects.

ESPR promotes environmental and sustainability goals and initiatives in the European market by establishing a sustainable product policy framework. The ESPR impacts global supply chains with the need for significant operational adjustments. Currently, Alla is working across the enterprise to create and track plans to address these emerging regulations.

Besides her professional responsibilities, Alla is an active mentor for middle and high school students, inspiring future STEM leaders, and a culture ambassador within her organization, promoting diversity and inclusion as keys to sustainable development. She is recognized in the category of **The Woman Engineer of the Year.**

Allison Bernard, ExxonMobil

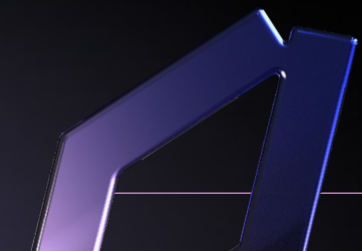
Allison Bernard is a seasoned Project Management Leader at ExxonMobil who has made significant contributions to the company through her leadership and strategic planning. Most notable is executing ExxonMobil's largest engineering transformation, the Gulf Coast Alliance. This transition required leading a diverse team of over 140 personnel, navigating complex challenges, ensuring safety while executing critical projects, resulting in substantial savings for ExxonMobil through the implementation of a global engineering model.

Currently, Allison is the Engineering Manager on the Performance Semiconductor Isopropyl Alcohol Project which is implementing a diverse digital strategy to boost communication efficiency, global collaboration, and construction innovation. ExxonMobil's investment in innovative technologies like Aconex, RealWear, and Hexagon Smart Completions under her leadership and is expected to enhance industry-wide competencies and accessibility. She remains dedicated to empowering women and future leaders, and has served as Vice-President of ExxonMobil's Women's Interest Network and mentors at ExxonMobil and Georgia Tech, investing time and resources in shaping the leaders of tomorrow. Allison Bernard is recognized in the category of **The Woman Engineer of the Year.**

Nancy Grossman, Chevron

Nancy Grossman is Engineering Data and Information Program Manager at Chevron. She has made significant contributions toward driving new operational paradigms, including the Digital Twin Data Delivery project and the Field Mobility initiative. These projects have helped enhance efficiency, reduced costs, and improved communications. In her current role, Nancy also spearheads the digitization of Process Safety Information, aligning with Chevron's global digitization roadmap. In her current role, Nancy also represents Chevron at IOGP driving industry data standards adoption including the Capital Facilities Information Handover Specification (CFIHOS).

A champion for diversity and inclusion, Nancy helped establish the Chevron Women's Network chapter and introduced various diversity programs during her secondment in Kazakhstan,. As a member of the Chevron Women's Network Leadership Team, she has helped initiate the Men Advocating Real Change program, promoting gender partnership, and has presented on diversity topics at the World Engineers Convention. She continues to champion STEM education through her leadership role in the Mathcounts program and represents America on the Women in Engineering committee of the World Federation of Engineering Organizations. She is recognized in the category of **The Woman Engineer of the Year.**



DIGITAL ENGINEERING AWARDS

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