



2023 Cost Engineering Virtual Conference

COST AND CO₂ ESTIMATING ACCURACY

October 18-19, 2023



For more information and to register, please visit: <https://spcea.org/conferences-2023>

ABOUT SPCEA

Conference Overview

The Society of Product Cost Engineering and Analytics (SPCEA) is thrilled to announce its annual conference, which brings together a global community of professionals and experts in product cost engineering, analytics, and related fields.

Our conference theme this year, "Cost and CO₂ Estimating Accuracy", explores the role of the cost engineering profession as companies strive to optimize product design and manufacturing for profit, CO₂, and manufacturability. In a world of increased awareness surrounding sustainability, the cost engineer is uniquely positioned to evaluate cost, carbon, and manufacturability trade-offs so that companies can make informed strategic decisions.

This year's conference will feature a range of engaging sessions, including keynote speeches and technical presentations, all focused on providing attendees with the latest insights, tools, and best practices in product cost engineering.

Whether you are a seasoned professional or a new entrant to the field, we invite you to join us to explore the latest trends and innovations in product cost engineering and analytics, connect with like-minded professionals, and discover new opportunities to advance your career and drive success for your organization. We look forward to seeing you there!

Our Mission



The Society of Product Cost Engineering and Analytics is a 501(c)(6) non-profit organization dedicated to promoting awareness and knowledge

of cost engineering and analytics in the manufacturing of products, thereby enabling improved industry profitability and increased employment that result in the betterment of society.

Our Vision



To be the prominent global hub of cost engineering and analytics knowledge sharing by establishing foundational standards, providing education and certification,

and driving thought leadership within manufacturing industries.

Contact us:

Phone
1-678-626-0783

E-mail
conference@spcea.org

KEYNOTE speaker



Ralf Altpeter

General Manager at FACTON, GmbH, Germany

With 19 years in consulting with stations at P3, Kerkhoff, and umlaut (part of Accenture), Ralf focuses on digitalizing enterprise product costing and cost/value engineering. Ralf is a Graduate Mechanical Engineer from the RWTH Aachen and spent his professional years in Germany and the USA. He recently built up the consulting practice for Cost/Value Engineering at umlaut, leading a global team of 25 consultants.

The Decade of Sustainable Product Costing

As the world becomes increasingly aware of the need to reduce carbon emissions, future regulations will further push the industry to create products that have a smaller environmental impact. By designing products with sustainability in mind, designers can help reduce the environmental impact of the products we use every day. Whether it's through the use of renewable materials, designing for durability and repairability, or minimizing energy usage, sustainable design can help us create a better future for ourselves and the planet.

The industry has shifted towards sustainability over the last decade, emphasizing the improvement of products' carbon footprint. Designers seeking to create sustainable products must understand the carbon drivers involved in a product's manufacturing, transportation, and disposal. This approach is similar to traditional design-to-cost, involving identification of drivers through detailed costing, optimization of design and supply chain, and implementation. However, the complexity increases as carbon footprint is added to cost, making traditional costing and CO₂ calculation equally important. The approach will be explained with a case study for a chain saw.

The industry has transitioned from a decade of design-to-cost to the "decade of design-to-sustainability," where the emphasis is on designing products with a reduced environmental impact. By understanding the drivers of carbon emissions and designing products with sustainability in mind, we can create a better future for ourselves and the planet.

EXPERT speakers



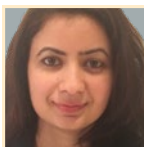
Chris Domanski
President, SPCEA
Director – Cost Optimization at Forvia
USA

Chris Domanski is a co-founder of SPCEA and is the author of the CRC Press published book “Cost Engineering: A Practical Method for Sustainable Profit Generation in Manufacturing” and the BEP published book “The Cost: A Business Novel to Help Companies Increase Revenues and Profits.” Chris has over 28 years of experience in Cost Engineering, Purchasing, Finance, and Engineering in the automotive industry, most recently as a Director of Cost Optimization at Forvia (Faurecia), the 7th largest supplier of automotive components in the world. Chris has had the fortune of working for many great companies, large and small, such as Ford Motor Company, Continental Automotive, TRW, ZF Group, Methode Electronics, Nexteer Automotive, and Forvia (Faurecia). Chris had an opportunity to work for both customers and suppliers within the industry, thus sat on both sides of the negotiation table. This unique experience has given Chris an unmatched level of expertise in all areas of Cost Engineering discipline. Chris also administers a LinkedIn Group “Manufacturing Cost/Price Estimators, Engineers, Analysts, and Controllers” with over 6,100 members and is a frequent speaker at the annual cost engineering conferences. Chris graduated with a Bachelor of Science Degree in Mechanical Engineering from Wayne State University in Detroit, Michigan, and a Master’s Degree in Business Administration with Finance concentration from Oakland University in Rochester Hills, Michigan. He also holds a certificate in Negotiation and Leadership from Harvard University Law School in Boston, Massachusetts.



Sander den Hartog
CEO
CostPerform
Netherlands

I love a good challenge. It started with studying econometrics, and right now, it’s managing CostPerform into its next phase. My personal life grants me other challenges: to be a good father and husband, but also to run 100km through the mountains of France. Challenges represent some sort of adventure for me. And cost and performance management has a lot of those adventure elements I’m always looking for. Every company is unique in its own way, so helping them to answer their cost and performance questions is always a journey. I like those journeys; all of them are different but always done with the same tools. This is just like my adventures in long-distance running: always in different environments and weather circumstances, but at the end of the day, it is the exact same pair of legs that brings me to the finish line. That’s also what we are aiming for with CostPerform: customized cost models with a standard tool. My expertise is mainly focused on understanding your business and its relevant challenges. I then translate those challenges into real solutions and answers. Don’t hesitate to share your questions with me. As I said: I love a challenge.



Nupur Jamthe
Software Manager
Design2Cost at Vodafone
Luxembourg

Nupur brings 13 years of specialized expertise in Technology Architecture through her extensive IT consulting career. Hailing from India, she completed her education there, graduating with a Bachelor of Engineering degree in Computer Science. Nupur’s career highlights leading technology architecture assessments and providing strategic recommendations to diverse clients. She excels in designing scalable, secure enterprise architectures and advising C-level executives on technology transformation. With expertise in evaluating technical and commercial aspects, she offers holistic assessments for transformation projects. Presently, Nupur holds the position of Software Manager DesignToCost at Vodafone. In this role, her primary responsibility involves assessing software programs for cost, effort, and its alignment with Vodafone’s technical roadmap for the next five years.

EXPERT speakers (CONTINUED)



Douglas T. Hicks, CPA
Cost Measurement and Management
Consultant / Author
USA

During his thirty-eight years as an author, speaker and consultant, Doug Hicks has championed the development of practical, down-to-earth managerial costing solutions. In that time, he has helped over 250 organizations of all types and sizes transform their history-oriented accounting data into customized, value-enhancing decision support information that provides their decision makers with the accurate and relevant intelligence they need to thrive and grow in a competitive world. He has shared his experience through hundreds of seminars and conferences, articles that have been published in dozens of trade and professional periodicals and four books that have sold over 15,000 copies worldwide. Doug is a 1970 graduate of the University of Michigan – Dearborn. In 1997 he was awarded the University's "Professional Growth and Scholarship Award" for his role as a leader in advancing managerial costing concepts. He is a member of the Institute of Management Accountants and the Michigan Association of CPAs, and a Director of The Profitability Analytics Center of Excellence.



Andrea Paviolo
Vice President
at MeC
USA

Andrea Paviolo is co-owner of MeC s.r.l. and Vice President of MeC US. His career started 16 years ago as VAVE Cost Engineer that helped him gain the design to cost focus necessary to support MeC's European clients in various industries. In 2012 MeC opened the US branch and Andrea became the direct contact for all customers. Interested in the company's Cost Engineering and Cost Benchmarking consulting services, Andrea collaborated on various projects in the automotive, electromobility, and electronics for International companies and government agencies.



Stefano Patisso
Chief Technical Officer
at MeC
Italy

Stefano Patisso joined MeC in 2011 as cost analyst for Chassis Components. In 2013, he had the opportunity to join the US branch of the Company where the main contribution was to support Customers' cost methods team (developing for instance cost breakdown analysis, machine rate and cycle time calculations) and the implementation of cost tools. In 2019, he came back to the Italian headquarter and he is currently responsible for the cost estimating and project management teams. Stefano's team focuses on a variety of activities (from cost benchmarking to should cost analysis) and industries (from automotive to white goods), assuring customers' expectations and quality in results are met in every project. Stefano holds a master degree in Industrial Engineering and in the last 4 years he's been involved at the Politecnico University of Turin as professor for Cost Analysis and Cost Benchmarking courses.



Alan March
Head of Cost & Value Engineering
Vandigital
United Kingdom

Alan has built and leads the Cost & Value Engineering capability within Vandigital over the last 6 years. He brings 20+ years' of engineering, finance and cost engineering experience across multiple sectors. Alan has delivered numerous global workshops on all aspects of understanding cost. Prior to Vandigital, Alan was coaching the UK SME supply chain in a business transformation program for Rolls Royce and the UK government.

EXPERT speakers (CONTINUED)



Paola Mainardi
Principal Engineer, Value Methodology
Baker Hughes
Italy

Expert and passionate about methodologies for innovation and product cost reduction, i.e. Value Methodology and Triz, running +20 workshops in O&G business, without impacting quality & safety. Team worker by leading multidisciplinary teams in the industrial sector, field of experience in product cost reduction and design to cost. Data driven approach, experience in acquiring, organizing and effectively reformulating data and knowledge from different sources, towards a defined goal.



Manjunatha Subbannachari
Cost Engineer
HCL Tech
India

Manjunatha Subbannachari represents Sustainability CoE at HCL Tech. He holds a Post Graduate Diploma in Operations Management. He has 18+ years of experience in the areas of Sustainable Product Design & development and value engineering experience across multiple industry domains.



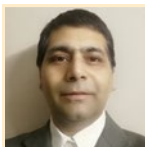
Davide Pavignano
Senior Cost Model Developer
at MeC
USA/Italy

Davide Pavignano approached cost engineering through MeC immediately after his master's degree in management engineering. The first experiences concerned vehicle perceived quality projects and cost benchmarking activities within the Italian automotive sector. He then started developing Cost Models and Cost Software for various manufacturing processes, including additive manufacturing projects, to improve IT cost analysis tools. In this context, in recent years, he has invested time in creating a calculation model capable of quantifying climate-changing emissions integrated with the MeC tool normally used in cost analysis activities.



David Bocher
Founder and Associate Director
Octoplus Consulting
France

David founded Octoplus Consulting 14 years ago. His Lean Manufacturing approach combined with a Modelling expertise pushed him to develop a Cost Modelling software currently used by major industries. David started as a development engineer in the offshore industry (3 years), then moved to Commodity Purchasing Management for AUTOLIV (Airbag Manufacturer) (10 years). Since the start of Octoplus, David has been leading some Purchasing transformation programs with a clear focus on Purchasing P&L improvement as well as internal profitability assessments. Around 500 cost analysis workshops globally, around 150 cost models developed. His coaching approach ensures the competence is transferred to his customers, this in order to take purchasing organizations to the next step, and obtain a competitive advantage. Over past 2 years, Octoplus has set up a solution to face the challenge of CO₂e measurement on scope 3-1 (purchased products).



Vinay Haribratta
Cost Engineer
HCL Tech
India

Vinay Haribratta represents Product Cost Management CoE. He holds a Master's Degree in Manufacturing Management. He has 21+ years of experience in the areas of product design & development, value engineering, cost engineering and procurement across multiple industry domains.

EXPERT speakers (CONTINUED)



Emanuele Checcacci

Principal System Cost Engineer
Baker Hughes
Italy

Mechanical Engineer with experience in packages and plant design (base-plate structure, piping, equipment selection, issuing of technical documentation) other than past experience in commercial operations, health and safety assessments and technical design.



Giancarlo Magni

Senior Value Engineer
Baker Hughes
Italy

Experienced Senior Cost Engineer with 25+ years of experience in Energy Technology Companies. Solid competencies in Cost Engineering, Should Cost, Value management, Program Management with a proven ability to apply a Continuous Process Improvement approach and develop working methods and practices. Broad technical background on turbo-machines (turbines, compressors, auxiliary systems). Certified as Professional Value Engineer (Associate Value Specialist) by SAVE (Society of American Value Engineers) and Certified Cost Technician (CCT) by AACE (Association for the Advancement of Cost Engineering).



Tomasz Rola

Electronics Costing Expert
Poland

Tomasz Rola is a highly skilled Senior Cost Engineer with expertise in electronics and a strong focus on cost analysis, value engineering, and CO₂ footprint assessment. Currently employed at a leading consulting company, Tomasz provides Electronics Should Cost Analysis to clients across various industries, driving cost reduction and enhancing product value. He excels in leading Design-to-Value analyses and workshops, optimizing usability and decreasing production costs. With upcoming PhD research on carbon footprint analysis in semiconductor production, Tomasz demonstrates a commitment to sustainability. His experience includes supporting R&D engineers at a renowned construction equipment company, managing CAD/PDM/PLM applications, and conducting technical workshops. As a Constructor/Designer at FTI Engineering, he led projects from research to prototype development, meeting regulatory requirements.



Gavin Hodgson

Hardware and Software Lead
Design2Cost
Luxembourg

Gavin Hodgson leads Vodafone's Design2Cost Hardware and Software practices. He has two decades of international experience in procurement and supply chain management, and holds degrees from Cambridge University, and KEDGE. His particular areas of professional interest in procurement are in value engineering, automation, and sustainability.

Virtual Booths

SPCEA is offering virtual booths to companies who are interested in sponsoring the conference to show off their products and offerings. For example, if you are a costing software company, you'll be able to welcome potential clients into your booths to demo your software. Or, if you're a company recruiting cost engineers, you'll be able to welcome potential candidates to discuss open positions and your company in general. Or, if you're an author, you'll be able to discuss your book(s) with potential buyers. Please contact Jeff Miller at jmiller@spcea.org if you're interested. He will provide you with the details.

SPCEA Contributor Of The Year



Each year, SPCEA honors an individual and a company who have shown continuing dedication to the advancement of the cost engineering profession. These renowned awards - the "SPCEA Individual Contributor Of The Year" and the "SPCEA Corporate Contributor Of The Year" - celebrate those who have made significant and sustained volunteer contributions of a highly significant nature to our profession and who have contributed positively to the recognition of the cost engineering field of study in the manufacturing of products.

A few examples of such contributions would include:

- Uncommon and sustained volunteer service to SPCEA
- Assistance with conferences and other SPCEA events.
- Providing forums and media through which experiences with the principles and techniques of cost estimating and analysis may be reported, discussed and published in furtherance of public interest (e.g. editorial, publications, symposium leader, etc.).
- Cooperating with other organizations and individuals, having common or related purposes that contribute to the cost estimating and analysis community of practice.
- Significantly advancing SPCEA's professional status and making significant personal commitments to SPCEA.
- Demonstrating an outstanding accomplishment within the field of product cost engineering.
- Exemplifying how cost analysis work provides decision support by influencing the management vision, goals, and objectives.

Nominations will be accepted from August 14, 2023 through September 14, 2023. Nominations will be evaluated by the Awards Committee, with the winner being announced on October 19 at the SPCEA Annual Conference. Please submit your nomination (with the name, title, company of the nominee along with a description of his/her contribution) to the following email address: 2023AwardNomination@spcea.org.

OCTOBER 18, 2023

day 1

Please note: All times are Eastern Standard Time.

INTRODUCTION

8:00 **Introduction by SPCEA President**

Chris Domanski, SPCEA President

Chris Domanski, President of SPCEA, Director of Cost Optimization at Forvia, and author of “Cost Engineering” and “The Cost”, will discuss SPCEA and its offerings. From its beginnings in 2020, learn about how SPCEA has grown to become the premier professional society for product cost engineering and how SPCEA drives awareness and knowledge of cost engineering methodologies through its conferences, the CPCE certification program, networking, and other activities.

KEYNOTE SPEAKER

8:15 **The Decade of Sustainable Product Costing**

Ralf Altpeter, General Manager, FACTON, GmbH

As the world becomes increasingly aware of the need to reduce carbon emissions, future regulations will further push the industry to create products that have a smaller environmental impact. By designing products with sustainability in mind, designers can help reduce the environmental impact of the products we use every day. Whether it's through the use of renewable materials, designing for durability and repairability, or minimizing energy usage, sustainable design can help us create a better future for ourselves and the planet.

8:55 **Costing Concepts They Should Teach You in School, But Probably Don't**

Douglas T. Hicks, CPA, Cost Measurement and Management Consultant

This session will discuss several topics that are critical to developing and using cost information in support of the decision-making process, but that are either overlooked or given little emphasis in the costing curricula at schools. These include the concept and usage of models, the importance of causality in developing valid cost models, how the “cost accounting” used for financial accounting is inappropriate for use in decision making, the difference between accounting costs and decision costs, and the fallacy of any percentage of sales measurement.

9:35 **Modelling “Indirect” Costs: a View on Integral Cost Prices**

Sander den Hartog, CEO, CostPerform

Making detailed product cost calculations requires great insights in material usage, machine usage, expected efficiencies, etc. But even with the perfect product specific calculations you will still be missing a significant part of the fully loaded product costs: those costs that are deemed to be “indirect”. Costs that do not seem to have a cause and effect relationship with the specific product calculation you are making. In this presentation we would like to give a view on how multi-dimensional integral costing can lead to true cost prices. We will examine a numerical example and show some differences. Furthermore we will discuss some techniques in overhead cost calculation to further improve the cost calculations.

OCTOBER 18, 2023

day 1 (continued)

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10:15 **Networking Session**

11:15 **Software Design2Cost at Vodafone**

Gavin Hodgson, Hardware and Software Lead, Design2Cost at Vodafone
Nupur Jamthe, Software Manager, Design2Cost at Vodafone

An overview of Vodafone's Design2Cost methodology used to support its procurement teams in the negotiation of supply contracts, by providing Software Cost insights for Vodafone businesses around the world. The Design2Cost software methodology covers the full range of software implementation projects within Vodafone, for example green field implementation, migration or transformation. To bench-mark the efforts and Cost of a software implementation program, we model the requirements and delivery methodology, considering the software architectural complexities as well as the skill and shore mix required to deliver the tasks. We will cover a recent success story from a Vodafone market where an incumbent vendor had been delivering CRM implementation for more than eight years, and Design2Cost analysis enabled the project team to deliver 20% savings despite inflation and volatile market conditions.

11:55 **CO₂e Calculation: Two Case Studies of a New Cost Driver**

Andrea Paviolo, Vice President at MeC
Stefano Patisso, Chief Technical Officer at MeC
Davide Pavignano, Senior Cost Model Developer at MeC

Global warming and climate change are in front of everyone's eyes. In cost analysis, cost reduction and value optimization activities the main drivers are changing to consider the environmental aspects of materials, technologies, logistics and regulations on greenhouse gas emissions. MeC will present two case studies where the CO₂e measurement tool, integrated in the cost models, has helped clients to identify the best strategic solution. Technological and manufacturing footprint changes are driven not only by costs, but also and above all by keeping the focus on a new decision-making factor: climate impact.

OCTOBER 19, 2023

day 2

INTRODUCTION

8:00 **Award Recognition by SPCEA President**

Chris Domanski, SPCEA President

Chris Domanski, President of SPCEA, will kick off the second day of the conference and will announce the winners of the 2023 SPCEA Individual Contributor Of The Year and the 2023 SPCEA Corporate Contributor Of The Year awards.

8:15 **CO₂ Calculation and Optimization by an Aerospace and Defence Company**

Alan March, Head of Cost & Value Engineering at Vandigital

Our Aerospace and Defence client had set themselves an objective of becoming carbon neutral by 2030 and thus reducing their carbon footprint by 60%. However, they lacked clear data and visibility of their own operations beyond a high-level assessment based on utility and financial data. They decided that they really wanted to gain a granular view at a product level to understand what their key carbon drivers were and therefore what they should focus on as part of the future strategy. Without developing a granular baseline, they were unsure where to focus their attentions. We built a detailed cost and carbon model for one of their key strategic assemblies by building a detailed value stream map at their facility. We then built scenario models of this for several geographies to help them understand what both their future cost and carbon landscape could look like.

8:55 **Cost and CO₂ Calculation Accuracy in Scope 3**

Vinay Haribratta and Manjunatha Subbannachari, Cost Engineers at HCL Tech

Purchased goods and services contribute to the largest share of Scope 3 emission. This calculation requires collecting multiple inputs from suppliers and developing complex calculation models. There are too many assumptions involved in this process which typically leads to low accuracy in the result. A higher accuracy of Scope 3 emissions can be achieved by adopting a supplier specific based approach as compared to spend based or hybrid-based approach which is being typically used across the industry currently. While developing a supplier specific approach or calculations, the complete supplier's eco system is analyzed in this process. Analysis involves a detailed simulation of the product manufacturing processes, data of water consumption and waste produced is considered along with very precise capture of the material grades and part weights. The supplier specific approach brings you an accurate trade-off between emission and cost reduction which will benefit the OEMs immensely.

OCTOBER 19, 2023

day 2 (continued)

9:35 **Cost Accuracy Estimation in the Development and Management of Program Cost... Governance and Case Study**

Paola Mainardi, Principal Engineer, Value methodology - Design2Cost
Emanuele Checcacci, Principal System Cost Engineer
Giancarlo Magni, Senior Value Engineer, Baker Hughes

Cost Estimation is a structured accounting of all labor, material, and other efforts required to develop, produce, operate and maintain of a product object of a Program. The development of a cost estimation entails identifying and estimating all cost elements that pertain to the program from initial concept through each phase in the program's duration in order to inform decision making that can be based on cost, as well as on a performance and technical basis. The process used by Baker Hughes IET (Industrial Energy Technology) for cost estimation during Program Development is described in Analysis Practice "Design to Cost in Gas Turbine New Product Development programs" and use BH experience of cost estimation and cost-out (Design to Cost, VAVE, ...) to New Product Development (NPD) program. Two case studies will be presented to share experience by using the approach introduced above.

10:15 **Networking Session**

11:15 **Carbon and Cost Factor Calculation for Electronics Products**

Tomasz Rola, Electronics Costing Expert

As global temperatures continue to rise, manufacturing industries face a sustainability challenge. The semiconductors that sit at the heart of most electrical devices require copious amounts of energy to manufacture and operate. In this presentation I would like to showcase an approach to create should cost calculation and CO₂ footprint assessment for electronics components and subcomponents.

11:55 **Setting up a sustainable methodology to estimate your Scope 3-1 (Product Purchase) - parallel between Cost Leadership and CO₂ Leadership!**

David Bocher, Founder and Associate Director of Octopus Consulting

It is not unusual to see in the industry, (and even more assembly industries), that the CO₂e emissions related to the purchased products represent more than 80% of total emissions of the entity. The same organisations sometimes claim that they will reduce their emissions by XX%. But, as we can only improve what we measure! How do they measure? The purchased products is an area which is more complex to analyse, as it requires some knowhow about suppliers materials, and process steps. This is where Cost leadership strongly enhances the ability to face this challenge. Let's see how to set up a sustainable system to continuously follow these emissions.

SPCEA GREATLY APPRECIATES THE SUPPORT OF OUR



corporate members and partners



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easyKost

FACTON
INNOVATIVE COST MANAGEMENT



GE APPLIANCES
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