

Embedding Sustainability in the Sourcing and Procurement Process

Oracle Sustainability Solutions

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Introduction

Sustainability has now become a dominant topic of discussion among purchasing and supply professionals, along with traditional metrics such as cost, quality, and delivery time. Maintaining an efficient, streamlined supply chain is becoming increasingly challenging due to growing scarcity of raw materials, rising energy prices, changing demand patterns and increasing costs of compliance.

The rising global population – counting 7.06 billion people in 2012 (US Census Bureau 2013) and projected to be 10 billion by 2100 (UN 2011)¹ – will cause a surge of natural resources consumption and material intensity, given that the substantial majority of this growth will occur in emergent and pre-emerging markets (Figure 1). Access to new resource reserves will become more challenging and expensive, increasing production costs. Indeed, prices for resource inputs from virgin raw materials are expected to remain high and volatile for at least the next 20 years, according to McKinsey².

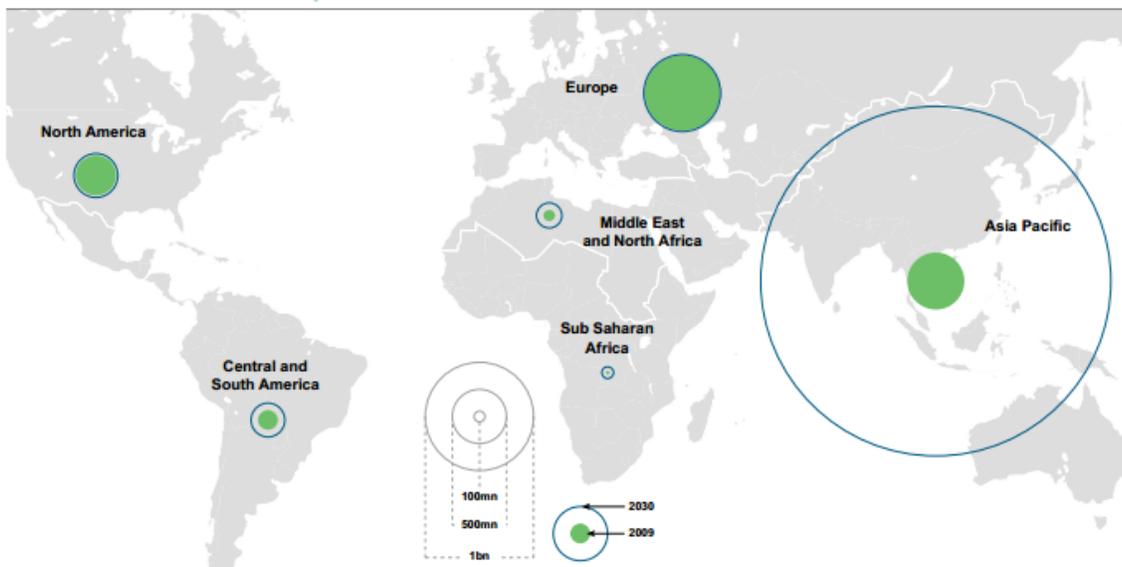


Figure 1: Global middle class in 2009 and prediction for 2030

Given these global change factors, procurement teams, executives and strategists need to evaluate the long-term impact on resource availability and price, analyze materials substitution strategies, and integrate resource recycling programs. Furthermore, companies should leverage collaborative partnerships at every stage of the value chain, sharing information to improve visibility as well as providing an assurance of performance.

¹ Source: UNEP Year Book 2013

² Resource Revolution: Meeting the world's energy, materials, food, and water needs. McKinsey Global Institute, November 2011



This white paper examines how to leverage Oracle's Advanced Procurement solutions to evaluate and manage suppliers with sustainability in mind, from implementing product selection criteria such as certification, recycled content, energy efficiency, and product stewardship to supporting sustainability clauses during contract negotiation and managing ongoing supplier sustainability performance using score-carding. Oracle solutions also enable organizations to develop collaborative supply chain management networks which are instrumental to building resilient supply chains to handle rapid changes in global markets.

Why Sustainable Procurement?

The spotlight of the procurement function today has shifted from minimizing costs to maximizing value. As part of this shift from a tactical to a more strategic focus, procurement policies are leveraging sourcing and procurement functions to drive supply chains' sustainability performance for long term success by analyzing products' environmental features, or lack thereof, in the upstream supply chain. The procurement function is also becoming more active in monitoring and influencing the sustainability performance of the suppliers themselves, which often results in cost savings that can be passed on to the buyer.

Through sustainable sourcing processes organizations can improve supplier disclosure and risk management capabilities and support information exchange and verification. Measuring supplier performance by addressing suppliers' sustainability practices drives improvement of internal and external standards and facilitates disclosure and transparency. This in turn supports compliance with any environmental regulation and enables the ability to better understand and minimize risks associated to specific products or suppliers. Procurement function credibility and collaborative supplier dialogue also favor the building of a sustainable supply chain that ultimately increases brand reputation and company value.

At a closer look, sustainable procurement practices appear to be driven by three different types of factors: cost reduction; risk management and compliance; and value creation.

Cost Reduction

Organizations achieve substantial cost reductions by adopting a wider approach to whole life costing. Intelligent sourcing should take into consideration all costs related to products and services throughout their lifetimes (purchase price, usage, maintenance, and disposal costs), incorporating additional evaluation metrics such as carbon and water footprint, raw material composition, energy intensity, packaging score, and transportation parameters.

As highlighted in the European Commission Green Public Procurement guidelines³, for many products the usage costs make up the predominant portion of the costs which a contracting authority or organization would incur. Energy-consuming products such as vehicles, IT equipment, lighting, and buildings provide a few examples. For buildings, running costs may account for up to 85% of the total life-cycle costs, which means that even if an energy-efficient building is more expensive during construction the lower operating costs will generate a faster return on investment.

Procurement scorecards and selection criteria that take into account life-cycle costing hence become a necessary tool for buyers in the sourcing process.

Risk Management and Compliance

85 percent of sustainable development issues that attract media interest are linked to suppliers' violations on human and labor rights or disruptive environmental practices.⁴ Increasingly audits and supplier codes of conduct are an essential requisite to protect an organization's reputation. Monitoring suppliers' environmental, social and governance activities should be at the forefront of any risk and compliance management to avoid brand damage and consequent financial and compliance risk. As companies are facing increasing legislative pressure on how they manage their businesses and the impact of their operations on the environment, suppliers need to be ready and aware of all compliance requirements they face to eliminate or reduce the risk of supply chain disruption. Key issues

³ European Commission - Buying Green! A Handbook on Green Public Procurement, 2011

⁴ [Ecovadis: Business Case for Sustainable Procurement](#), 2014



that need to be addressed include forbidden substances, child labor, toxic substances, recycling, energy efficiency, traceability, and impact on local communities.

Value Creation

Implementing sustainable procurement practices can generate additional revenue through premium brand differentiation, income from recycling/closed loop programs, and product innovation. Increasingly, sustainable procurement is one of the factors taken into account by corporate social responsibility rating agencies and ethical funds. A positive evaluation facilitates access to capital and potentially increases company valuation. Attention to sustainable sourcing and procurement can also provide a marketing advantage with consumers sensitive to socially responsible supply chain credentials.

A recent report released by PWC and INSEAD⁵ undertook quantitative analysis of value drivers of select Global 500 companies achieved through sustainable procurement and found that:

- » Sustainability-related cost reduction initiatives can rapidly raise significant amounts. For example, in 2005 Wal-Mart was able to save US \$2.4 million on logistics costs by reducing the package size of a single toy. Another multinational company, 3M, claims that the emphasis on sustainability has reduced its costs by US \$1.4 billion over the past three decades. Sustainable procurement programs are estimated to achieve up to six times payback in cost reduction across spending.
- » Direct costs after a supply chain disruption linked to sustainability issues represent on average 0.7% of a company's revenue and an average 12% decrease in market capitalization. Financial impacts were relative to the impact on brand value from bad supplier practices (e.g. child labor, local pollution) and the economic costs of supply chain disruptions (e.g. non-compliance with environmental regulations).
- » 0.5 percent average increase of total organization revenue was achieved through innovation of eco-friendly products/services, price premium, or income from recycling programs. For example, a sustainable approach to the selection of 278 subcontractors helped Bovis Lend Lease win a £2.4 billion fifteen-years contract to build schools in the UK's second largest city, Birmingham. Revenue growth is indeed closely linked to the strengthening of a brand's reputation through sustainable practices as well as other initiatives.

Challenges

Despite the increasing effort to uptake sustainability procurement policies and strategies, organizations still face significant challenges related to supply chain complexity that make it difficult to get accurate and reliable information on products' environmental impact within the upstream supply chain. Resistance from suppliers in this case is particularly relevant as providing information is both costly and potentially damaging to their own business through disclosure of proprietary information.

Implementation of Total Cost of Ownership (TCO) models integrating sustainability, which would allow companies to truly factor sustainability criteria into their procurement performance, is a time-consuming and resource-intensive process that companies often find daunting if handled manually. Rather than distributing the costs into different buckets (or budgets) based on materials used or labor associated with the product, TCO counts all costs associated with the product. However, it is often difficult to gather and allocate data associated to a single product that are typically spread across different cost centers when lacking cost management software tools.

Transparent, formalized sustainability performance measurement across the entire supply chain are necessary to implement procurement processes that increase company value, but they are not easily achieved without appropriate tools and understanding of KPI metrics needed to measure and monitor progress.

⁵ [Value of Sustainable Procurement Practices: A quantitative analysis of value drivers associated with Sustainable Procurement Practices](#). PWC and Ecovadis in collaboration with the INSEAD Social Innovation Centre – 2010



There are also practical challenges associated with identifying which standards to use. Making sense of product certifications, labels, standards, and third-party conformity assessment is intimidating even for industry experts.

Finally, there are frequently internal challenges related to change management issues and conflicting goals. Middle managers can't execute mandates from top management that require substantial process changes and reorganization efforts, or they lack expertise on sustainability topics. Sometimes the ownership of this process is unclear or budgets are too low to get internal or external support. The conflict between short term financial targets and midterm sustainability goals causes organizations to delay initiatives.

Oracle Solutions

As outlined earlier, environmental considerations in sustainable procurement are based on a two-fold approach:

- » Supplier evaluation: focusing on the environmental and sustainability performance of partners' and suppliers' organizations
- » Products and services evaluation: focusing on sourcing of environmentally-preferable products and services that minimize environmental harm over their life cycle, including manufacturing, transportation, use, and recycling or disposal

Oracle Advanced Procurement is the integrated suite of applications that enables companies to reduce spending on goods and services, streamline procure-to-pay processes, and drive policy compliance including environmental compliance. The suite of modules can be leveraged to play a key role in the implementation of a sustainable procurement strategy.

Analyze Spend and Supply Chain Costs with Oracle Procurement and Spend Analytics

The first step in any sustainable procurement program is understanding the overall organization's spend, extracting information to model and analyze a variety of spend analysis views and financial spend outputs. Oracle customers can leverage [Oracle Procurement and Spend Analytics](#) to gain visibility into direct and indirect spending across global accounts and provide transparency across finance, operations and procurement to improve procurement processes. Customers can also leverage Oracle Spend Classification to organize spend into logical categories, processing data from any source, discovering existing patterns, and assigning disorganized data into appropriate categories, enabling procurement organizations to gain a holistic view of procurement and supplier performance necessary to drive ongoing improvement. A deployment enabling sustainable procurement metrics would configure the data warehouse to capture environmental and social impacts for each spend category (e.g. carbon, resource usage, pollution, water use, labor KPIs) for particular suppliers or specific products and services.

Drive Supplier Selection with Oracle Sourcing

From a product perspective, sourcing teams require the ability to measure the sustainability of new products, packaging and services and identify and implement total cost models incorporating sustainability criteria.

[Oracle Sourcing](#) drives sourcing through online collaboration, enabling organizations to exchange information, define requirements, conduct negotiations, and create new contracts.

Procurement professionals can use templates and flexible document styles to quickly create sourcing events such as RFIs, RFQs, RFPs and reverse auctions. A sourcing and requisition template can be configured to include criteria related to supplier company policy such as environmental policies, environmental risks, or management of environmental risks (Figure 2). Bids can then be scored on such criteria to analyze supplier environmental strengths and weakness and factor supplier environmental performance in award decisions, excluding for example suppliers that do not reach a minimum required score in such categories.

ORACLE Sourcing Home Logout Preferences Diagnostics

Requisitions Negotiations Intelligence Administration

Negotiations > Advanced Search > RFQ: 57636 > Live Console (RFQ 57636) > Award by Quote (RFQ 57636) >

Compare Requirements (RFQ 57636)

Title Corrugated Packaging RFQ Status **Closed**

[Show Chart](#)

Filter By: Environmental Policies

Label	Target Value	Industrial Dressler	Allied Manufacturing	Eastern Industrial Products	Global, Inc.
All Business & Financials					
Supplier S Cost and Pricing Information		US HEADQUARTERS	SAN JOSE-ERS	EIP MAIN	GLOBAL-GA
Supplier C Quality		Indus, James	Francis, Veronica	Leady, Ronald	Ackerman, Mr. Rich
Supplier C SLAs					
Quote Environmental Policies		33169	33168	33167	33166
Environmental Risks					
Total Score Management of Environmental Risks	100	99.118	79.706	45.292	29.996
Section: Environmental Policies	26.46	26.46	18.816	10.584	4.704
List and describe any Environmental Certifications your company has achieved		EU & US	A, B, C, D, etc.	Various Canadian certifications	None
Score	2.94	2.94	1.764	1.176	
Please describe your environmental impacts and how you act on these. Include environmental impact caused by providing service or products for this Sourcing event		All environment impacts are mitigated via corp mitigation plan	Renewable / sustainable is good business. We have calculated a positive net present value for all of our renewable/sustainable projects	Go to www.eip.com and view our statements	None
Score	2.94	2.94	1.176	1.176	
Provide your Compliance with relevant regulatory and legislative requirements for different geographies		US, Canada & EU	US, Canada & EU	Canada	None
Score	2.94	2.94	1.764	1.176	
Participation in efforts to improve environmental protection and understanding around the world and the sharing of appropriate knowledge, methods and working practices		Sustainability council participation	Yes	Trade group participation	None
Score	2.94	2.94	1.764	1.176	
Provide details of how you perform monitoring and continually improving performance and sustaining a commitment to the prevention of pollution		Oracle shop floor monitoring / process manufacturing	Oracle shop floor monitoring	Integration of continuous improvement with operating budget savings	None
Score	2.94	2.94	2.94	1.176	
How do you maximise cost reduction through the adoption of environmental friendly processes and		Internal sustainability council	Environmentally-friendly processes reduce costs in the long run.	Environmentally-friendly processes are tomorrow's improvement	Continuous improvement

Figure 2: Scoring suppliers on environmental policies, environmental risks, and management of environmental risks

Oracle Sourcing enables buyers to source for lowest total cost and make more best-value award decisions based on total cost, not just on unit price. Bids can be scored on any combination of price and buyer-defined criteria such as delivery dates, quality, vendor's reliability, and cost factors related to transportation mode, miles, energy efficiency, and support for recycling. Optimization based on such cost factors and tiered pricing makes it clearer for managers to understand the whole life cost implications of award scenarios. Supplier scorecard integration also makes it straightforward for buyers to factor past supplier performance in current award decisions.

ORACLE Sourcing Home Logout Preferences Help Diagnostics

Requisitions Negotiations Intelligence Administration

Create RFQ Template: Review

Template Name: **Sustainability RFQ Template** Status: **Active**
 Access: **Public** Operating Unit: **Vision Operations**
 Description: **RFQ w/ Sustainability Requirements embedded** Global Template

Header Line Defaults Controls Suppliers

Display Rank As: **1,2,3...** Cost Factors: **Buyer**
 Ranking: **Price Only** Suppliers see their quote price transformed
 Category: Price Tiers: **None**

Update

Cost Factor	Description	Display To Suppliers	Pricing Basis
CO2-e footprint by product	Based on estimated carbon (CO2) footprint by product/line item	No	Per-Unit
Non-renewable energy footprint	Based on amount of non-renewable energy consumed by facilities producing the product	No	Per-Unit
Solid waste footprint	Based on amount of solid waste generated from the facilities that product selected products	No	Per-Unit
Total miles driven_flow_n_transport	Based on number of miles product transported from supplier facilities to buyer facilities	No	Per-Unit
Water footprint	Based on amount of water use by facility/facilities producing the product	No	Per-Unit

Cancel Save Inactivate

Requisitions Negotiations Intelligence Administration Home Logout Preferences Help Diagnostics

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Figure 3: Environmental cost factors

Managers can use knockout criteria that can be used to automatically exclude suppliers from the shortlist. Once finalists are identified, side-by-side and graphical comparisons show at a glance which suppliers provide the best overall value (Figure 4).

ORACLE Sourcing Home Logout Preferences Diagnostics

Requisitions Negotiations Intelligence Administration

Negotiations > Advanced Search > RFQ: 57636 >

Live Console (RFQ 57636)

Title: Corrugated Packaging RFQ Time Left: **0 seconds** Actions: Award by Quote

Overview

Symbol	Supplier	Quote
●	Global, Inc.	33166
■	Eastern Indust...	33167
▼	Allied Manufac...	33168
◆	Industrial Dre...	33169

View: RFQ Summary

RFQ Value (USD) **3,708,567.85**

No Quote Value (USD)

Lines with no Quotes **0**

Potential Savings (USD) **509,736.30**

Potential Savings % **13.74%**

View: Savings by Supplier

Lines

1.1: BOX CORRUGATED 13 1/4X5X4 DFLDR 32B

Select Line	Savings	Quotes
1 Corrugated		4
1.1 BOX CORRUGATED...	12.98%	4
1.2 22 3/4X9 3/4XS...	13.07%	4
1.3 26X12X8 44ECT ...	13.15%	4
1.4 CORR CARTON 26...	13.23%	4
1.5 BOX CORRUGATED...	13.30%	4
1.6 29 3/4X29 3/4X...	13.37%	4

View: Best Quotes by Time

View: Savings by Supplier

Figure 4: Supplier scorecard



Execute Sustainability Contract Clauses with Oracle Procurement Contracts

Procurement teams look for tools to enforce contract and policy compliance, supporting specific contract clauses and supplier codes of conduct, and initiating internal or third party supplier audit programs. To track internal progress, organizations may track percentage of suppliers evaluated/audited, percentage of suppliers signing 'green' clauses, or percentage of spend with sustainable suppliers.

[Oracle Procurement Contracts](#) allows organizations to take control of a contract lifecycle, from authoring and negotiation through implementation, enforcement, evaluation and closeout. Procurement and legal professionals can quickly author contracts that comply with corporate standards, and measure compliance to ensure that negotiated savings reach the bottom line. Contract terms negotiated through Oracle Sourcing automatically generate the resulting contracts for execution. Once signed, users can immediately receive the goods or services against these contracts. The solution enables companies to include and enforce environmental clauses, with contractual agreements based on transactional activities (i.e. percentage of green items delivered) or non-transactional activities (i.e. remittance of ISO 14000 certificate). It also enables suppliers and internal owners to complete deliverables through online collaborations.

Get a 360° View with Oracle Supplier Lifecycle Management

Measuring overall supplier sustainability performance means looking into suppliers' environmental performance disclosure metrics (i.e. GHG Scope 1 and 2 emissions, disclosure to CDP and GRI). Supplier score-carding should take into account and evaluate ethical suppliers through several categories that might include certifications, historical performance, transparency, risk, and sustainability-related innovations.

In this case, Oracle's ability to integrate with suppliers' information databases such as EcoVadis, CDP, D&B, Sedex, Achilles is instrumental to facilitate safe and transparent exchange of information without encountering suppliers' resistance. Supplier sustainability exchange platforms are fundamental to extend supplier collaboration across all goods and services, integrating all business partners, including designers, suppliers, manufacturers, and customers.

[Oracle Supplier Lifecycle Management](#) provides tools for an organization to manage suppliers throughout the relationship lifecycle. Oracle Supplier Lifecycle Management supports this relationship from initial supplier discovery, through qualification and on boarding, to ongoing maintenance, and possible obsolescence. Such a master gives a 360° view into supplier information. Oracle Supplier Management's feature set and technical solution translate to tremendous business advantages – primarily by enabling spend tracking and supplier risk management.

Furthermore, buyer administrators mitigate their risk of engaging in business with suppliers who fail to comply with corporate- or government-set standards through visibility into suppliers' environmental, social and governance data.

Supplier Management utilizes User Defined Attribute technology that allows administrators to add an unlimited range of attributes to the supplier definition and to group these into logical profile sections. The extensible Supplier profile attributes allow disparate information to be captured and stored centrally from a wide variety of source systems including third party data sources such as EcoVadis, CDP, D&B, Sedex, Achilles and others.

The screenshot displays the Oracle Supplier Management Profile Extension interface. At the top, there are navigation tabs for Profile Extension, Registration, Security, and Concurrent Requests. Below this, the 'Attribute Group Details' section shows information for 'SM_Performance_Evaluations', including its internal and display names, description, behavior (Multi-Row), and table layout details (20 columns, 5 rows). A 'Business Entities' table lists 'Supplier Party' with 'View' and 'Edit' privileges. Below this is an 'Attributes' table with columns for Select, Sequence, Internal Name, Display Name, Data Type, Display As, Value Set Name, Part of Unique Key, Enabled, Required, Indexed, Column, and Edit. The table contains 10 rows of attributes related to performance scores and delivery performance.

Select	Sequence	Internal Name	Display Name	Data Type	Display As	Value Set Name	Part of Unique Key	Enabled	Required	Indexed	Column	Edit
<input type="checkbox"/>	90	SM_Quality_Performance	Quality Performance Score	Number	Text Field		No	Yes	No	No	N_EXT_ATTR4	
<input type="checkbox"/>	95	SM_Overall_Quality_Performance	Quality Performance	Char	Text Field	SM_Performance_Response_Values	No	Yes	No	No	C_EXT_ATTR3	
<input type="checkbox"/>	100	SM_Technical_Performance	Technical Performance Score	Number	Text Field		No	Yes	No	No	N_EXT_ATTR5	
<input type="checkbox"/>	101	SM_Environmental_Performance	Environmental Performance	Char	Text Field		No	Yes	No	No	C_EXT_ATTR10	
<input type="checkbox"/>	105	SM_Overall_Technical_Perf	Technical Performance	Char	Text Field	SM_Performance_Response_Values	No	Yes	No	No	C_EXT_ATTR4	
<input type="checkbox"/>	110	SM_Management_Performance	Management Performance Score	Number	Text Field		No	Yes	No	No	N_EXT_ATTR6	
<input type="checkbox"/>	115	SM_Overall_Management_Perf	Management Performance	Char	Text Field	SM_Performance_Response_Values	No	Yes	No	No	C_EXT_ATTR5	
<input type="checkbox"/>	120	SM_Delivery_Performance	Delivery Performance Score	Number	Text Field		No	Yes	No	No	N_EXT_ATTR7	
<input type="checkbox"/>	125	SM_Overall_Deliver_Performance	Delivery Performance	Char	Text Field	SM_Performance_Response_Values	No	Yes	No	No	C_EXT_ATTR6	

Figure 5: Supplier Management Profile Extension

Foster Exchange with Oracle Supplier Network and iSupplier Portal

[Oracle Supplier Network](#) (OSN) is the secure online service that automates electronic document exchange with suppliers. By enabling paperless processing, OSN slashes the cost, effort, and cycle time of managing purchase orders and invoices. OSN is free and works seamlessly with Oracle Fusion, Oracle E-Business Suite, and PeopleSoft applications, enabling procurement and finance organizations to accelerate supplier enablement, simplify connectivity, and reduce costs. Additionally, [Oracle iSupplier Portal](#), with its powerful platform for online collaboration, enables organizations and their suppliers to become more efficient. Suppliers access the latest information, including purchase orders, delivery information, and payment status. The rich two-way collaboration enables suppliers to submit change requests, ship notices, payments, and profile data.

Conclusion

Organizations can embed sustainability in their sourcing and procurement processes using Oracle Advanced Procurement solutions by analyzing whole life costs, driving supplier selection based on environmental, social and governance performance categories, executing sustainability contract clauses, streamlining purchase order processing aligned with environmental policy compliance, and enabling a 360° view into their suppliers' performance while fostering exchanges and communications.

Benefits include:

- » Driving upstream supply chain cost reduction through energy savings, waste elimination, packaging reduction and other environmental performance improvements
- » Improving supplier disclosure to reduce risk, including supply chain disruption, non-compliance, and brand protection
- » Ensuring compliance with supplier auditing
- » Evaluating supply chain sustainability performance with analytics and supplier score cards
- » Supporting information exchange for supplier collaboration



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Hardware and Software, Engineered to Work Together

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