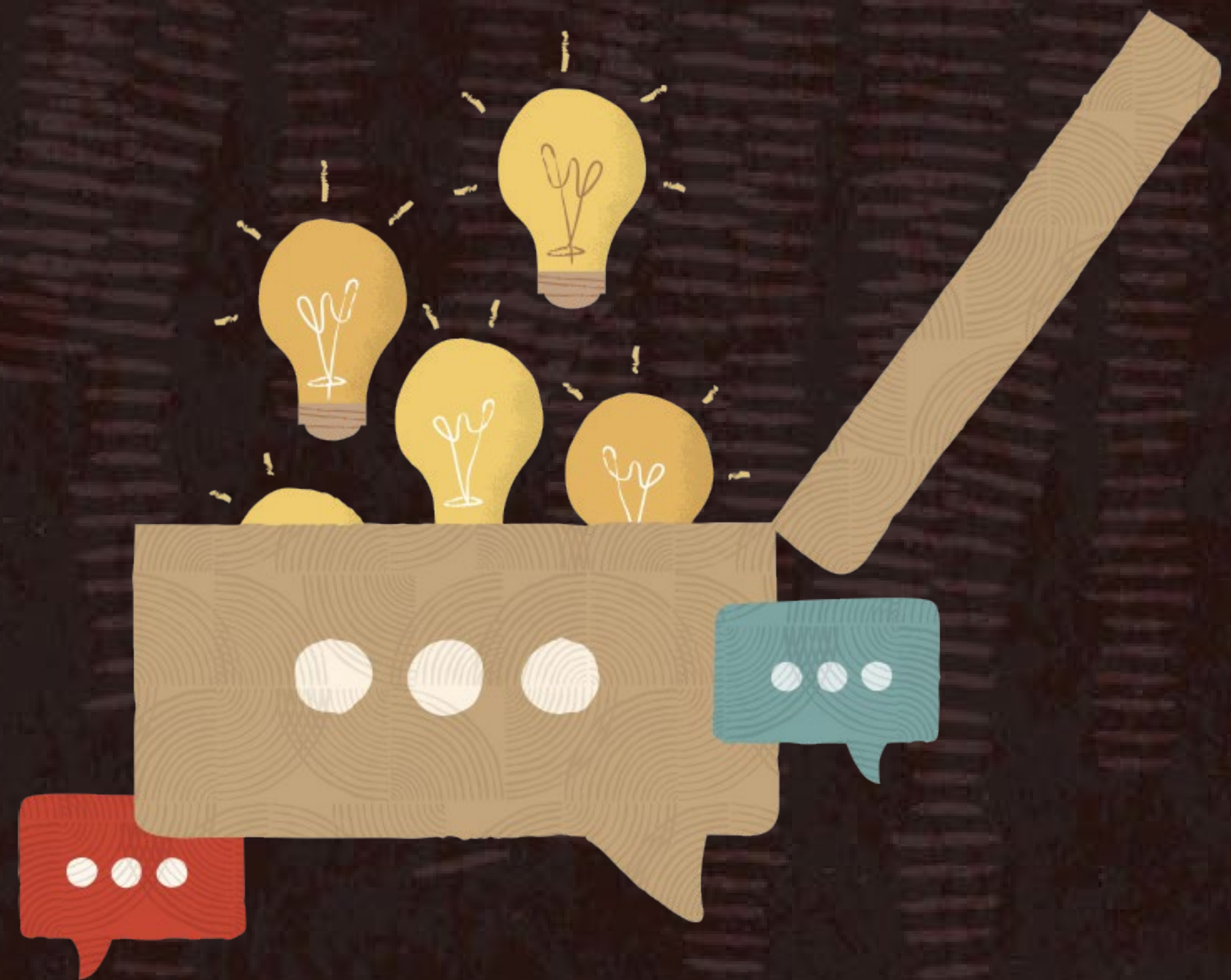


ORACLE

Fueling the race to net zero

Three key energy business models –
and the digital changes to advance them



An industry in transition

Energy, oil and gas (O&G) companies of every kind, whether green leaders, hydrocarbon-focused or somewhere in between, are facing a time of rapid transition. Tensions around the future of fossil fuels, increased market uncertainty and an aging workforce are causing widespread change across industry value chains, and as businesses consider how best to deal with these issues, a new era of energy is emerging.

Radical change is underway

In this new renewables-focused era, industry priorities are shifting from a volume focus to one of value:



From VOLUME...

... to VALUE

What success looks like

Hydrocarbons **volumes and market share**



Diversified/balances assets **portfolio**

Business focus

Finding **new reservoirs**



Maximising production from **existing assets** i.e. lower and more competitive production

Capital allocation drivers

Breakeven economics



Breakeven economics along w/ **carbon economics**

Project focus

Fewer larger projects



Small/medium-sized projects
Few **key strategic hubs**

Digital transformation: the key to unlocking value

As this shift takes place, and organizations consider their strategies for ensuring their value in a new landscape, digital transformation is emerging as the fundamental driver toward future success.

Rapid developments in AI and automation are maximizing efficiency and driving down costs, allowing businesses to get the utmost value out of existing assets and ushering in more agile, decentralized operating models and workforces.

For energy companies across the board, no matter their strategic focus for the future, ensuring they accelerate their digital transformation while reducing the cost and risk of doing so is imperative.



Navigating the energy transition: three main business models

As the energy transition brings new hurdles and drivers, every energy organization has drawn up their own strategic approach to moving forward. And from these approaches, we have identified three main business models:

The O&G Specialist

By maintaining a purely hydrocarbon focus, these companies are set on carrying out business as usual, continuing their path as O&G specialists. Despite (and because of) their focus on traditional energy resources, these companies are as vulnerable as any to the many fluctuations the industry faces.

The Energy Major

These organizations are committed to decarbonizing and diversifying their portfolio, but realistic about the financial and operational hurdles that lie ahead. By maintaining hydrocarbon-based business lines and using the cash they generate to invest in low-carbon innovation, they aim to make the gradual move toward sustainable transformation.

The Low Carbon Leader

Trailblazers in the path toward the new future of sustainable energy, these businesses look to adopt low- and no-carbon practices wherever possible. They face difficult variables when it comes to energy production, distribution, and supply, but consider it a worthwhile trade-off as they look to carve out a market share as early adopters.



The challenges each business model faces

We've defined four key challenges that energy companies face, each of which manifests itself differently for the contrasting business models.

Challenge 1: managing portfolio diversification

As customer appetite and legal requirements shift away from hydrocarbon-based energy sources and toward more sustainable solutions, many energy companies are diversifying their portfolios, adopting more sustainable energy sources in many forms. This diversification requires great nuance and strategy to be properly managed.

How it effects each model

For **The O&G Specialist**, this isn't a pressing issue, since it has made a conscious move away from engaging in such diversification. The reliability and storability of carbon-based energy sources are a key driver for the choices such organizations have made.

The Energy Major, with a diverse range of sources, faces a number of hurdles when it comes to managing its portfolio. By maintaining use of the more storable hydrocarbons, however, it does at least tend to ensure more consistent access, since carbon-based sources are, at least in theory, available as back-up to greener options. For **The Energy Major**, the greatest challenge is one of logistical balance: how to move with the fluctuations of green sources and plan accordingly.

The Low Carbon Leader faces definite difficulties, since the comparative volatility of green energy sources forces it to diversify and juggle between a larger combination of sources – something which requires significant planning and modeling capabilities to navigate. These capabilities are crucial if such businesses are to maintain the supply consistency required to compete.

Challenge 2: Supply disruption and price volatility

Disruption is a reality of today's volatile market, and an issue every energy company must therefore understand intimately in order to counter. With factors such as finances, supply demand, workforce operations and global visibility all at play, it takes the right decision-making, business planning and execution to move with speed, flexibility, and purpose.

How it effects each model

The O&G Specialist faces an increasingly disruptive supply chain, with price volatility and a shifting political landscape each having a part to play. The shock of Covid-19 has been a particularly large factor in this case, seeing fuels such as crude oil becoming less profitable, while the market uncertainty ahead has clouded judgment on when prices may once again fall.

For such businesses it is imperative to improve market visibility, as well as the ability to make financial and operational decisions at speed.

The broader portfolio of **The Energy Major** is best equipped to deal with the issue of supply disruption. By combining both hydrocarbon and green energy sources, it is able to juggle supply disruption – as long as it has the right systems and operations in place to do so.

For **The Low Carbon Leader**, difficulties arise from the relative immaturity of the available technology. While sources such as solar and wind are abundant in terms of supply, the technology is not yet there to store these resources in a cost-effective way. This means that leading green energy suppliers, producers and distributors require highly accurate, reactive, real-time decision-making to harness such a volatile supply chain.



Challenge 3: Streamlining operations

In volatile times, with so many variables to consider, the modern energy organization requires visibility and control over every aspect of business operations in order to maximize efficiency, efficacy and cashflow. Business growth is often fueled by projects, large and small, and to be successful, these projects must be connected with finance and other lines of business, maintaining effectiveness throughout the organization.

How it effects each model

The O&G Specialist suffers from inflexibility. With the project focus remaining on fewer large operations, all of which require site-specific manpower and a fixed global supply chain, operations mirror the moving tides of the industry. Such a model is difficult to scale back, something which becomes ever more problematic as global events such as Covid-19 and waning resources make for less predictable profitability.

The Energy Major's fortunes in respect to streamlining operations are tied directly to its transition toward more carbon-neutral operations, as it looks to navigate a vast shift in its way of working. These businesses face huge operational challenges as they move from volume to value. Scaling back traditional methods means disrupting jobs, dismantling supply chains and rewiring decade-old infrastructure, and so the number one priority is achieving the analytical and strategic insights available to do so in the smoothest of ways.

The Low Carbon Leader's model is best suited to operational streamlining, since it lends itself to a more decentralized, digital-first approach. Without the heavy infrastructure and fixed workforce demanded by more traditional projects, it is capable of great business agility, and the main challenges for these businesses lie in executing this agility. Connectivity, excellent strategy, and high-performance computing are required to pull this off.



Challenge 4: attracting and retaining talent

As industries change, so too do the skills required of the workers who inhabit them, and the energy sector is feeling the weight of its own evolution in regard to recruitment and retention. Retooling the energy company of the future will require an efficient modern workforce, and that means a sustained period of transformation over the next decade. The change will not just be a matter of doing things differently. It will require a fundamental, top-down rewiring, restructuring systems, roles and values as well as embracing greater levels of automation and self-service.



How it effects each model

Without the safety of new, green manifestos to fall back on, **The O&G Specialist** faces an uphill battle when it comes to recruitment as its perceived values become more and more at odds with those of the best talent. Retention, too, takes a hit, as employees begin to wonder quite how such ‘specialist’ skills will serve them in ten years’ time. Inevitably, these challenges force the O&G Specialist’s hand, causing them to pay top dollar for candidates and presenting an even more pressing concern: Can they afford to keep doing so while factoring in the increased financial volatility fossil fuels bring?

The Energy Major finds itself at the center of a war for talent as it looks to hire a future workforce with a vastly different outlook than those that came before. A generation ago, these businesses were big hitters, capitalizing on brand recognition and financial might to attract the very best from the industry and beyond. But a new generation of

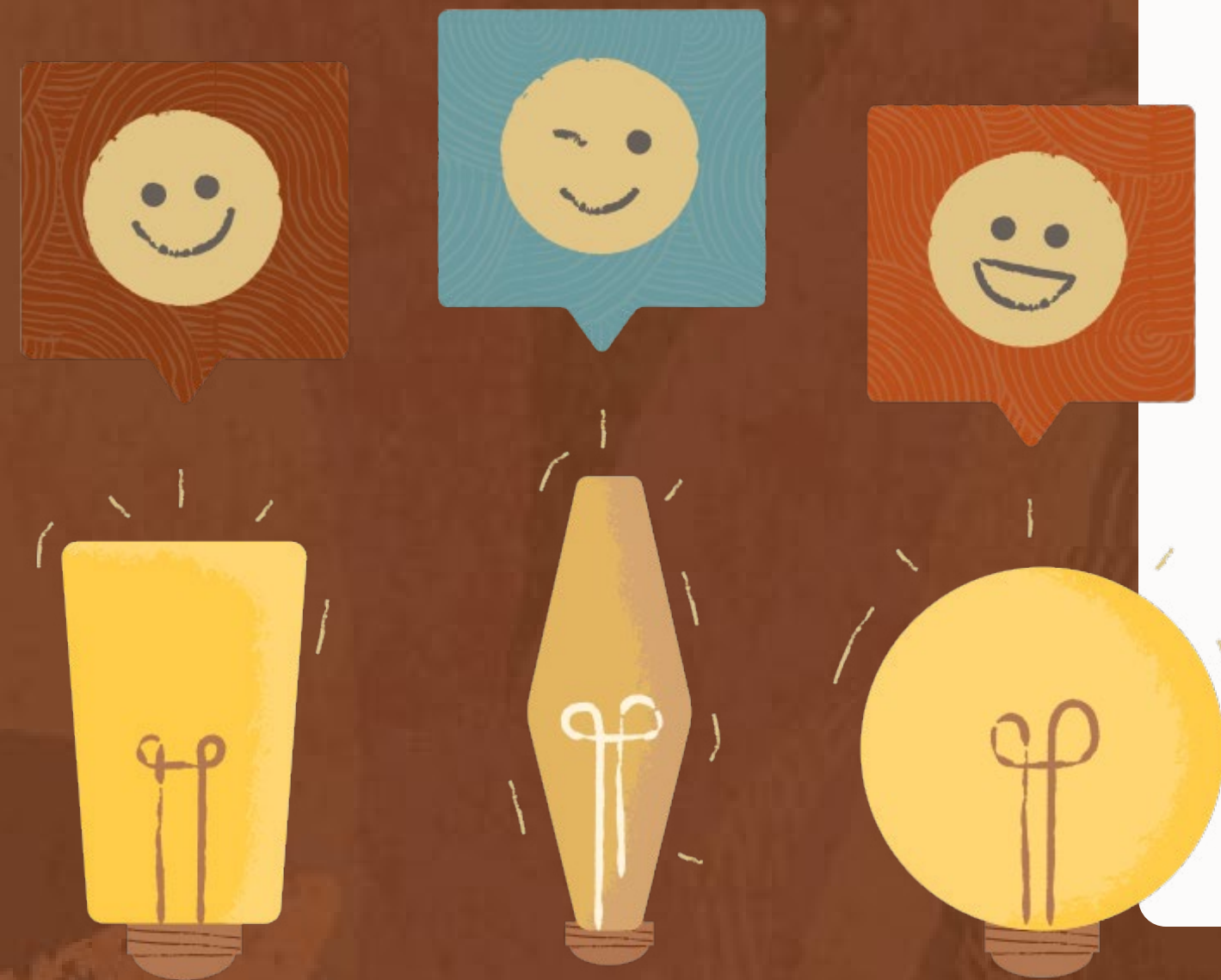
workforce has emerged who treat such businesses’ hydrocarbon-based past with suspicion. For this organization type, perception is once again key. Only by demonstrating their appetite to make positive, innovative difference in the world can they attract a generation of talent that hopes to do the same. Other factors – like an appetite for remote and agile working – will play a key part too.

The Low Carbon Leader faces altogether different recruitment challenges. Though it may be a challenger brand, its reputation for sustainability and innovation has thrust it into the enviable position of attracting a wider array of talent – forward thinkers who can recognize what the industry will look like in years to come. For this business model, the main challenges come with identifying that talent: rethinking their HR business process architecture and target operating model in order to analyze where and how it might be reached.

Addressing these challenges with Oracle's connected energy

Though each of the three main business models and the challenges they face differ, one thing they all have in common is the pressing need for digital transformation. By connecting their energy value chains with top-specification cloud and application solutions, they give themselves the visibility, flexibility and agility to grow within an ever-changing industry.

Oracle's price-competitive cloud-connected technology solutions can help you address each of the challenges above, delivering value through financial and operational outcomes. Combining Oracle Cloud Infrastructure (OCI) and High-Performance Computing (HPC), there's a digital solution for every challenge an energy organization might be facing.



Deftly manage your portfolio with connected planning

When facing the hurdle of portfolio management – whether your business is dealing with growing portfolio diversity like **The Energy Major** and **The Low Carbon Leader** or dealing with an ever more volatile supply like **The O&G Specialist** – the key to doing so better lies with Enterprise Performance Management (EPM).

Oracle's EPM platform shares a framework of technical and functional components among Cloud EPM processes, giving the user a more unified experience and simplified administration across the entirety of the business. By providing simplified visibility across planning, profitability and costs, financial consolidation, account reconciliation, tax reporting, narrative reporting, and enterprise data, it helps you analyze and understand the whole story, so you can act on the fluctuations your portfolio brings.

Plan and execute end-to-end success with supply chain management

No matter what resources an energy organization focuses its business model on, or how its supply chain is structured, disruption is inevitable, and the ability to quickly and flexibly respond to it is an enormous market advantage. In these situations, there is no digital solution more powerful than Oracle's Supply Chain Management (SCM).

Oracle Fusion Cloud SCM connects your entire supply network with a comprehensive integrated suite of cloud business applications designed and built to outpace change. Boasting a huge selection of connected tools including supply chain planning, manufacturing and maintenance, logistics, blockchain/IoT and management systems for inventory, orders and product life cycles, SCM brings together and digests every focus area your business needs to make decisions quickly, while high-performance analytics technology uses machine learning to enhance and simplify your understanding of the vast amount of data available.

Streamline, simplify and centralize with resource planning

At a time when every energy organization is facing financial concerns – whether it be the volatility of fuel prices, the cost of transition or the resources required to innovate new, competitive carbon-neutral alternatives – streamlining must be at the center of every strategy. Fundamental to that process is the implementation of top-level Enterprise Resource Management (ERP) solutions.

Oracle's complete ERP suite is designed and built for continuous innovation. Making use of Oracle's HPC, it uses AI to automate and speed up manual processes, analytics to react to market shifts and automatic updates to go where the market goes, faster – all while lowering costs. Offering visibility across financials, project management, procurement, risk management and more, it's a highly flexible solution that gives you the agility to move and transition with speed.

Find and keep the right talent with human capital management

Behind every great business is great talent. And so, when it comes to digitalization, it is fundamental to put your systems in the very best position to reach out to and retain the best. In terms of your systems, this means Human Capital Management (HCM).

People are at the center of Oracle's HCM solution, which is built natively for the cloud. And while its comprehensive suite of applications works across every HR process from hire to retire, its end-to-end talent management platform provides masterful, user-friendly management for every aspect of the talent lifecycle. From candidate attraction, engagement and hiring to every step of a career's development, it gives the employee device-agnostic control over their own progression, while analytics allow management to make the right decision at every turn.

Take the lead

The race to net zero is speeding up, and no matter what strategic business model your energy company has taken in response, digital transformation is inevitable.

To find out more about how we can help you as you undertake that transformation, [click here](#).



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