

**ENERGY
& MATERIALS**

GETTING PREPARED

for the Workforce of the Future

**HOW DO YOU THINK
YOU COMPARE?**

Analysis
SWOT

WHAT TO FOCUS ON

Momentum
Collaboration
Planning

USING TECHNOLOGY

The 3DS solution

CHANGE IS INEVITABLE

Change is inevitable. As well as managing the exodus of an ageing workforce, the energy and materials sector must prepare to welcome younger, tech-savvy employees who are eager to make an impact, quickly.

Managing this transition will mean keeping pace with industry innovation, addressing evolving societal pressures, and adopting new technologies that ensure organizations keep up with competitors as well as allow for the transfer of knowledge from today's generation to the next.

Read on to find out how to become better prepared for the workforce of the future.



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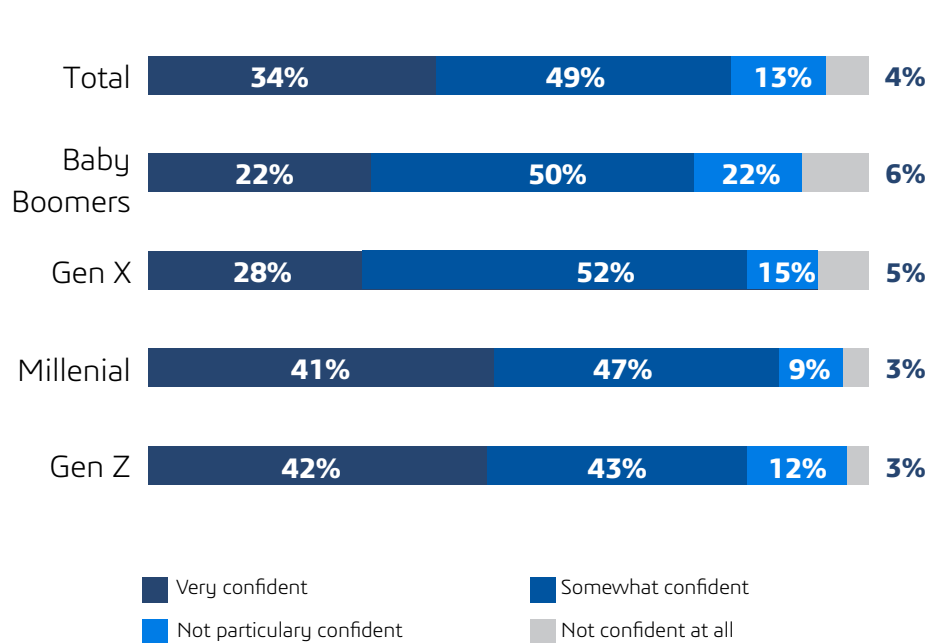
HOW DO YOU THINK YOU COMPARE?

The future will bring many changes, including the rise of intelligent technologies such as digital twins and AI, and an influx of new digital capabilities like social collaboration and automation. Most energy and materials companies are aware of some of the challenges that are on the horizon, but you are not yet in a place to action them.

KEEPING PACE WITH THE NEW GENERATION

The industry somewhat confident with the technology required, but the millennials entering the workforce remain more advanced and comfortable than the bulk of the existing workforce.

How confident are you in your skills and abilities to work with intelligent technologies ?



ADOPTING NEW TECHNOLOGIES AND SKILLSETS

When it comes to a business transformation strategy that addresses and leverages the rise of technological advancements energy & materials companies are falling behind the competition, across industries.

Projected (2022) strategies to address shifting skills needs, by proportion of companies (%)



Source: Accenture Future Workforce Worker Survey 2017

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STRENGTHS

Awareness:

Energy & materials companies know new challenges lie over the horizon and a transformation strategy will be necessary to future-proof their businesses.

Upskilling:

The industry is aware and prepared to develop the skills and workforce necessary to manage the emerging trends and technologies of tomorrow.

“McKinsey research finds that the strongest growth area when it comes to skillsets across industries will be for technological skills, the smallest category today, which will rise by 55% by 2030.

— McKinsey, 2018

WEAKNESSES

Interconnectivity:

Energy & materials companies need to put a greater emphasis on building systems that better connect remote and central location workers to appeal to a generation that values flexibility.

Organisation-wide support:

Everyone will need to focus on how their champions of transformation are enabling adoption across their companies as well as raising awareness of upskilling and learning opportunities so employees don't feel it is solely their responsibility.

“74% of workers believe it's their own responsibility to update their skills rather than relying on an employer.

— McKinsey, 2018

OPPORTUNITIES

Learning:

Changes are happening in the industry all around you. To keep pace energy & materials companies will need to learn from the energy sector's success stories to put in place best practises from the start.

Internal advocacy:

Building support for the changes necessary takes internal buy-in. Generating internal support will enable larger long-term changes are employed efficiently and quickly.

“More than 3,000 business leaders in seven countries found a widespread focus on continuous learning for their workforces.

— McKinsey, 2018

THREATS

Speed:

Putting in the systems and learning mindset needed to rapidly advance your organizations can be difficult in a large business. Making strides soon is essential.

Technological unemployment:

The continued development of technology has the potential to displace a large amount of the workforce. Companies will need to be prepared for managing this so it does not cause negative effects across their organizations.

“73% think technology can never replace the human mind. 37% are worried about automation putting jobs at risk.

— PwC Workforce of the Future report

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MOMENTUM

Finding the right pace to instigate change is crucial. It takes time to implement the systems and process needed to meet the needs of the future, but being prepared for tomorrow requires action today.

COLLABORATION

Switching to new technologies that unite organizations around knowledge and know-how will ensure continuity of work across generations while powering innovation and business transformation. Managing this change must begin from the very top of an organization, but it will require finding the right partners and support across all levels. Collaboration is key to transformation.

PLANNING

Transformation does not become lasting change when implemented on the fly. Planning takes time. Start slow then build up speed to create agility as a mindset – at all stages and levels.

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USING TECHNOLOGY TO CREATE AN ENGAGING WORK ENVIRONMENT

The shift from an ageing workforce to a new generation of tech-savvy employees means a change in how work is done, but also in how knowledge is shared. An immersive and collaborative work environment can capitalize on the knowledge and practices of veteran workers to empower and inspire the workforce of the future.

The **3DEXPERIENCE**[®] platform connects the dots from concept to delivery to project stakeholders, in one integrated platform for your business. Information is up to date and delivered at the right time, to the right person. Workers are better enabled and supported, more effective, and safer on the job, thereby mitigating risk, errors, and unwanted costs.

Use **3DEXPERIENCE** to redefine the worker experience and:

- Transform your business by attracting the skills and workers you need with technology that truly inspires them.
- Put all your company's knowledge and know-how to work to understand the past to navigate the future.
- Enable your employees, change workflow governance and 'experience it before you do it' in the virtual world for consistent, safe and productive work whether in the office or in the field.
- Help your teams innovate better with **3DEXPERIENCE** Twins that model and simulate sophisticated experiences - taking distances between the real and virtual worlds to zero.
- Move beyond optimizing individual disciplines in silos to connecting them to always deliver on time and to quality, and to innovate faster.

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PREPARING FOR THE WORKFORCE OF THE FUTURE

The workforce of today is undergoing rapid change. For the first time digitally-native millennials are taking over Baby Boomers as the largest labor force population, creating an entirely new working environment.

The organizations that will win in this new landscape are those that can manage the shift of knowledge, abilities, mindsets and expectations of the outgoing and incoming workforces.

This will take preparation for what is to come, but also action for what is happening right now. With awareness of the challenge understood, it quickly falls to implementing the right systems and tools, and to finding the right support to set up your organisation for success.

Because the future is already here, and it's time to act.

Our 3DEXPERIENCE® platform powers our brand applications, serving 11 industries, and provides a rich portfolio of industry solution experiences.

Dassault Systèmes, the 3DEXPERIENCE® Company, provides business and people with virtual universes to imagine sustainable innovations. Its world-leading solutions transform the way products are designed, produced, and supported. Dassault Systèmes' collaborative solutions foster social innovation, expanding possibilities for the virtual world to improve the real world. The group brings value to over 250,000 customers of all sizes in all industries in more than 140 countries. For more information, visit www.3ds.com.



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