

# 10<sup>th</sup> World Renewable Energy Technology Congress 2019

21<sup>st</sup> to 23<sup>rd</sup> August 2019

Theme: Renewable Energy Solutions for a Sustainable Future

## **Renewable Energy: Skill Development & Human Capacity Building to meet Future Challenges**

Keynote Address: Thursday 22<sup>nd</sup> August 2019 at 11.30 hrs<sup>^</sup>

Prof Colin Coulson-Thomas\*

The capabilities of people and technologies are inter-related and inter-dependent. Developing renewable energy solutions for a sustainable future is more than just a technological challenge or a human resources one. We need to look at how people and technologies can support each other and remain current and cost-effective at all stages of their life cycles. To quickly scale up, we also need to look beyond high fliers and work with our existing people.

Successive generations of technology can appear much more quickly than previous ones were rolled out. The shelf life of many related skills is correspondingly shorter. Reskilling, upskilling and life-long learning are now urgent necessities. Hence the value of affordable ways of updating people with what they require, as and when they need it, 24/7, wherever they might be, including on the move.

The wider and quicker adoption of renewable energy solutions requires an attitude change and a broader and more diverse skill set among the renewable energy community. Too often technology suppliers expect users to change their practices to suit the requirements of their offerings. For many potential adopters, the promise of a new technology may only become a reality when it is offered in a form that is suited to their needs, means and local context.

Large solar panels for high energy use in urban areas might be inappropriate for poorer and scattered communities. Take up in rural villages might be speeded up if a package of technologies with relevant capabilities were offered in an affordable way, for example paid for on a usage or rental basis rather than by a one-off initial purchase. Some suppliers may need the skills to assemble and/or develop location and sector specific solutions, perhaps in collaboration with the community concerned and suppliers of complementary technologies.

End of life costs are the Achilles heel of some energy sources. Decommissioning costs of offshore oil platforms and nuclear power stations are examples. Some renewable technologies are not renewable in the sense that their physical infrastructure cannot be easily recycled. What will happen to solar panels and batteries at the end of their lives? Can rare minerals be easily extracted from them and reused? We need skills for the full life cycles of technologies.

More rapid take up of renewable energy will reflect its affordability. Companies need to avoid bidding wars for scarce skills in demand. My report *Talent Management 2* is concerned with how to succeed without recruiting expensive stars. Keeping existing staff current can be less risky than importing expensive prima donnas and trying to recruit and develop high fliers for an unknown future. People should be helped to excel at key activities and remain current,

and enabled to handle challenges as, when and wherever they arise. The approaches of many firms are costly and doomed to disappoint.

Some talent management strategies are unsustainable. One should not follow the herd and adopt an approach just because it appears trendy and high status companies champion it. Hype can lead to expensive, time consuming and frustrating journeys, when much better, cheaper and proven alternatives exist.

Talent wars to attract 'the best people' can push up salary costs, be distracting and involve collateral damage. Talented people can also be difficult to manage and retain. A person who is exceptional in one arena may be average elsewhere. It may be cheaper to work with the people one has and put the right support environment in place to enable them to succeed.

Large amounts are spent on expensive people who are not engaged, effectively used or appropriately supported. Views of what represents 'top talent' can also quickly become outdated. We need more flexible ways of making it easier for affordable people to understand complex issues and helping them to do important, difficult and stressful jobs.

Paying for talented people may make little sense if one cannot harness, or capture and share, what they do differently. We need to move on from single-issue initiatives such as preparing a few 'high fliers' for an unknown future to boosting the performance of today's key workgroups and quickly delivering multiple benefits for both people and organisations.

We need affordable approaches that improve results by taking people as they are, rather than as we would like them to be. Performance support offers one route to achieving a high performance organisation and multiple objectives with the people one has - average people who do not cost an arm and a leg to recruit and retain - and an existing corporate culture.

In areas we examined that are critical for business success we found there are few stars in the top quartile of achievement, often less than one in twenty. Those who excel in one area might be hopeless in another, while even top quartile superstars are only very effective at less than half of the critical success factors identified in our studies of winning business.

General competences and training can miss what is important for excelling at a particular job, while focussing development on what annual assessments suggest people are not good at can be a costly indulgence. Much greater returns on investment can often be obtained by helping people to become even better at things that interest them and which they do well.

Many corporate initiatives demotivate and deskill. People have to modify how they work to fit in with the requirements of a technology. Thoughtful individuals are forced to operate according to the rules of systems to which they become an appendage.

Technologies that operate as black boxes and quickly produce answers, responses and solutions can deskill their users and increase dependency. An engineer might weigh sensory clues such as noise and vibration in order to identify the source of a problem. The use of a push button device that speeds up this process may result in the erosion of this capability and the replacement of the engineer by someone who is cheaper to employ or self-diagnosis.

Diagnostic devices have their advantages. They can ensure consistency of performance and be easier to update than humans. The deskilling and increasing dependency of users is not an inevitable consequence of their introduction.

Transparency can allow users to understand how answers are arrived at. Windows that open and give reasons for outcomes can increase capability with each use. A relationship between people and technology that increases the capability of both enables more complex problems to be addressed. It might also enable repair or renewal as a responsible option to replacement.

Many companies adopt general, expensive, time consuming and disruptive approaches to increasing performance such as corporate wide restructuring, motivational drives or culture change programmes. They often fail to deliver. Before they are implemented, requirements and priorities change. Opportunities are missed during transformation journeys.

The results of reorganisation and recruitment drives can be overtaken by events. In contrast, a quicker and more focused approach such as changing the support provided to key workgroups can yield multiple benefits and deliver large returns on investment. Continually updated support can ensure people stay current and remain vital.

My *Talent Management 2* report advocates assessing the roles and tasks that contribute most to priority objectives, ensuring people undertaking them excel by putting relevant critical success factors in place, and providing the workgroups concerned with appropriate support.

Performance support is a focused, relatively quick and cost-effective way of securing large returns on investment, engaging people and meeting talent-on-demand requirements. It can be individualised and easily updated. People can learn and build their skills with each use. It can also be designed to match how they prefer to work and operate.

Our challenge is to build mutually beneficial and capability enhancing relationships between people and renewable energy technologies to the advantage of both and our planet. Like the effective use of artificial intelligence (AI), performance support can complement human capabilities and intelligence. People and technology can evolve together in a sustainable way.

#### Selected Bibliography

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\*Prof (Dr) Colin Coulson-Thomas, author of *Talent Management 2*, *Transforming Public Services*, *Winning Companies*; *Winning People* and *Developing Directors* is President of the Institute of Management Services. He has received international recognition for his work as a change agent and transformation leader and helped directors in over 40 countries to improve director, board and corporate performance. Colin also leads the International Governance Initiative of the Order of St Lazarus, is Director-General, IOD India, UK and Europe, chair of United Learning's Risk and Audit Committee, Chancellor and a Professorial Fellow at the School for the Creative Arts, an Honorary Professor at the Aston India Foundation for Applied Research, a Distinguished Professor and President of the Council of International Advisors at the Sri Sharada Institute of Indian Management-Research, a Visiting Professor of Direction and Leadership at Lincoln International Business School, and a member of the advisory board of the Aravind Foundation and ACCA's Governance, Risk and Performance Global Forum.

An experienced chairman of award winning companies and vision holder of successful transformation programmes, Colin is the author of over 60 books and reports and he has spoken at over 300 international events. He has also held public appointments at local, regional and national level and professorial appointments in Europe, North and South America, Africa, the Middle East, India and China. His research has involved a comparison of data sets covering key corporate activities in over 2,000 companies and over 400 professional firms, and an examination of what certain alternative approaches deliver. Colin was educated at the London School of Economics, London Business School, UNISA and the Universities of Aston, Chicago and Southern California. He is a fellow of seven chartered bodies and obtained first place prizes in the final exams of three professions. He obtained the CSR Lifetime Achievement Award at the 2018 CSR Leadership Summit.

*Talent Management 2* by Colin Coulson-Thomas is published by Policy Publications. Reports on critical success factors for key corporate activities and what high performers do differently in these areas, along with *Transforming Public Services* which applies lessons from the investigation to the public sector, *Winning Companies*; *Winning People* on helping average people to excel at difficult jobs and *Developing Directors* on building an effective boardroom team are also available from Policy Publications: [www.policypublications.com](http://www.policypublications.com)