PEOPLE POWER & SUSTAINABILITY

Investors need greater insights into the people creating our sustainable organisations, according to researchers **Carol Royal** and **Loretta O'Donnell**.

Carol Royal

Loretta O'Donnell

Several programs developed across business schools tend to have a theme of education *about* sustainability, rather than a focus on education *for* sustainability – that is, developing skills to work within and improve the quality of sustainable organisations. In particular, there is a gap in professional development of both investment managers and financial analysts concerning the social aspects of sustainability, including human capital, and how to analyse them from an investor's perspective.

There is an increasing awareness of intangible value within listed firms and with the widespread use of the United Nations Principles of Responsible Investing, the pressure is on investment managers and financial market analysts to use tools other than those that focus on tangible assets, and tend to generate commoditised investment products and investment research on listed firms. However, there have traditionally been few models for analysts to use to interpret and use qualitative human capital data.

To overcome the knowledge gap, UNSW academic staff members Dr Carol Royal and Ms Loretta O'Donnell have drawn on award-winning research to assist professionals to focus on the analysis of human capital, from the point of view of investors. Professionals are challenged to develop skills in human capital analysis on listed firms, using publicly available information, to give them insights into potential future financial organisational performance. They rate the relative strength of human capital systems of a group of ASX listed firms, according to selected human capital metrics and models, to provide insights to potential investors. Professionals with backgrounds in accounting, finance, environmental management, management and human resources all contribute different perspectives to help bridge the knowledge gap in the marketplace. O'Donnell and Royal have been lending their expertise to both European and Australian funds managers and investment banks, who have recently created financial products based on human capital analysis and/or used human capital research as a filter based on the evidence that human capital is a lead indicator of future financial performance.

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As one portfolio manager noted recently, human capital potentially provides a key factor in assessing whether a listed firm is able to execute its strategy. This is an increasingly critical concern of capital markets, which need to be able to analyse and invest in the potential future value of firms.

Even more widespread professional development of analysts and advisors to the financial markets is needed, incorporating additional models, frameworks and expert systems designed to codify and accelerate insights from the principles of human capital analysis. Once the investment management and securities and derivatives industries are more systematically educated in human capital principles, the more we are likely to see increased pressures on listed companies to improve and to disclose the specific ways in which their human capital systems are designed to execute corporate strategy and enhance future firm value.

Dr Carol Royal and Loretta O'Donnell are researchers in the School of Organisation and Management.

STAY COOL ON GLOBAL WARMING

When it comes to "the inconvenient truth", actions will speak louder than statistical predictions, says **Professor Ian Wilkinson**.

Professor Ian Wilkinson

Professor Scott Armstrong, a Professor of Marketing at Wharton Business School in the US has challenged Al Gore to a wager of $10,000 that global temperatures will not rise to dangerous levels in the coming decade. The bet was based on a paper he presented at a conference in New York on Forecasting in which he criticises the methodologies used to predict global warming and argues that no change in temperature is the best forecast.

I have long been an admirer and user of Professor Armstrong's research but here he is in serious error. I'm not sure such forecasts of global temperatures have been made but, as a marketing professor myself, I want to respond on behalf of those who have a better understanding of the systems and methods involved. Basically, he gets things upside down.

He confuses forecasting based on the statistical models of socio-economic systems, with equations describing the way material, chemical, biological, geological and climate systems work which are based on established results in physics, chemistry, biology and geology. Such models are not like those used in market forecasting. People's behaviour is difficult to forecast because they respond to the results of bets like this and forecasts we make about them, whereas atoms, molecules and creatures don't read and respond to newspaper reports. Their behaviour is hardwired in.

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Climate change models are based on known mechanisms driving the behaviour of our physical and biological world. They are like Einstein's equation $E=MC^2$, which is not derived from statistical models of the way measures of energy, mass and the speed of light wiggle around together over time and place; it is derived from serious physics theory building on the work of people like Isaac Newton and James Clerk Maxwell and confirmed by carefully carried out experiments.

The same goes for equations describing chemical systems, including carbon, as well as biological, geological and climate systems. The equations describe identities, not statistical models, that capture the way something becomes something else in a material, chemical and ecological system. The "predictions" are no more than working out of the maths, like saying 2+2 predicts 4, which is plain silly! When we burn fossil fuels, we turn one type of thing (oil, gas, wood, coal) into something else and part of that is carbon emitted into the atmosphere.

We don't know for certain what exactly will happen with climate change and when, but for different reasons than the Professor suggests. First, our measures of the mechanisms involved are not precise and complete. We don't have weather stations everywhere measuring rain, sunshine and heat, and there is another problem – the systems involved are non-linear and potentially chaotic. You cannot simply add a bit of an effect on the outcome due to this and a bit due to that and derive a result – but this is what statistical models do, by and large. Such models are statistical only in the sense that numbers are involved.

Science is not about taking a vote among scientists about what is right. Einstein didn't survey physicists to determine if it was $E=MC^2$ or $E=MC^3$. It was established based on evidence and theory and knowledge about how things work. This is what Professor Armstrong fails to grasp along with many others, because the truth is challenging and inconvenient to some. But it is not inconvenient really.

We have the means to do something about it and many are concerned and want to act. By facing up to the challenge, we can unite us against this common foe and ignite innovation and opportunities of all kinds.

Ian Wilkinson is a Professor of Marketing in the Australian School of Business.