

Technology, automation and Al: According to a 2019 McKinsey report, According to a 2017 inichinsely report, it is estimated that 25-46% of current work activities in Australia could be wurkacuviues iii rusii aiia cuuiu ve automated by 2030, helping to drive a aucomaceu by 2000, neipins county personal renaissance in productivity, personal income and economic growth. (Taylor et al., 2019)

> conduct 'work of the heart'. Robots are learning to understand and mimic human tone, but are less able to exercise emotional, judgement or champion professional ethics."

(Deloitte Insights, 2019)

Deloitte Access Economics (2019) predicts that soft-skill intensive occupations will account for two-thirds of all jobs by 2030. Work of the future will see technology augmenting human capability and will allow

individuals to focus on higher value-added

Jobs will increasingly need us to

According to the National Skills Commission (2020), According to the National Skills Commission (2020), be "75% of employers considered employability skills to be "75% of employers considered employers than to be important than to be important than to be important to be imp or employers considered employability skills ". as important, if not more important, than technical skills". Soft skills made up more than half of the top 10 skills most demanded in ICT job Communication skills (42%) postings in 2020: Teamwork/Collaboration (23%) success at Google are all soft skills." Problem-solving (18%) Structured query language (14%) The seven top characteristics of Planning (17%) Customer service (13%) Project management (12%) Troubleshooting (11%) Writing (11%) (Deloitte Access Economics, 2021) Java (10%). (Strauss, 2017) Automation is reshaping work and the skills demanded for work:

Ine demand for advanced cognitive skills and the demand for sociobehavioral skills is increasing, whereas the demand the chille is waning Meanwhile the chille is waning the chille is want to be children to be childre The demand for advanced cognitive skills and whereas the den sociobenavioral skills is increasing, whereas the demand to narrow job-specific skills is waning. Meanwhile, the skills narrow job-specific skills is waning. narrow Job-specing skills is waning, weanwhile, the skills in demand.

associated with 'adaptability' are increasingly in demand.

This combination of energing compitive eville (critical associated with adaptability are increasingly in definition of specific cognitive skills (critical This combination of specific continuous cont Inis compination or specific cognitive skills (critical skills compination or specific cognitive skills location of specific cognitive skills (critical skills and sociobehavioral skills and sociobehavioral skills and curincity) is transferable across inhe thinking and curincity) is transferable across inhe thinking and curincity) is transferable across inhe thinking and curincity). There will be a shift from work of the . hands (manual labour) to work of the head (cognitive tasks), towards work of the heart: unnking and curiosity) is transferable across jobs. (creativity and curiosity) (The World Bank, 2019)

The demand for workers who can undertake nonroutine cognitive tasks, such as high-skilled (The World Bank, 2019) research, is increasing.



characteristics will more than double over the next two decades as workers shift into tasks that require uniquely. human skills such as empathy, leadership, team work and The importance of coordination. Over their lifetime, Australians will need to spend an additional 3.5 hours per week developing these uniquely human skills." (AlphaBeta, 2019)

Silicon Valley Wants leaders who

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Australia, in the future, the most valuable skills will be distinctly

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burgan characteristics According to AlphaBeta's (2019) report for Google Students need what computers cannot provide: inference, are story tellers.

(Condee, 2016) human characteristics.

intuition, and imagination."

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It seasier to mathematical rules (knowledge) than it is to teach it to drive (a characteristic). In particular, (an ability) or be creative (a characteristic) and contact descendent bursts of the contact descendent bursts of the contact descendent bursts of the contact of the contact descendent bursts of the contact of an ability of be creative to characteristic. In particular, complex and context-dependent human characteristics complex and context-dependent human characteristics. comprex and context-dependent numaricinar acteristics like empathy or leadership are challenging to translate into a language that a machine can understand. This into a language that a machine can understand. This means that any skill set comprising even a small share means that any skill set comprising the demand of but one and the d means that any skin set comprising even a small share of humans of tacit capability will remain the domain of humans

because tacit skills cannot be codified." (AlphaBeta for Google Australia, 2019)

technology married with liberal arts, married with the humanities, that yields us the results that make our heart sing. **3 3**

Skilling-up for an Al-powered world involves more than science, As computers behave more important I and lader art history technology, engineering and maths:

As computers behave more like humans, the social sciences and humanities will become even more important. Languages, art, history, humanities will become even more important human development actions at his or not a seconomic of the seconomic o numanities will become even more important. Languages, art, history and human development that the conomics, ethics, philosophy, psychology and ethics, philosophy, psychology and ethics, philosophy, psychology and ethics, has each critical nhilosophical and ethics has economics, ethics, philosophy and ethics has economics, ethics, philosophy and ethics has economics. economics, ethics, philosophy, psychology and human development
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be instrumental in the development courses can teach critical, philosophical and ethics-based skills that will be instrumental in the development and management of Al solutions, be instrumental in the development and management and management and management of Al solutions. (Brad Smith, Microsoft President and Chief Legal Officer, Brad Smith, Microsoft President and Chief Legal Officer, on a Smith, Microsoft President of Microsoft of Microsoft of President and Chief Legal Officer, on a smith on a construction of the Microsoft of President and Harry of President Crown common of the Microsoft of President of the Microsoft Shum, Executive Vice President of Microsoft, 2018; Shum & Smith, 2018; Shum & Smith, 2018; Shum, Exercise 2020). Eards 2020, E ana kesearch Group; Snum & Smith, 2018; See also Doidge & Doyle, 2020; Forde, 2020)

The soft skills that emerged from humanities can help give us answers on some of the most complex questions and problems in science and technology. Studies within humanities teach students to evaluate complex and sometimes flawed or fragmentary information by skeptically and carefully considering evidence and considering more than one side of every question. By comparing information with different points of view and using critical and creative thinking, students are taught to make a subjective and effective decision, which is one of the key skills of the 21st century (Pavlica et al., 2020) job market."

> scientists must consider how their To be truly innovative, work will affect the world and its (Pavlica et al., 2020) inhabitants."





