

Topic

Gamified and Digitised Technology to help empower minority and under resourced groups to fuel their advancement and rise

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Special focus area: Emerging skills requirements for the future of work (industry 4.0), namely in data science and AI-enabled industries; platform economy and learning platforms; transferability of skills through platform work.

Key words: Emerging skills, Future of work (industry 4.0), Human Skills, Lifelong learning, Women in Technology, Up-skilling, Re-skilling

Abstract

The issues and challenges confronting the changing face of the global workforce, like automation, technology advances and a global shortage of skilled labour, are expediting the need for business and economies, to quickly adapt and drive the necessary upskill/reskill of employees to be ready. The need is global, and just as acute in disadvantaged countries. Economies, and their leaders, who think beyond technical skills and seek to avail themselves of market leading solutions, and help their people invest in human skill development will thrive.

The future of work looks different

Research shows that two-thirds of all jobs will be soft skills intensive by 2030¹, compared to half in 2001. Furthermore, according to McKinsey², all global citizens will need 56 foundational skills (Deltas) to increase the likelihood of employment, higher salaries, and increased job satisfaction. Forty-three of the fifty-six of these will be human skills such as communication and collaborative problem solving. This need will be global and industry agnostic so all walks of life, from the privileged through to the disenfranchised and disadvantaged. Those who fail to take advantage of this shift in focus, and fail to avail themselves of the education required to upskill and be ready will be left behind.

Technology's role within organisations is evolving from automating the business to being the business. Industry trends and environmental factors are disrupting the traditional service requirements of organisations. While AI will increasingly support organisational efficiency, automation still requires human skills to tailor solutions to unique business requirements. Machines will be unlikely to possess human skills like creativity, nuance & sensitivity, collaboration, and conceptualised intelligence. These new skills will not only be essential assets for business success, but also for personal growth and happiness. While specific hard skills will continue to be important in this fourth revolution; with new hard and technical skills continually emerging; soft skills will become the priority, regardless of industry, position, and seniority of the role.

¹ Deloitte Access Economics: Premium skills, the wage associated with human skills (2018)

² McKinsey & Company: Defining the skills citizens will need in the future of work

56 Foundational skills that all citizens will need in the future of work

56 DELTAS¹ across 13 skill groups and four categories

<h3>Cognitive</h3>		<h3>Interpersonal</h3>	
Critical thinking <ul style="list-style-type: none"> ● Structured problem solving ● Logical reasoning ● Understanding biases ● Seeking relevant information 	Planning and ways of working <ul style="list-style-type: none"> ● Work-plan development ● Time management and prioritization ● Agile thinking 	Mobilizing systems <ul style="list-style-type: none"> ● Role modeling ● Win-win negotiations ● Crafting an inspiring vision ● Organizational awareness 	Developing relationships <ul style="list-style-type: none"> ● Empathy ● Inspiring trust ● Humility ● Sociability
Communication <ul style="list-style-type: none"> ● Storytelling and public speaking ● Asking the right questions ● Synthesizing messages ● Active listening 	Mental flexibility <ul style="list-style-type: none"> ● Creativity and imagination ● Translating knowledge to different contexts ● Adopting a different perspective ● Adaptability ● Ability to learn 	Teamwork effectiveness <ul style="list-style-type: none"> ● Fostering inclusiveness ● Motivating different personalities ● Resolving conflicts ● Collaboration ● Coaching ● Empowering 	
<h3>Self-leadership</h3>		<h3>Digital</h3>	
Self-awareness and self-management <ul style="list-style-type: none"> ● Understanding own emotions and triggers ● Self-control and regulation ● Understanding own strengths ● Integrity ● Self-motivation and wellness ● Self-confidence 		Digital fluency and citizenship <ul style="list-style-type: none"> ● Digital literacy ● Digital learning ● Digital collaboration ● Digital ethics 	
Entrepreneurship <ul style="list-style-type: none"> ● Courage and risk-taking ● Driving change and innovation ● Energy, passion, and optimism ● Breaking orthodoxies 		Software use and development <ul style="list-style-type: none"> ● Programming literacy ● Data analysis and statistics ● Computational and algorithmic thinking 	
Goals achievement <ul style="list-style-type: none"> ● Ownership and decisiveness ● Achievement orientation ● Grit and persistence ● Coping with uncertainty ● Self-development 		Understanding digital systems <ul style="list-style-type: none"> ● Data literacy ● Smart systems ● Cybersecurity literacy ● Tech translation and enablement 	

¹Distinct elements of talent.

Soft skills are the skills that will differentiate high performance in the future. Youth will encounter jobs in the next decade that don't exist today, making transferable soft skills as or more important than technical skills in isolation. Today, secondary, and higher education curriculums don't offer dedicated programs to teach these skills. Yet, 97% of businesses require people with both technical and soft skills and 25% of employers have difficulty filling entry level vacancies because applicants lack soft skills. Successful organisations are built on the productivity and dedication of their employees and the pandemic has reshaped the meaning of the "workplace" and transformed employee expectations about their experiences at work in 2022 and beyond.

People with strong human skills will form deeper connections with colleagues and customers. This ultimately serves as a strong foundation for peak workplace performance in terms of innovation, adaptive thinking, collaboration, and more. Human skills are so highly valued because they are transferable skills that can be implemented in any company position. These allow employees to become multi-disciplinary and very adaptable.

But how do we democratise and give access to upskill opportunities to all that need them, and allow these traditionally disadvantaged to allow them to rise and thrive? How do we empower disadvantaged groups who make up most of the world's population, and transfer the availability of choice to the majority not just the small percentage of people who can afford to make this choice today? How do we cater to the masses so that they can be ready for the future of work and share in the choices and opportunities that are given to the select few today?

Scalable, affordable, curated, and digitised EdTech opens up world leading upskill programs

Technology has become the great enabler in terms of democratising accessibility to solutions that can help ensure emerging economies do not get left behind and are able to provide their citizens with access to quality world class skills development through technology-enabled learning.

Recent developments in technology and how digital tools and capabilities are enabling advanced ways to uplift the whole learning process. With innovations in cloud computing, emerging technologies and affordability factors have made access to wide community groups in geographic regions far easier than before. These emerging tools are not just designed for teaching and up-skilling in a particular learning domain, but greater emphasis is placed on the learner. Emerging tools focus, and even obsess, on the student/learner experience and engagement underpinned by advanced analytics to assess and track learner performance. Wide-spread deployment and adoption of internet capability in the regions or developing countries (like the South Pacific) has provided residents with similar tools and content as any other developed country.

Digital transformation was a silent strategy item in most organisations' roadmap; however, the recent pandemic has provided a level of urgency to speed up that agenda for longer term survival. A successful transformation includes leveraging the technical process and product change by developing workforce skills that support this evolution. Investing in people to develop skills of the future is fundamental to building organisational resilience and supporting transformation at scale.

This digitisation concept is also being adopted by learning institutions with a view to driving better engagement and student experience. Government bodies are also addressing how they can re-skill and re-train the local workforce so that they are aligned with the future of work. Non curated and often disjointed EdTech solutions can make it difficult for end users to know what to invest in and where to start their learning journey. Collaboration across solution providers can help strengthen propositions and simplify what is available to learners who are looking to up-skill. We bring you two such providers --Maxme and Crystal Delta--who are leading the charge globally.

Who is Maxme?

Maxme exists for the sole purpose of helping humans thrive. They help people all around the world, turn up every day as the best version of themselves. Students, people looking for work and people at work looking to advance and grow. Maxme has a vision to be a global leader in democratising human skills development through providing innovative and affordable training tools accessible to anyone, anywhere, at any time they want it.

Human skills or 'soft skills' like self-awareness, critical thinking, negotiation, and communication are what enable humans to make deeper connections. Through these deeper connections to self and others we can understand and utilise our strengths, improve our interactions, transform the way we look at and approach problems and thrive on both professional and personal levels.

Youth and young professionals will more easily identify the technical skills needed to fulfil role requirements but may not yet have the foresight to anticipate the critical human skills for workplace success. Maxme programs are designed to deliver both breadth and depth of critical human skills, and can be delivered either standalone via Hodie app, or as a supplementary offering that sits alongside a more technical-based course. Maxme pricing structure and freemium model removes the cost barrier, making Hodie highly accessible as part of the deliberate approach to democratise learning and make it more easily available. Maxme believes this approach will create a more resilient future workforce and promote lifelong learning amongst global citizens.

To bring this to life, Maxme has developed a suite of innovative, technology-enabled learning experiences to address the increasing demand for human skills to support the changing work environment, including:

Hodie - A first-of-its-kind mobile application providing educational content on vital soft skills to address the work readiness gap and support lifelong learning and development of human skills. Hodie is available on the iPhone and Android platforms.

Amica - A blended in-class and online schools program run over 3, 4 or 5-days to improve work-readiness skills. Amica has been delivered to a number of high schools within Australia and there are further plans to roll-out the program to financially challenged schools.

Raeda - A human skills mentoring, and coaching service developed to complement the Hodie self-paced program both in-app and available virtually through group coaching.

Modum - Reporting and insights tool for individuals and organisations using Maxme products and services.

Typically, comprehensive human skills development is only provided to a privileged few - employees who have been selected for specialist attention and coaching within large corporations. Developed based on qualitative and quantitative research, their suite of human skill development offerings comprises a blended approach combining in-person, virtual and app-based options. We underpin the learning experience with application of key frameworks aligned to cognition, motivation theory and the fundamentals of human behaviour. Our products and programs are based on a combination of research, science, and the lived experience. In concert, all three aspects bring about tried and tested, practical and relevant learning that ultimately serves as a strong foundation for peak workplace performance in terms of innovation, adaptive thinking, collaboration, and more.

Maxme products are underpinned by innovation through research and practise: They have learnt by researching, doing, and by sharing their learning with peers and clients. They blend Vertical (Mindset) and Horizontal (Skillset) development: a focus on leaders and leadership, building relationships and cultures of adaptive capacity. They have expertise in a variety of approaches: including Adaptive Leadership, Adult Development, Complexity, Coaching, Strategic Thinking, Systems, Group Process work, Experiential Learning, Appreciative Enquiry, Growth Culture and Organisational Change.

The drive is to design and enable development programs that transform the way participants think and operate in an increasingly complex world. In their experience, longer, multi-day, multi-module and blended programs are more effective in developing the adaptive or complex thinking abilities needed for leaders to be successful in VUCA contexts. At the heart of this approach lies a focus on learning that is woven into the daily fabric of working life, not solely through a separate program or intervention. It involves everyone learning alongside, and as part of, their regular operations, daily routines, and conversations. The aim is that everyone, everyday works on developing themselves, to reach their full potential.

The Maxme approach is designed to support workers at multiple levels and the experience lends itself to bite sized interventions that can be easily and readily applied immediately in life and work. Hodie takes users through curated human skill areas and guides them to 'learn', 'do' and 'reflect'. The experience is based on modern adult learning principles that scaffolds learning with timely actions and reflection to make progress and development sustainable. Connection builds trust and is the foundation of great teams. Maxme provides immersive and vibrant learning experiences that are fun, personalised and apply highly gamified learning for stickiness, with leader boards, assessment quizzes, and activity-based actions to create a little bit of healthy competition.

At the formal education level, this includes going beyond traditional curricula to enable blended in-class, remote and app-based applications (in resilience, negotiation, and communication skills etc.), empowering learners to better plan and navigate their professional and personal lives. Their proposed solutions also address employer challenges in sourcing graduates and staff with skills required to build a resilient workforce. Fulfilled via fully curated programs, learning experiences are designed to foster a culture of life-long learning that has ongoing positive emotional, social, and economic benefits and impacts.

To realise their mission to help as many people as possible to increase their employability and work-readiness through human skills development, they're committed to ongoing research and innovation activities. The ever-changing landscape requires an internal focus that seeks to stay connected and adapt to emerging thinking and most importantly, stays connected to the changing needs of end users as the complexity of their working life increases.

A crucial focus area for their business is the empowerment for females, with initiatives designed to increase numbers of females working in male-dominated sectors including Technology and Trade-based sectors and supporting the growing imperative to increase the female: male ratio in these industries. Their solutions have high potential for low-cost scalability, democratising access for lower- and middle-income communities to promote

equity and inclusion. Specifically, there are identified opportunities for countries with high service-based offerings requiring people such as helpdesk staff with communication skills to provide optimal customer experiences to international markets.

Who is Crystal Delta?

A passionate crew of EdTech pioneers, CD (Crystal Delta) are ready to make waves in education. We believe that for students there is no greater feeling than a sense of accomplishment that they get from productive learning experiences and for an educational organisation, there is no greater feeling than being able to master the development of those productive learning experiences. To achieve maximum impact, our products empower teachers, experts, and educators to help in efficiently designing and delivering educational experiences that engage your learners to achieve productive learning outcomes.

Crystal Delta has successfully developed technology solutions that are now used by many organisations globally. Apart from many deployments around the world, our digital platforms have enabled introduction of new courses online in the South Pacific region.

End-2-end Digital Learning platform – Xen.Ed – Cloud hosted service, cost effective and easy to deploy.



Whether you are looking to supporting K-12 teaching, postgraduate learning, company-wide training, onboarding new clients or extending your social impact, Xen.Ed has you covered with its full-stack learner-centric solutions. From efficient student registration portals, interactive learning experiences, easy to build quizzes, and assessments, all the way through to super-charged features like eCommerce, browsable course marketplaces, certificates, and video streaming Xen.Ed delivers robust, powerful, and engaging learning for all levels and needs. Xen.Ed supports schools, TAFE, Registered Training Organisations (RTOs), Non-profits, universities, and businesses, to deliver successful online learning experiences. Regardless of the industry you are working in Xen.Ed provides you with everything you need to meet your educational and business needs.

Limitless Course Authoring - Create and deliver modern digital learning experiences. Xen.Ed Authoring unlocks a sharp and intuitive course authoring tool that equips teachers with the power to create interactive, responsive, individualised and thoroughly engaging learning content.

Flexible Learning Modes - Integrate face-to-face, hybrid and online learning. Xen.Ed empowers you to choose the appropriate learning mode for each context, competency, or requirement. Allow learners to join sessions online via Zoom, G-Meet or BigBlueButton, with video conferencing.

Mobile Friendly - Create highly responsive, mobile-friendly course pages within minutes and without coding. Xen.Ed Authoring ensures content creators are able to expand their possibilities to deliver intuitive and engaging learning on all types of digital mediums.

Fully customisable learning - Created for customization. Take complete control of your learning platform and customize Xen.Ed to match your brand identity. Personalize your domain name and imprint your brand across the entire customer journey, from student registration to certification leverage Xen.Ed's powerful custom themes capability to match your existing brand identity.

Interactive and Engaging content - Engage learners with rich and interactive learning content with powerful learning tools. Easily add video, SCORM, H5P, interactive e-books, quizzes and more to capture attention, increase engagement and improve the success and satisfaction of your learners. Xen.Ed's built-in discussion forums, student surveys, and embedded chat features enrich your learning community.

Data and Analytics - Leverage platform's built-in analytics and reporting modules to gain full access and control over your data. Efficiently explore, review, schedule & download learner and course data using fast and intuitive dashboards. Quickly visualize data in various forms, from simple pie charts to highly detailed charts and extensive datasets.

Design Engaging and Interactive Learning Experiences -with Loree –

Interactives - Create and embed customised Interactive elements with zero code (eg: image sliders, flip cards, accordions, tabs, hotspots and more).

Media Integration - Transform your course pages with Loree's collection of out of the box media elements such as images, video and even an embed url block which supports third party tools such as H5P, Panopto and more.

With zero coding experience, Loree empowers educators, learning designers and independent organisations to build web-like course pages and interactive learning experiences in minutes, giving precious time back to focus on what they do best. Educate! As an LTI application, Loree can seamlessly integrate with most of the popular LMSs. Ensure your learners have both accessible and well-designed content to meet their learning needs with our built-in WCAG 2.1 AA Checker.

Engagement drives Satisfaction - A learner's success and satisfaction are directly dependant on their engagement with course materials. With Loree you'll gain the flexibility and support you need to create engaging and interactive course pages, uplifting the learners experience.

In Summary

The environment that global leaders are currently operating in is increasingly complex and unpredictable. The skills and mindsets needed to exercise effective leadership have changed, and the way we develop leaders needs to change alongside. Empowerment of disenfranchised and under resourced economies around the world will be the great enabler for growth and globalisation. Building leadership capability for complex and uncertain times will help large and small economies across the globe, develop their citizens and equip them with the skills needed to thrive in the future of work. In addition, organisations can improve leadership competence, improve culture, and more effectively manage change and digitisation challenges. Today's technology advancements ensures that up-skill tech is readily available for all to use, even for those who have traditionally been left behind.

With the work of Maxme and Crystal Delta we bring the best to you to help your people grow and thrive. This includes supporting learners and workers not only in complex and difficult settings, but those with limited resources and capacities in developing economies. Maxme and Crystal Delta are gamechangers in a field that seeks to leverage the affordances to technology to empower learners and workers easily and seamlessly.