TEL Case Study

COMMONWEALTH of LEARNING

Digital Education Leadership Training in South Africa: Learning from SchoolNet

Structured Abstract

PROBLEM:

Despite the existence of a national framework that mandates digital learning, aspiring education leaders lack the structured, continuous support they need to advance beyond basic digital literacy and mentor colleagues systematically.

SOLUTION:

The C-DELTA framework provided a dual solution — a self-learning online platform and facilitated workshops — to provide the required structured, scalable support for pedagogical and leadership development.

TARGET GROUP:

Educators, officials, school leaders and learners positioned to champion digital education.

RESOURCES REQUIRED:

Basic Internet access, devices for participants, a designated school champion and allocated time for monitoring.

RESULTS:

Participants reported high satisfaction and significant gains in understanding digital identity and grew confident about promoting the framework. They particularly valued the practical workshop sessions.

LESSONS LEARNED:

Hands-on sessions drive engagement. While confidence can build quickly, deep institutional change requires structured follow-up, ready-to-use resources and peer networking.

CHALLENGES:

Inconsistent connectivity and access to devices and restrictions on educators' time hinder engagement. A lack of institutional mechanisms at the school level — for example, policy implementation — and champions threatens sustainability without external support.

SUSTAINABILITY:

Short-term sustainability is supported by high participant confidence and peer advocacy. Long-term success depends on integrating C-DELTA into official plans, designating champions and fostering peer-led communities of practice.

KEYWORDS:

Capacity building, C-DELTA, digital education, digital literacy, leadership, peer-led support, SchoolNet SA

Introduction

South Africa has a population of over 63 million, all of whom have a constitutional right to basic education (Republic of South Africa, 1996). The Department of Basic Education (DBE) is mandated to monitor the standards of the provision, delivery and performance of education in the country, and the South African Council for Educators (SACE) is responsible for registering all educators and promoting their continuing professional development (CPD) (South African Council for Educators, 2012).

Despite these frameworks, South Africa's education system faces significant challenges, including inequitable access to quality education, inadequate digital infrastructure and a critical shortage of teachers equipped with 21st-century skills (Department of Basic Education [DBE], 2004; Spaull, 2013). Effective professional development opportunities, particularly in digital pedagogy, are scarce. This leaves many educators, especially those in rural and underserved communities, without the training or confidence to integrate technology effectively (Chigona & Chigona, 2010). The Covid-19 pandemic starkly exposed the skills and resources gap. Schools with a low level of digital readiness struggled with remote learning, and countless learners lost access to education (Czerniewicz et al., 2020). In addition, with a youth unemployment rate of more than 45%, South Africa urgently needs its education systems to foster digital literacy and prepare learners for a technology-driven economy (Statistics South Africa, 2023).

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This is the context — systemic inequality and a pressing need for educator professional development — in which SchoolNet South Africa operates. A non-profit public benefit organisation (PBO) established in 1997, SchoolNet is dedicated to advancing digital learning for underserved communities. Its mission is to bridge the digital divide by empowering learners, educators and institutional leaders through innovative, technology-driven education solutions that align with South Africa's National Development Plan (National Planning Commission, 2012).

Recognising the profound need for scalable teacher training, SchoolNet collaborated with the Commonwealth of Learning (COL) to implement the Commonwealth Digital Education Leadership Training in Action (C-DELTA) programme in South Africa between 2018 and 2024.

C-DELTA is a comprehensive framework and capacity-building programme designed to foster digital education leadership. It moves beyond basic digital literacy to empower educators, learners and institutions to reflect critically on their digital practices, make strategic and informed decisions about using technology for learning and develop plans to lead digital transformation within their own communities. By focusing on critical thinking, ethical applications and leadership, C-DELTA is designed to create sustainable change agents who can drive a culture of self-driven and effective digital learning (Brown et al., 2016).

The C-DELTA programme addressed key gaps in South Africa's education system by:

1. **Empowering teachers as digital leaders:** Many South African educators lack formal training in digital pedagogy. C-DELTA equipped them with the skills they need to lead technological integration in their schools and foster a culture of innovation. In this programme, teachers learned to use digital tools not only to deliver content but also to enhance collaborative, project-based and inclusive learning.
2. **Bridging the digital divide in underserved schools:** Urban schools generally have better infrastructure than their rural and township counterparts, which often lack connectivity and devices. C-DELTA trained educators to make

best use of the available resources, even in low-tech environments. The programme's emphasis on the potential application of adaptive strategies, such as blended learning and offline materials, made it relevant across diverse school contexts.

3. **Preparing learners for the workplace:** South Africa's job market increasingly demands digital literacy. C-DELTA helped teachers integrate critical thinking and online collaboration into lessons so that learners can gain the skills they will need in the workplace. The leadership aspect of the programme included a focus on learner development, with learners being encouraged to take ownership of their digital learning. This fostered their independence and problem-solving abilities.

4. **Supporting systemic change in education policy:** South Africa's policies and frameworks highlight the need for digitally competent educators (Department of Basic Education, 2004, 2018; Department of Communications and Digital Technology, 2020). The use of C-DELTA aligned with these policies by building a network of teacher leaders who could advocate for and implement digital transformation in their schools, communities and districts.

5. **Addressing gender and socio-economic barriers:** Women and girls in South Africa often face limited access to science, technology, engineering and mathematics (STEM) and digital education. C-DELTA included a strong focus on gender-responsive digital leadership, which encouraged female educators and learners to participate in it and take on tech-related and leadership roles.

C-DELTA served as a vital intervention in South Africa's education landscape, equipping teachers with the skills to drive digital transformation in their classrooms and communities. By fostering digitally confident educators and future-ready learners, the initiative contributed to reducing inequities and integrating global digital advancements into South African education.

Implementation

Since its inception in 2019, the implementation of the C-DELTA programme in South Africa has been a dynamic and rewarding journey of strategic adaptation and collaborative growth. To effectively engage South Africa's vast and diverse education landscape, SchoolNet embraced a flexible approach, proactively testing and refining multiple innovative strategies to foster widespread participation and successful completion of the programme. A pivotal enabler from the outset was the strong foundational partnership with COL. COL not only provided the C-DELTA platform and framework but also facilitated an initial international training-of-trainers (ToT) workshop in Delhi, India, for its partners, which a key SchoolNet member found invaluable. The ToT workshop was followed by a local master training workshop at the University of Johannesburg in early 2019 that attracted 36 potential trainers from a wide range of public institutions across the country, laying the groundwork for a national roll-out.

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Educators' motivation to participate in C-DELTA increased when SACE voted to accredit the programme. After a rigorous submission process, the programme was endorsed for 35 Continuing Professional Teacher Development (CPTD) points. This recognition meant that teachers could earn 70% of their annual 50-point CPTD requirement by completing the programme — a powerful incentive that significantly boosted participation and cemented the programme's value within the national professional development landscape.

The participating schools were primarily public institutions identified in collaboration with provincial

departments of education. The departments facilitated the selection process by recommending schools that already had a foundational level of access to digital technologies, such as computer labs or Internet connectivity. This strategic approach ensured that the C-DELTA programme could build on existing infrastructure, so the training could focus immediately on developing leadership and pedagogical integration skills rather than on overcoming basic technological barriers.

The implementation model itself evolved into a key enabler through continuous learning. The initial model required the first cohort of master teachers to cascade their training within their own schools. When this proved challenging, SchoolNet responded by enhancing the support structures — it introduced additional mentoring, encouragement and refresher training for provincial master trainers who showed promise. In 2021, this flexible approach culminated in an optimised blended model that strategically combined the passion of self-motivated teacher practitioners with the reach and expertise of dedicated SchoolNet facilitators. The combination proved highly effective — the practitioners became credible champions driving organic adoption within their schools, and the facilitators, already respected figures within their provincial networks, efficiently expanded the programme's reach through structured workshops and webinars, thus ensuring quality and consistency.

By embracing a spirit of iterative learning, from testing online master training in 2020 to refining the trainer cohort model, the implementation of C-DELTA was flexible and appropriate for local needs. By 2024, SchoolNet had successfully completed its fifth iteration of the programme, having trained a significant cohort of educators and learners and established a sustainable and expanding model for digital education leadership across South Africa. The financial and strategic support provided by COL was invaluable throughout the entire process.

MONITORING AND EVALUATION

Monitoring and evaluation (M&E) was a critical, integrated pillar of the C-DELTA implementation. COL and SchoolNet collaborated to combine formal metrics with responsive, on-the-ground facilitation to ensure quality, provide real-time support and measure impact.

Formal M&E was based on quantitative data collection. This included tracking participation numbers against targets, monitoring gender representation to ensure equity and, most importantly, administering pre- and post-tests to quantitatively measure knowledge gains and the programme's direct educational impact. The diligent follow-up by staff to verify post-test completion and facilitate the allocation of SACE CPTD points was a crucial incentive for teachers to stay engaged and acquire their CPD points and also served as a key performance indicator for participant completion.

Qualitative monitoring played an essential role in M&E. Trainers acted as frontline evaluators, actively observing participant engagement with the content and the quality of interactions during training sessions. This provided immediate insights into which concepts resonated, where learners struggled and the overall effectiveness of the facilitation methods.

A defining feature of the M&E strategy was its emphasis on real-time, responsive support, which doubled as a rich source of informal evaluation. The establishment of instant messaging groups, primarily on WhatsApp, created a direct and immediate feedback loop (SchoolNet South Africa, 2025). These channels, supplemented by email and telephone support, were not only for troubleshooting login issues; they became vibrant communities of practice in which content questions were debated and solved collectively. The nature of the queries received provided SchoolNet with invaluable, real-time data on common technical hurdles, points of conceptual confusion and participant enthusiasm that allowed it to make rapid minor adjustments and informed planning for future iterations.

In essence, the M&E system was successful because it moved beyond a simple audit of numbers. It was a dynamic, multifaceted process that blended summative assessment using test results and CPTD points with formative feedback through trainer observations and WhatsApp interactions. This enabled the implementation team not only to report on outcomes, but also to actively listen, learn and improve the programme delivery while it was happening, fostering a culture of continuous improvement and responsive support.

Outputs and Outcomes

The implementation of the C-DELTA programme in South Africa has yielded substantial outcomes, demonstrating notable success in both scale and depth of impact (SchoolNet South Africa, 2025). An analysis of the programme's performance revealed significant achievements in terms of participation, gender inclusion and measurable learning gains; it also identified room for improvement in the M&E. The following overview summarises this analysis — how the programme not only met but exceeded its core targets, empowered a diverse range of participants and fostered meaningful improvements in digital education leadership capabilities, while also acknowledging the operational challenges that emerged.

OVERALL ACHIEVEMENTS

The programme's performance against its agreed targets demonstrates a significant achievement in scale and reach. Overall, participation slightly exceeded expectations, with a total of 8,912 individuals trained against a goal of 8,570, including 331 master trainers being certified, rather than the initial target number of 320. With a larger-than-expected facilitator base, the programme could be cascaded effectively — 4,436 teachers participated, which was just short of the target of 4,450. Learner enrolment exceeded expectations at 4,145 against a planned 3,800. Overall, these figures reflect strong engagement and effective mobilisation at institutional and provincial levels. (See Table 1.)

Table 1. C-DELTA training through SchoolNet SA

Category of trainee/learner	Expected target	No. of participants	No. of female participants	No. of male participants	SACE certificates
Total master trainers trained	320	331	186	145	31
Total teachers trained	4,450	4,436	2,950	1,486	447
Total learners/students trained	3,800	4,145	2,416	1,729	N/A
TOTAL	8,570	8,912	5,552	3,360	478

A particularly encouraging outcome was the programme's success in promoting gender equity. Female participation was notably high across all groups — 59% of master trainers, 67% of teachers and 58% of learners were female. This consistently strong female representation indicates that the programme's design, messaging and delivery methods effectively engaged and supported women and girls, aligning with broader national and international goals to reduce gender disparities in digital skills and educational leadership.

Table 2 shows the number of successful participants from the schools covered by SchoolNet SA as recorded on the C-DELTA platform at the time of writing.

Table 2. Completion of C-DELTA (SchoolNet SA interventions)

Category of trainee/learner	No. of female participants	No. of male participants	Total no. of completions
Teachers	936	437	1,373
Students	417	226	683

The true measure of C-DELTA's impact lies in its effectiveness, not only in terms of participation numbers but also, and more importantly, in its ability to foster meaningful learning, build confidence and

promote sustainable changes in practice. This section examines the programme's effectiveness through multiple measures: quantitative assessment data, qualitative feedback from participants and observable outcomes in knowledge transfer and professional growth aggregated through the SchoolNet's Feedback Survey (SchoolNet South Africa, 2025). Together, these measures provide a comprehensive view of how successfully the programme met its educational objectives and empowered educators and learners to become leaders in digital education. According to the master trainer survey (SchoolNet South Africa, 2024), participants rated their post-workshop skills as solidly "good" to "excellent," especially the ability to explain digital education leadership to others. They also noted that the workshop helped them build specific digital competencies. Strengthened facilitation skills, useful tools that were incorporated into the workshops, such as LinkedIn and Google, and the value of peer collaboration were all highlighted in the qualitative feedback.

HOW PARTICIPANTS RATED THEIR SKILLS AFTER THE WORKSHOP

Overall, the master training evaluation (SchoolNet South Africa, 2024) showed that participants' self-rated skills had means between 3.35 and 3.59 on a scale of 1–4 (to assess the effectiveness of the training). The ability to understand digital identity, develop personal learning networks and explain digital education leadership ranked high on the scale. (See Figure 1.)

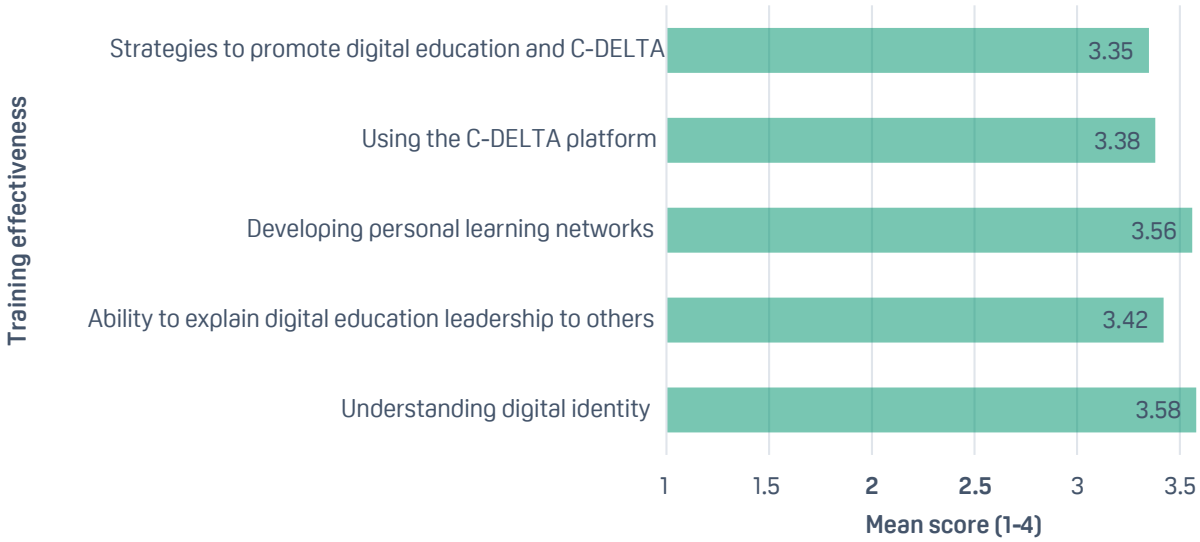

Figure 1. Participants' rating of the effectiveness of the training.

Challenges and Mitigation Strategies

Several strategic enhancements could make the C-DELTA programme even more accessible and impactful. For example, given the diverse linguistic landscape of our participants, we increased engagement by simplifying the language in the course materials and at times used local languages to mediate the discussions. This ensured that both teachers and learners who speak English as a second or third language can understand the concepts more easily and benefit fully from the programme.

The learning journey itself can be optimised for better user experience and knowledge retention. For example, the modules were text-heavy. So, to cater to diverse learning preferences, we integrated more multimedia elements such as short videos and interactive graphics. These were highly praised when used in live training sessions. Participants suggested that the pre- and post-tests should be broken up into smaller, module-specific assessments to make them less overwhelming and integrated into the learning

process to allow participants to focus on one concept at a time.

Finally, we had to strengthen our support structures to maximise completion rates. Working with COL, we were able to improve group manager co-ordination by establishing clearer communication channels and giving them access to progress metrics for multiple cohorts. When institutions experienced technical difficulties, COL provided technical guidance, helping them navigate firewall restrictions and ensure seamless platform access for all participants, regardless of their location.

Together, these strategies created a more supportive, intuitive and effective learning environment for everyone involved.

Lessons Learned

The master training evaluation feedback (SchoolNet South Africa, 2024) identified several key lessons that could guide SchoolNet and other organisations in the future implementation and expansion of C-DELTA.

- The learning design was consistently praised for offering a valuable balance of theory and practice. The use of interactive elements such as breakout rooms and group reporting significantly boosted engagement and enriched peer learning. This confirms that maintaining a structured yet participatory approach is essential for effective facilitator-led delivery.
- The quality of the facilitation emerged as a critical success factor. Facilitators were rated highly across multiple domains, including knowledge, delivery, responsiveness and fostering a positive learning environment. This underscores the importance of selecting, training and supporting skilled facilitators who can create an atmosphere conducive to learning and confidence-building.
- Although many participants expressed high levels of confidence about promoting C-DELTA within their institutions, a notable portion indicated they were only somewhat or not yet confident with the materials. This highlights a clear need for structured follow-up support — for example, additional mentoring, communities of practice or advanced training sessions — to ensure all participants can effectively translate learning into leadership practice in their contexts.
- Some participants found it took them a long time to work through the material. This suggests that future implementations of C-DELTA should take participants' existing schedules and other commitments into account and possibly offer flexible pacing options to accommodate diverse participant needs.

Sustainability

The C-DELTA programme demonstrates strong potential for sustainability in terms of people and practice, largely because it is designed as a self-directed learning journey and hosted on COL's open access platform. This flexible open educational resource (OER) allows educators to learn at their own pace and revisit materials as needed, fostering deeper personal and professional growth. Participants consistently report not only a meaningful transfer of knowledge into their daily practice but also a strong willingness to recommend the course to their peers. Most importantly, they emerge with the confidence to actively promote digital education leadership within their schools, creating an organic ripple effect that extends the programme's impact far beyond formal training sessions.

The C-DELTA programme demonstrates strong potential for sustainability in terms of people and practice.

However, long-term financial sustainability without ongoing external support remains a challenge. Funding from COL was the only reason public schools in underserved areas were able to participate fully in the initiative, as COL covered essential costs of the programme such as data access and facilitation through SchoolNet. For the programme to continue independently, schools and provincial departments will have to make formal commitments to integrate and scale it within their own professional development budgets and operational plans.

Fortunately, the open nature of the C-DELTA resources ensures its principles continue to drive change. SchoolNet, for example, actively integrates the OER into its other digital education projects, especially for critical themes such as digital identity, cybersecurity and building professional networks. In this way, C-DELTA enables organisations such as SchoolNet to further expand the programme's core goal of cultivating a lasting culture of digital education leadership across South Africa.

Way Forward

SchoolNet is strategically leveraging the C-DELTA framework to directly address South Africa's critical need for scalable, sustainable professional development in digital education. The programme moves beyond conventional technology training by focusing on fostering reflective, confident digital leaders who can drive pedagogical change within their schools and communities. Participants have responded strongly to this approach, consistently praising the programme's design and practical delivery, which balance theoretical understanding with immediately applicable strategies.

By empowering educators with not only skills but also the confidence and language to lead, SchoolNet is using C-DELTA to build a grassroots network of digital champions.

Post-workshop assessments reveal significant growth in key leadership competencies, with educators reporting feeling "good" to "excellent" about their ability to articulate a vision for digital leadership, advocate for its importance and guide their colleagues towards meaningful technology integration. This development is especially crucial in underserved and rural contexts, where structured support is often scarce. By empowering educators not only with skills but also with the confidence and language to lead, SchoolNet is using C-DELTA to build a grassroots network of digital champions. This effort directly supports national educational goals, helps bridge the digital divide and creates a ripple effect of innovation that strengthens the entire educational ecosystem, from individual classrooms to provincial and national leadership structures.

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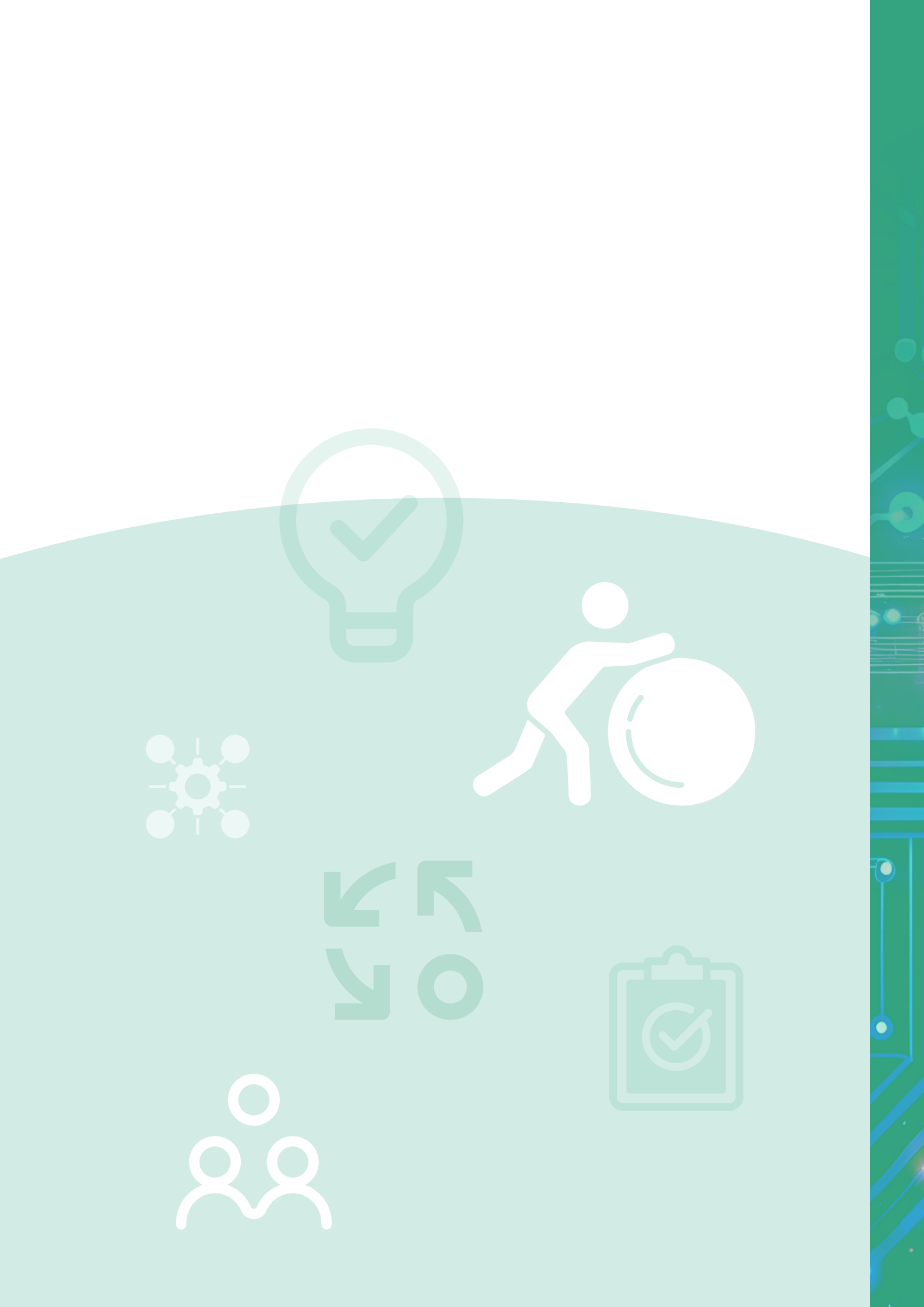

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