

INTEGRATING SIPOC INTO RESPONSIBLE PROGRAMME MANAGEMENT FOR SUSTAINABLE DEVELOPMENT GOALS ACCELERATION

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Abstract

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The purpose of this paper is to propose the use of suppliers, inputs, processes, outputs, and customers (SIPOC) of Six Sigma for responsible programme management for Sustainable Development Goals (SDGs) acceleration. A content analysis with literature has been conducted to explore the key elements of resilience for reskilling and upskilling via implementing United Nations SDGs (UNSDGs), and design thinking supported by a literature search. Qualitative interviews with industry practitioners in the creative art-related industries are followed to envision and empower programme management skills. It is recommended educators, trainers, and programme managers design project-based activities with the SIPOC concept for programme success. This is managerially relevant to the creative art industry development. However, validation of the research findings needs further study.

Keywords: Programme Management, Education, Six Sigma, SIPOC, Corporate Social Responsibility, CSR, UNSDGs

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1. INTRODUCTION

In 2023, the author was invited by SYART Art Gallery as a judging panel member for the Young Asia Artist (YAA) Awards 2023 and 2024. The author was also nominated as a local change maker by the International Center for Environmental Development and Community Education (ICENECDEV), a United Nations (UN) Global Compact member. In March 2023, the author was shortlisted to display Spatial.io teaching/painting exhibition templates and Chinese calligraphy paintings on the project “Restore the Nature with Innovations via SDGs/ESG” in the UN Economic and Social Commission for Asia and the Pacific (UNESCAP) 75 SDG Acceleration Pavilion, Bangkok, Thailand, and invited to display her artworks in education, UNESCAP, UN Building, Thailand, on February 2024. The ongoing project has been selected by the Ministry of Education, United Arab Emirates (UAE), 28th meeting of the Conference

of the Parties (COP 28), to present in Dubai on December 12, 2023, via SDG/ESG and i5 (Impact 5 — collaborative, social, meaningful, joyful, iterative, and actively engaging methods to generate the future leaders) — Explore and Flourish Life.

Based on the above learning outcomes, the following steps were presented earlier in the 9th UN Educational, Scientific and Cultural Organization (UNESCO) Entrepreneurial Education Meeting in Hangzhou in October 2023 with positive comments. It is time to visualise the steps via the November 13, 2023, event on “Restore the Nature with Innovations via SDGs/ESG/IEP” with the engagement of small and medium-sized enterprises (SMEs), school principals, teachers, parents, and students to learn more about growing green via fostering entrepreneurial mindset with actions — technology application and humanistic caring¹:

¹ <https://marketplace.sdgreen.com/collection>

1) Set up a network community of art, technology, and business entrepreneurship with opportunities to deliver cross-disciplinary training via artificial intelligence (AI), NFT, and metaverse with practitioners/users who have experiences in context creation with job opportunities to fight for SDG 1.2: Increase the Coverage of Poor People with Targeted Social Assistance Programmes (by 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions), SDG 3: Good Health and Well-Being, SDG 9, and SDG 17.

2) Provide hybrid training (drawing/content creation for transactions/NFT blockchain account opening and wallet monitoring) to help participants, teachers and students have a head start in putting together a transformative responsible social business plan and to be able to cope with the anticipated demand of Art-Tech-Social Business (ATSB) entrepreneurs using metadata and SDGs (Yeung, 2023).

The findings of Rocha and Kissimoto (2022) showed that “the results demonstrated how AI and IoT [internet of things] were being incorporated into OM [operations management], identifying the main barriers of its use, as well as indications of research gaps that may lead to further investigations to advance on this topic” (p. 2) and the author highlighted that “by adopting new technologies, regardless of the size or level of the adoption, companies have their businesses transformed somehow” (p. 6). She has opened up a new research area on the difficulty of coordinating culture, skills, and technology in the application of technology for transformation. Moreover, Hanley et al. (2020) echoed that “trainers indicated that there were substantial opportunities for youth-driven green enterprises in agriculture, waste and sanitation, particularly in new technology development. Innovative technologies for dealing with waste and sanitation include innovations in toilets, wastewater treatment, recycling and waste management, such as recycling and composting. [...] Therefore, creating awareness and interest about potential green technology and enterprise creation opportunities in sectors outside of ICT [information and communication technology] is needed” (p. 23).

Socially responsible management education institutions in the UN Principles for Responsible Management Education (UNPRME) have been driving changes by applying the new seven principles of UNPRME for innovative and relevant curricula for behavioural changes and organizational performance. “PRME’s mission is to transform management education and develop the responsible decision-makers of tomorrow to advance sustainable development”². This mission statement has been published on the official website of UNPRME with the new seven principles of purpose, values, teach, research, partner, practice, and share in 2023³. Hence, it is time to re-think the key elements of behavioural changes. The favourable conditions, such as empowerment and trust in leadership for changes for curriculum design in a systematic way have been less explored and have been identified as a research gap in this paper.

The rest of the paper is structured as follows. Section 2 reviews the relevant literature on sustainable

development, quality assurance (QA), suppliers, inputs, processes, outputs, customers (SIPOC), and technology. Section 3 presents the research methodology. Section 4 provides the interview results with NVivo analysis. Section 5 discusses the findings. Section 6 concludes the study with implications for future research directions.

2. LITERATURE REVIEW

2.1. Programme management and SIPOC

Programme management usually starts off with the establishment of a programme development and review committee which is responsible for locating the needs of an institute, its students, a newly-planned programme, modules within the programme and its target industry. The major elements that are discussed and reviewed among members of this committee are:

- intent and philosophy, scope of work and deliverables;
- specific and measurable programme aims and objectives;
- programme and module structure, including contents and contact hours;
- teaching and learning methods;
- assessment methods for demonstrating learning outcomes;
- regulations for programme, modules, and students;
- detailed module outlines with objectives and learning outcomes;
- resources to support, for example administration staff and technology.

Hence, staff working in the programme development and review committee should possess QA competency in managing the operation of a programme.

Humphreys et al. (1995) concluded the following ideas on business programme management of Handy, Constable, McCormick, Porter, and McKibben:

- focus on participants’ needs and be more interactive in design;
- offer participants the opportunity to apply theoretical concepts in practical situations;
- focus on content and utilize appropriate pedagogic techniques which can enhance learning and develop leadership and interpersonal skills;
- try to integrate individual courses into a coherent programme of instruction;
- reflect the impact of environmental forces at regional, national and international levels.

As there are many elements in a programme that need to be integrated, designed, reviewed, verified, validated and monitored, a systematic method is highly in demand. Therefore, using methods of Six Sigma, like define, measure, analyse, improve and control (DMAIC), SIPOC, and seven tools of flow chart, run chart, scatter diagram, histogram, Pareto diagram, control chart and cause and effect diagram (Ishikawa) can be a choice for educators.

Good use of quality methods in programme management can be considered as a shared learning process for people involved in the programme; programme management is an ongoing process experiencing the long-term strategy of the educational institute itself.

² <https://www.unprme.org/>

³ <https://www.unprme.org/what-we-do/>

2.2. SIPOC of Six Sigma and quality assurance

Among the above-mentioned methods of Six Sigma, SIPOC is the focus of the paper as the flow of suppliers (S), inputs (I), processes (P), outputs (O), and customers (C) can guide educators logically to monitor and measure elements in a programme. Metcalfe (2006) pointed out that the main advantage of system thinking is to shift thinking from the object to an inter-relationship of components. Therefore, marketers should develop systematic thinking through the use of quality concepts, like SIPOC is used to find out the linkage between customer satisfaction and marketing activities. Wedgwood (2016) further pointed out that SIPOC is a powerful tool in the *Lean Sigma* toolkit.

“The SIPOC helps the Team reach consensus on the simple scope and purpose of the process and the project. [...] To that end it is a potent change management tool. The useful outputs of the tool are: [...] an agreed process scope, an agreed-upon process purpose, the beginning of a list of Customers to feed into VOC [voice of customers] work...” (Wedgwood, 2016, p. 472).

“Sigma” is a symbol meaning how much deviation exists in a set of data. It is used to identify the number of defects within the production process. For service industries or social service organizations in relation to organization culture, it can be interpreted as defects in working relationships, communication and management that affect the organizational performance. Eckes (2003) mentioned that the fundamental use of Six Sigma is to improve both effectiveness and efficiency at the same time. It is a technical measure of the number and the kind of unhappy customers per million opportunities.

“Six Sigma is a measure of customer satisfaction that is near perfection. Most companies are at the two or three sigma level of performance — that means between 308,538 and 66,807 customer dissatisfaction occurrences per million customer contacts” (Eckes, 2003, p. 4).

Eckes (2003) brought up that a process was defined as a series of steps and activities that take inputs provided by suppliers; add value and provide outputs for their customers. Management needs to measure the existing sigma performance of each of their processes. This is especially crucial in marketing management as there are a number of marketing processes involved and they affect customers’ satisfaction either directly or indirectly. Hence, management not only identifies the processes but also monitors their performance. Their performance is supposed to add value in each process from suppliers to final outputs with a final destination of achieving their company’s business objectives.

Lok et al. (2008) mentioned that the DMAIC of Six Sigma is an analysis tool for measuring and reducing the injury rate in the workplace. The case illustrated by Lok et al. (2008) showed that the Six Sigma program can help organizations to learn and to improve. Actually, there are many methods under Six Sigma that can be used to monitor programme development and management.

The aim of this research is to make use of the idea of SIPOC in Six Sigma to reduce defects by finding out the major components in programme

management from the eyes of educators for implementing and accelerating SDG-related projects with an ultimate goal of enhancing stakeholder satisfaction — students, educators, prospective employers, and the community. With the use of SIPOC in marketing metric, systematic and factual information can be consolidated for measuring performance of students and teachers.

“Six Sigma, unlike other quality initiatives that have come before it, is a management philosophy” (Eckes, 2003, p. 25).

As curriculum design activities are situational — based on the needs and wants, requirements and expectations of stakeholders, using systematic thinking for building an inter-relationship of components in curriculum design is very important. Metcalfe (2006) mentioned that human behaviour is very situational.

“Much of what we do is because of the situation we are in and who we are with” (Metcalfe, 2006, p. 27).

Przekop (2006) mentioned that a fundamental driving principle behind Intuit’s Six Sigma efforts is to incorporate three stakeholders into outcomes of improvement. The three stakeholders are: employees, customers, and shareholders. Przekop (2006) also noted that looking at the organization there are three core processes: creating the products, acquiring customers and expanding relationships, and servicing and fulfilling customer requests.

Apart from stakeholders, management skills of planning, organizing, directing and controlling are also important in all aspects of SIPOC. With the appropriate use of management skills in the SIPOC metric, variables can then be measured and monitored; and student satisfaction can then be achieved.

2.3. Technology and sustainable development

Artificial intelligence and blockchain technology have been deployed in service industries to ease the workflow and enhance decentralization, traceability, and transparency. Datasets in different service industries, for example, creating art images for creative art and entertainment industries can be more efficiently analysed with data integrity. Blockchain, in turn, provides transparency proof of works and data storage for AI outputs. In art, this means AI-generated artworks with verified provenance on the blockchain. Based on recent conferences on AI by UNESCO, we may predict the application of AI in services, education and social entrepreneurship will be a trend. And, opportunities have been raised in image creation, ease of workflow, AI governance, and AI assessment tools for impacts.

“UNESCO has made a seminal contribution to the goal of effective and ethical AI governance by adopting an ambitious global standard — the Recommendation on the Ethics of AI in 2021, and spearheading its implementation by the Member States through innovative tools and methodologies, such as the Readiness Assessment Methodology and the Ethical Impact Assessment” (UNESCO, n.d.-a, para. 2).

2.4. AI applications and SDGs

Developing AI-powered tools to help social enterprises better track and measure their impacts on SDGs and environmental, social, and governance (ESG) factors. This could include platforms for collecting real-time data, analyzing results, and generating insights to improve decision-making. For example:

- 1) using AI for predictive modeling and analysis to identify potential areas for investment and growth in social entrepreneurship, especially in underserved communities or sectors;
- 2) implementing AI-driven risk assessment and mitigation solutions for social enterprises, incorporating factors related to environmental sustainability, social impact, and good governance;
- 3) developing AI-powered platforms, chatbots or virtual assistants to provide personalized or do-it-yourself (DIY) guidance and support to social entrepreneurs, particularly those in remote or marginalized communities;
- 4) implementing AI-powered data analytics platforms to track and monitor the progress of social and business enterprises in meeting their SDG and ESG goals, as well as to communicate impact to stakeholders and investors.

2.5. What are the Sustainable Development Goals?

The SDGs were adopted by all UN Member States in 2015 to end poverty, reduce inequality and build more peaceful, prosperous societies by 2030. Also known as the Global Goals, the SDGs are a call to action to create a world where no one is left behind.

The SDGs cannot be achieved without the realization of child rights. As world leaders work to deliver on the 2030 promise, children around the globe are standing up to secure their right to good health, quality education, a clean planet and more. The leaders of tomorrow and children's ability to protect the future for us all depends on what we do to secure their rights today.

On September 25, 2015, 193 world leaders committed to 17 Global Goals to achieve 3 extraordinary things in the next 15 years⁴. The 3 extraordinary things are:

- 1) end extreme poverty;
- 2) fight inequality and injustice;
- 3) fix climate change.

Therefore, Chinese calligraphy and calligraphy and painting training not only trains the left and right brains but also trains students to create creative content. Works, such as natural environment and ecology, global warming, etc., stimulate creativity and analysis, art appreciation and peace of mind.

2.6. From technology to humanistic wellness opportunities

Chinese calligraphy drawing and carving techniques are an excellent way to train both the left and right brain. Firstly, calligraphy requires careful attention to detail, precision, and control, which are skills that target the left brain's analytical and logical thinking. This aspect of Chinese calligraphy focuses on

the technical aspects, such as stroke order, balance, and symmetry, which engage the left brain in a logical and structured manner. On the other hand, the artistic and creative aspect of calligraphy, including the choice of brush and ink, the rhythm of strokes, and the composition of characters, engages the right brain. This facet of Chinese calligraphy allows for self-expression, spontaneity, and intuition, which are characteristics pertaining to the right brain's creative thinking. By practicing calligraphy, individuals enhance their artistic abilities, develop a sense of aesthetics, and improve their ability to think outside the box. Furthermore, calligraphy requires concentration and mindfulness, which promote a harmonious balance between the left and right brain. This practice demands focus, patience, and discipline, qualities that are inherent in both sides of the brain. The concentration required to execute the strokes accurately stimulates the left brain, while the act of allowing the ink to flow freely and expressively activates the right brain. Consequently, calligraphy encourages the integration of both logical and creative thinking, fostering a balanced and holistic brain development.

In conclusion, Chinese calligraphy drawing and carving techniques provide well-rounded training for both the left and right brain. The fusion of technical precision and artistic expression in calligraphy engages various cognitive functions, enhancing analytical thinking, creativity, and mindfulness. Through consistent practice, individuals can develop a harmonious connection between their left and right brains, leading to improved cognitive abilities and a greater sense of artistic expression.

3. RESEARCH METHODOLOGY

Communication is to send textual messages — verbal and non-verbal for coordinating, integrating, controlling and persuading purposes. Hence, textual messages are tools for persuading people's minds to accept ideas. Organizational behaviour is to understand, predict and control others' behaviour. Management is to manage resources within an organization for achieving organizational goals. These three principles — business communication, organization behaviour and business management bear an interrelated relationship.

Textual messages are data for conducting content analysis during the process of grounded theory which helps us to induce a concept for generalization and future prediction. From the following quotation, we can realize that content analysis is a technique to enables researchers to study human behaviour in an indirect way. It is an analysis of written contents drawn from a certain kind of communication paper, like textbooks, essays and articles from newspapers. By analyzing these written works of people, the researcher can:

- understand the behaviour of people and organizational patterns;
- infer attitudes, values and cultural patterns in different countries or organizations;
- gain ideas of how organizations are perceived;
- can see the trend of certain practices;
- differentiate practices among certain groups of people.

"Content analysis as a methodology is often used in conjunction with other methods, in particular

⁴ <https://edu.unicef.org.hk/zh-HK/global-goal>

historical and ethnographical research. It can be used in any context in which the researcher desires a means of systematizing and (often) quantifying data. It is extremely valuable in analyzing observation and interview data” (Fraenkel & Wallen, 2006, p. 484).

Content analysis is a systematic and objective analysis of selected text characteristics. This includes counting the number, and frequency of words, finding out the characteristics of themes, and characters, building relationships among items and paragraphs, and finally, establishing meaningful concepts. It is not simply a quantitative research method but also a qualitative one as the purpose of the writing is also reflected through the analysis.

In this research, the author counted the frequency of occurrence of words and phrases from literature related to transformation servant leadership and co-branding strategy with interviews to identify the key elements for the following research questions:

RQ1: What are the key elements of empowerment impacts on behavioural changes?

RQ2: How do institutions accelerate SDGs via programme management for behavioural changes with impacts?

4. RESEARCH RESULTS

4.1. Data collection: Part 1 — Content analysis

Qualitative research was conducted to decide the key factors related to empowerment impacts on

behavioural change. Fifty-seven selected research papers on transformational leadership, servant leadership, and empowerment published in the past 10 years were found. By analyzing these articles, numerous relatable factors are identified to the topic, including empowerment impacts on behavioural change, trust in leadership, psychological empowerment, job performance, co-learning, and citizenship behaviour.

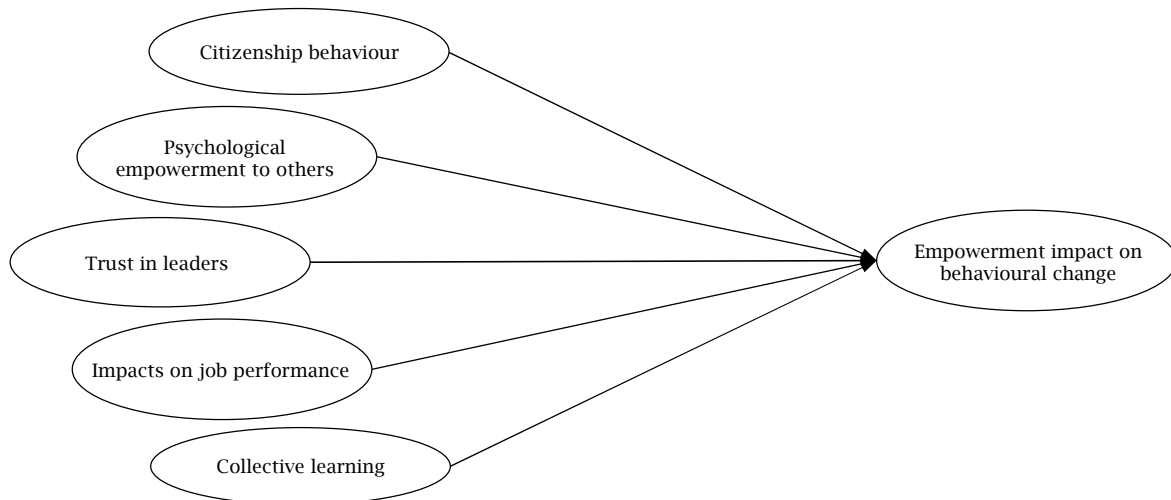
To identify their relationship to the topic, by using NVivo, a text search was performed for the mentioned keywords. The search result showed that some of the factors such as empowerment impact on behavioural change — psychological empowerment to others, trust in leaders, and impact on job performance were cited the most frequently with 4067, 3102, and 2491 times, correspondingly, while citizenship behaviour was cited less frequently in comparison.

Table 1. Findings of the keywords search

Name	Sources	References
Psychological empowerment to others	54	4067
Trust in leaders	54	3102
Impacts on job performance	52	2491
Collective learning	53	768
Citizenship behaviour	34	517

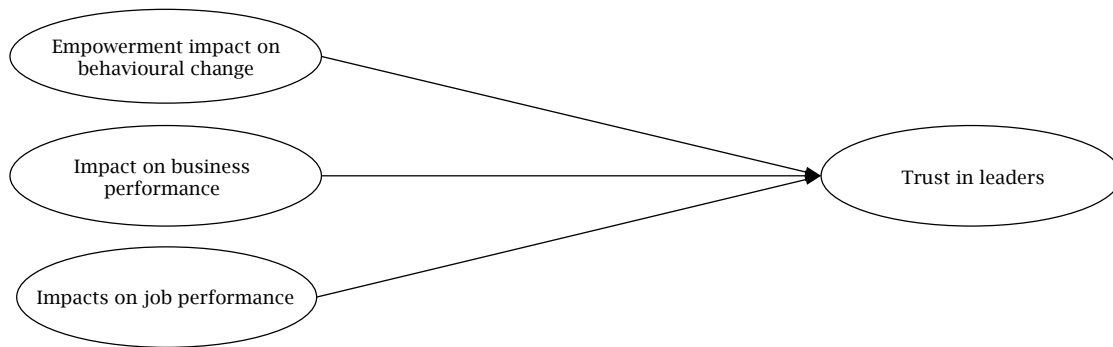
Further speculating the relationship among the above five key factors, a graphical model was generated with the data (see Figure 1).

Figure 1. Model on the factors of generic transformational leadership, servant leadership and empowerment (57 pcs — 2014–2020)



Based on the above model, a second round of qualitative research was conducted to decide the key factors related to trust in leaders. Eleven selected research papers on business servant leadership published in the past 10 years were found.

By analyzing these articles, there are three main factors related to the topic, including empowerment impacts on behavioural change, job performance, and business performance indicated in Model 2 (see Figure 2).

Figure 2. Model on the factors of business servant leadership papers (11 pcs — 2010–2019)

Based on the above findings, it is time for business servant leaders engaging in programme management on SDG acceleration to psychologically empower employees with behavioural changes via enhancing citizenship behaviour and collective learning for impacts on job performance and trust in leaders. Kingsnorth (2016) puts forward the idea of vision-based and real-time planning for visualizing strategy. The steps are: vision, mission, goals, objectives, strategies, action plans and execute, evaluate and evolve. Hence, the following interviews have been arranged to identify potential areas for the SDGs acceleration programme with entrepreneurial activities and career transformations for RQ2.

4.2. Data collection: Part 2 — Interviews and results

4.2.1. Interview 1 — Joe Yiu, interior designer

The relationship between emptiness and art creation can be difficult to explain.

In some traditions of craftsmanship in interior design, “pure consciousness” is hard to develop from traditional interior design, engaging in paint usage and techniques of artistic presentation where understanding of materials and techniques requires oneself to connect with a deeper sense of creativity. Within this state of emptiness, artists, like Joe Yiu, renowned art entrepreneur of Y’s Concept applied his inspirations and insights that led to the creation of meaningful and impactful works of art in interior design projects and training with environmental paint on walls to reduce carbon emission. However, it is important to note that the interpretation and exploration of emptiness in relation to art can vary across different industry sectors.

Based on a recent art exhibition in Fotan Studios in January 2024 with an interview with Mr. Yiu, the author has gained insights into using environmental paint in interior design materials to achieve SDG innovations. Here are the steps to follow:

1. *Identify the scope:* Determine the areas or materials where environmental paint will be used. This can include walls, ceilings, wooden surfaces, metal surfaces, etc.

2. *Research environmental paints:* Explore different brands and types of environmentally friendly paints available in the market. Look for different environmental paints that are low in or free from volatile organic compounds, have low or no heavy metal content, and are made from

sustainable raw materials. Mr. Yiu has demonstrated environmental paint in landscape design on walls with the author.

3. *Evaluate certifications:* Look for paints that have eco-friendly certifications such as Graphenstone from Spain, GreenSeal, Environmental Choice, or Leadership in Energy and Environmental Design (LEED) certification. These certifications ensure that the paint meets specific environmental standards.

4. *Choose colours:* Select the desired colours for your interior design project. Environmental paints come in a wide range of colours, so you have plenty of options to choose from.

5. *Prepare surfaces:* Properly prepare the surfaces before painting. This includes cleaning, sanding, and priming if necessary. Follow the manufacturer’s instructions for surface preparation.

6. *Apply paint:* Follow the manufacturer’s instructions and the experiences of Mr. Yiu’s artworks or application techniques. Use the appropriate tools such as brushes, rollers, or sprayers. Apply the paint evenly, and allow sufficient drying time between coats if multiple coats are needed.

7. *Maintain clean air circulation in sites of artworks:* During the painting process and after, ensure proper ventilation to minimize exposure to paint fumes. Open windows or use fans to circulate fresh air and accelerate the drying process.

8. *Dispose of waste properly:* Dispose of any excess or unused paint according to local regulations. Some communities have specific guidelines for paint disposal to prevent environmental contamination.

9. *Monitor indoor air quality:* After painting, monitor the indoor air quality to ensure it meets health and safety standards. If necessary, implement air purification systems to further improve air quality.

10. *Educate clients and visitors:* Spread awareness about the use of environmental paint in your interior design materials. Explain the benefits to clients and visitors, and encourage them to choose environmentally friendly options in their own projects.

By following these steps, you can incorporate environmental paint into your interior design materials, contributing to SDG innovations and creating healthier and more sustainable living.

4.2.2. Interview 2 — Michael Lo, language teacher

Bonomi Savignon and Costumato (2024) mentioned that the notion of innovation has progressively expanded to include other actors, processes and values, as well as a more comprehensive,

participatory approach on top of the traditional concept of “innovation”. It is time to explore how innovations are applied to teaching subject matters with creative content production to motivate teachers and learners to grow and flourish in their lives. For example, teaching English and creative content production with photo shooting skills.

If teachers teach business, SDG 12: Responsible Consumption and Production, teachers may use photos to raise awareness about the environmental impacts of the different industries, such as excessive packaging and waste generation in the clothing and food industries. Using photo shooting skills for producing own content for business related to sustainable practices may be promoted by adopting more eco-friendly packaging materials and reducing the use of harmful chemicals.

For SDG 3 photography often focuses on promoting inclusivity and body positivity. However, we may use photographs with content appreciation for content beauty appreciation and representations of beauty.

Photography can help improve mental health and well-being. They can relate to SDG 5 for advocating gender equality in different industries by featuring men and women from various backgrounds in roles typically associated with beauty.

For SDG 8: Decent Work and Economic Growth, photography can support fair trade practices by showcasing beauty products sourced from marginalized communities. It can highlight ethical beauty brands and their efforts to provide fair wages and safe working conditions.

For SDG 10: Reduced Inequalities, photography can challenge racial and cultural biases in the beauty industry by showcasing diverse models from different ethnic backgrounds. It can promote equality by encouraging representation of underrepresented communities, including people with disabilities. While these points provide a general understanding of how photography and beauty can align with SDGs, in-depth research studies would be required to provide specific data and insights into the impact of photo-taking on the SDG.

To the question “Do you think a language teacher needs to know creative content skills to motivate students to learn and express themselves in an artistic way?” Micheal Lo said: “Yes, having creative content skills can be highly beneficial for a language teacher when it comes to motivating students to learn and express themselves in an artistic way” (personal communication, January 22, 2024).

Here are a few reasons why creative content skills are important for language teachers:

1. *Engaging and inspiring students:* Creative content skills allow teachers to design innovative and interactive lessons that capture students’ attention and make the learning process more enjoyable. By incorporating artistic elements such as storytelling, poetry, or visual arts into language lessons, teachers can create a stimulating environment that motivates students to participate actively.

2. *Fostering critical and imaginative thinking:* Creativity encourages students to think outside the box and develop their critical and imaginative thinking skills. Language teachers with creative content skills can introduce activities that require students to analyze, interpret, and express themselves creatively, leading to deeper and more meaningful language learning experiences.

3. *Promoting self-expression:* Artistic activities provide a platform for students to express themselves freely and develop their own unique voices. By integrating creative content into language lessons, teachers can encourage students to express their thoughts, opinions, and emotions through various mediums, such as writing, drawing, or performing, enhancing their language proficiency and confidence.

4. *Cultivating cultural understanding:* Creativity allows for exploration and appreciation of different cultures and perspectives. Language teachers who possess creative content skills can incorporate cultural elements into their lessons, exposing students to diverse artistic traditions, literature, music, and visual arts from around the world. This exposure helps students develop a broader understanding and empathy towards different cultures and promotes intercultural communication skills.

5. *Encouraging lifelong learning:* By engaging students in creative and artistic learning activities, language teachers can instil a passion for learning that extends beyond the classroom. Students who are encouraged to express themselves artistically are more likely to develop a lifelong love for language learning and continue to explore and create with the language even after completing their formal education. While not all language teachers may have extensive creative content skills, possessing at least a basic understanding of artistic approaches and techniques can greatly enhance their teaching effectiveness and student engagement.

The key takeaways of the interview are to explore the transformation elements in teaching with skills of appreciation, self-imposed motive to learn, and creative content production skills for sustainable development.

Based on the interview with Mr. Michael Lo, Mike’s Gallery on January 22, 2024, motive generation skills are needed for both teachers and students for a sustainable lifestyle with happiness. “I found most people suffer with “disconnectivity”, hiding oneself and avoiding facing challenges in their lives which hinder the development of skills with social interaction” (personal communication).

Mr. Lo has been an English language teacher for many years in tertiary education and has picked up photo shooting since 2010. He appreciates the “beauty” in photographs. “There are different interpretations of “beauty” for people. The thing is how we decode images and interpret to produce your own image with unique identity. In fact, this is also a way of teaching and learning”, said Michael (personal communication, January 22, 2024).

4.2.3. Interview 3 — Kevin Pao, media industry

Innovative skills of identifying with awareness of culture and issues, use of colours and space with metaverse mindset and digital transformations skill sets. Besides, the strategy of market positioning and choosing appropriate platforms with desirable results of reaching the target audience are also crucial in the journey of transformations.

“It is important to have integration of Sustainable Development Goals and ESG with new technology, for example, metaverse mindset and Web 3.0 in content creation, knowledge transfer, and a mindset of transformative business management”, said Mr. Kevin Pao (personal communication, November 30, 2023).

Based on the sharing from Kevin Pao, ONE TV, transformations in the media-related industry also need to have a mindset of hot and hit-hot topics with content for target audiences with a high circulation rate for sustainable business.

Based on the interview results of respondents, understanding the cultural background and the lifestyle of the target audience with knowledge of new media development, medium used in teaching business, languages and programmes related to SDG 3, SDG 4: Quality education, SDG 12, and SDG 17 with UNPRME seven principles, and materials used in case study/workshop related to environment, for example, use of environmental paint for multimedia design and visual design programmes are innovations for SIPOC curriculum design for impacts. Curriculum designers and teachers may use visual and environmental-related materials in course design to raise awareness about the environmental impacts of the different industries, such as excessive packaging and waste generation in the clothing and food industries. Using photo shooting skills for producing own content for business related to sustainable practices may be promoted by adopting more eco-friendly packaging materials and reducing the use of harmful chemicals. In fact, applying SIPOC in curriculum design with SDGs not only accelerates SDG applications in education institutions but also brings in marketable new services and products for the business sector. Hence, a socially responsible new media organization not only be accountable, and professional, having different perspectives on contemporary issues but also identification of market positioning with appropriate use of new technology, for example, metaverse mindset and Web 3.0 in SDGs and ESG for impacts.

5. DISCUSSION OF THE RESULTS

Organizing a programme with impacts that align with the UN i5 principles (impact, inclusive, innovation, individual, integrity) and support the UNSDG and ESG criteria requires empathetic and prudent planning of expected measurable impacts in response to UNSDG 196 targets of 17 SDGs.

Based on the background of UNSDG/ESG-related projects and results from content analysis and interviews, the following are suggested steps to help you organize an impactful programme:

1. *Define the objectives of a programme:* Clearly outline the purpose and specific goals of the project, focusing on 1-2 SDGs and identifying how these SDGs related to ESG areas with specific impacts. For example, the project "Restore the Nature with Innovations via SDGs and ESG" selected by the Ministry of Education, the UAE, COP 28, and UNESCAP 2023 and 2024 of the author focuses on SDGs 3 and 4 (knowledge transfer wellness via Chinese calligraphy drawing), SDG 5 (social elements) with SDG 9 via blockchain technology (governance with decentralization, traceability and immutability) for Chinese calligraphy drawings in NFT (environmental friendly with digital images) for fundraising. The objectives of empowering women to learn Chinese calligraphy drawings with blockchain technology for NFT are aligned with the UN i5 principles, SDGs, and ESG criteria.

2. *Conduct a stakeholder analysis with AI and data analytics with blockchain:* Identify the key primary and secondary stakeholders who will be impacted by the project (for example, content contributor, project beneficial party or sponsoring organization), including employees, customers, communities, and investors who are interested in the SDG/ESG areas. Understand their needs and expectations to ensure the project meets their requirements, allowing opportunities to listen to their voices to finetune the project's details and progress with environmental (E), societal (S), and governance (G) impacts plus well-being with nature.

3. *Develop a sustainability strategy with AI tools to measure SDG/ESG impacts:* Create a comprehensive sustainability strategy based on ESG reporting guidelines or international standards that outline how the project will address the key ESG issues (locally and/or globally), as well as contribute to the achievement of the SDGs. Consider ways to narrow down the SDG areas and maximize positive impacts while minimising resource utilization.

4. *Integrate AI impact measurement and reporting tools with blockchain for transparency and traceability:* Implement a robust monitoring and evaluation framework, for example, using a metric to track the project's progress towards achieving its objectives and impacts. Use key performance indicators to measure success/failure in the milestone plan and report regularly on outcomes to stakeholders via an ongoing dialogue format with transparency.

5. *Collaborate with partners:* Engage with like-minded organizations, non-governmental organizations, government agencies, and other stakeholders to leverage expertise, resources, and networks. Co-create and collaborate on joint initiatives that can magnify the project's impacts and accelerate SDGs with shared resources and shared responsibility.

6. *Implement ethical practices with AI ethics policy:* Ensure that the project adheres to ethical principles and values, such as transparency and accountability with the application of blockchain, fairness, and respect for human rights with Institute for Economic Peace (IEP) concepts. Align decision-making processes with the UN i5 principles and ESG criteria, promoting integrity and responsible business practices.

7. *Communicate and engage with stakeholders:* Keep stakeholders informed and engaged throughout the project lifecycle, seeking their input and feedback to improve decision-making and outcomes. Communicate openly about the project's progress, impacts, and challenges, fostering trust, and transparency.

8. *Continuously improve and innovate:* Regularly review and evaluate the project's performance to identify opportunities for improvement and innovation. Embrace new technologies, business models, and practices that can enhance sustainability and create lasting positive impacts.

By following these steps of the basic principles of the plan, do, check, act (PDCA) of ISO 9000 and integrating the UN i5 principles, SDGs, and ESG criteria into your programme with pre-planning and implementation with metric measurements, you can create or co-create a meaningful and impactful initiative that contributes to a more sustainable and inclusive future.

6. CONCLUSION

Through this research, the key factors identified for programme management with responsibility are: sourcing key stakeholders with contemporary solutions, for example, AI/SDG/ESG/UNPRME i5 for tackling issues with a quality assurance (QA) system for increasing stakeholders' satisfaction. And, the QA system has to be transparent with curriculum designers' acceptance of criticism and values offered to learners to accelerate the quality of programmes. Through this paper, service organizations and business leaders involved in quality programme design, implementation and measurements may re-think the use of the SIPOC mindset to improve programme outcomes and engagement of programme designers, implementors and learners for disruptions in teaching and learning. This paper serves to enhance the implementation of design and identity-related elements in education and training-related services for developing a new perspective on QA and the use of SIPOC in services management. Based on the above findings, it is time for creative art-related industry practitioners to envision and empower project management

practitioners in creative art industries, curators and story writers with a mindset and behavioral changes via enhancing the execution skills of SDG/ESG-related projects for community education in the rising industries of creative art and museum hub industries.

Educators need to design project-based activities with SDG/ESG/i5 elements for programme success, echoing Kingsnorth's (2016) idea of vision-based and real-time planning for strategy implementation. Hence the above recommended guidelines and Table A.1 (see Appendix) may have values for talent development in the creative art and SDG acceleration programmes with impacts.

The researcher recognized that qualitative analysis with document and interview analysis used in this research may have limitations, for example, quantitative surveys to support textual analysis. Future research could expand on this study by increasing the number of published literature in recent years for content analysis and conducting survey collection together with the textual analysis and good practices identified to illustrate the cause and effect relationships and extend the results of this paper.

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APPENDIX A

Table A.1. Integrating SIPOC of Six Sigma into the QA system of the SDG acceleration programme

<i>Areas of QA elements</i>	<i>Suppliers (S)</i>	<i>Inputs (I)</i>	<i>Process (P)</i>	<i>Outputs (O)</i>	<i>Customers-stakeholders (C)</i>
Plan for systematic evaluation	Sourcing AI/SDG/ESG/i5-related professionals and stakeholders to identify programme objectives, and requirements, for QA (planning, organizing, directing, and controlling skills)	Identifying stakeholders' needs and expectations with NVivo analysis and interview results of leaders with trust to empower behavioural changes, business performance and job performance (organizing)	Developing a flow chart with AI and technology with traceability, accountability and transparency to monitor activities in programme management (organizing)	Gaining trust in leaders and citizenship behaviours with environmental materials, self-expression tools and business impacts in maintaining a quality assurance system through highlighting bottom necks in the process flow, reducing dissatisfaction and increasing satisfaction (controlling)	Increasing stakeholders' satisfaction with positive learning outcomes of an SDG acceleration programme (controlling)
Establish a culture of criticism	Training on trust in leaders (planning, organizing, directing, and controlling skills)	Training SDG/i5 and SIPOC elements with objective evidence for QA (planning and organizing)	Increasing exposure to industry and academic leaders with trust and SDG experiences with ongoing guidance to programme execution staff (controlling)	Establishing and maintaining a positive organizational learning culture with trust in leaders (directing and controlling)	Strengthening peer relationships and relationships between management and employees, organization executing SDG acceleration programmes and stakeholders with positive perception and understanding of the use of criticism for continual improvement (controlling)
Add value	Supplying information to stakeholders on defining and demonstrating specific value with evidence from different perspectives stakeholders (planning, organizing, directing)	Carrying out ongoing stakeholder analysis for their definition of "value" (planning and organizing)	Locating value in SDG acceleration programme-related activities, in carrying out assessments, and in implementing QA system (controlling)	Showing evidence for "value" and benchmarking results (controlling)	Enhancing the competitiveness of SDG acceleration programmes (controlling)
Accountability	Identifying accreditation criteria and process of SDG acceleration programme validation (planning)	Understanding elements of QA requirements through training and briefing to stakeholders (planning)	Showing transparency of information with AI and technology in the process of SDG acceleration programmes in the QA system (organizing, directing controlling)	Achieving desirable accreditation results with trust in leaders and AI implementation with accreditation (controlling)	Increasing stakeholders' satisfaction with public confidence (controlling)

APPENDIX B. SELECTED SOLO AND JOINT EXHIBITIONS WITH RESILIENCE, REPLICABILITY, AND SOCIAL CONTACT OF THE AUTHOR

1	Life Artist Paintings (Egret, Crane, and Lotus), selected by Master Artist Foo (San Zhuo Tang) displayed in Central Library, July 29-31, 2022.
2	Selected paintings displayed in the 4th Belt & Road National Art & Culture Expo, Asia World Expo, Airport, September 23-25, 2022.
3	Selected paintings (solo) displayed in Color Brown Coffee Shop, Kowloon, Hong Kong, September-October 2022.
4	Selected paintings displayed (solo) in Guble Art Gallery, Opening Ceremony on November 5, 2022.
5	Selected paintings displayed (solo) in Color Brown Coffee Shop, Wan Chai, Hong Kong Island, February-March 2023.
6	Selected paintings displayed in Hong Kong Cultural Center, 4th floor, February 18-21, 2023.
7	Selected paintings on Restore the Nature via SDG/ESG, Cyberport, Green Corner, March 3, 2023.
8	Shortlisted to display (the only professors/artists from Hong Kong) UNESCAP, SDG Acceleration Pavilion on the project "Restore the Nature with Innovations via SDGs, ESG, and Positive Peace", UN Conference Centre, Bangkok, March 27-31, 2023.
9	Tai Kwun, Central Heritage Building, Hong Kong, for the project "Restore the Nature with Innovations via SDGs, ESG, and Positive Peace", April 9-11, 2023.
10	Beyond Coffee & Bar, "Restore the Nature with Innovations via SDGs, ESG, and Positive Peace", IEP, May 22-28, 2023.
11	Anita Chan-Lai Ling Art Gallery, the Fringe Club, "Restore the Nature with Innovations via SDGs, ESG, and Positive Peace", IEP, July 23-August 3, 2023, with Song Yang, founder of SYART Art Gallery.
12	Josephine Kitchen, "Restore the Nature with Innovations via SDGs, ESG, and Positive Peace", IEP, August 4-31, 2023.
13	Anita Chan-Lai Ling Art Gallery, the Fringe Club, "Sensitive" — an extension of the project "Restore the Nature with Innovations via SDGs, ESG, and Positive Peace", IEP, September 27-30, 2023, with 8 female artists (Anna Salenko, Anna Lau, Aya, Kate, Laren, Marianne, and Yulia from different countries) with Shirley Mo Ching Yeung as chief curator and Anna Salenko as curator.
14	SYART Art Gallery, Beijing, China, an extension of the project "Restore the Nature with Innovations via SDGs, ESG, and Positive Peace", IEP, November 26-December 3, 2023, and appointed as representative, Hong Kong, for SYART Art Gallery by the founder, Mr. Song Yang.
15	Anita Chan-Lai Ling Art Gallery, the Fringe Club, "Nature" — an acceleration of the project "Restore the Nature with Innovations via SDGs, ESG, and Positive Peace", IEP, February 16-19, 2024, with the female artist (Belinda Liu) and Shirley Mo Ching Yeung as curator/artist.
16	Selected Lotus Painting displayed in Boomer Gallery, London, UK, February 2024 (https://boomergallery.net/the-dark-side-call-for-artists).
17	Selected Lotus Painting displayed in ITS LIQUID Group Gallery, 14th Edition Contemporary Venice Exhibition, March 15-29, 2024 (https://www.itsliquid.com/call-contemporaryvenice-14th.html).
18	Beyond Coffee & Bar, "Restore the Nature with Innovations via SDGs, ESG, and Positive Peace", IEP, April 16-22, 2024.
19	Anita Chan-Lai Ling Art Gallery, the Fringe Club, "Nature" — an acceleration of the project "Restore the Nature with Innovations via SDGs, ESG, and Web 3.0 — SDG Acceleration", June 22-26, 2024, with female artist (Emily Law), Song Yang with Shirley Mo Ching Yeung as curator/artist.
20	SYART Art Gallery, Beijing, China, Solo Exhibition on "SDG Acceleration #3/4/9 — Environment and Values — Seek from Nature, Explore from Values", June 8-11, 2024.
21	Toronto Outdoor Art Fair (TOAF 63), "Restore the Nature with Innovations via SDGs, ESG, and IEP — SDG Acceleration with i5" project, July 12-14, 2024.
22	Anita Chan-Lai Ling Art Gallery, the Fringe Club, "Nature" — an acceleration of the project "Restore the Nature with Innovations via SDGs, ESG, and Web 3.0 — SDG Acceleration with Fung Shui", June 23-25, 2024, with female artist (Emily Law), Song Yang with Shirley Mo Ching Yeung as curator/artist.
23	Anita Chan-Lai Ling Art Gallery, the Fringe Club, "Nature" — an acceleration of the project "Restore the Nature with Innovations via SDGs, ESG, and Web 3.0 — SDG Acceleration with Fung Shui", August 11-14, 2024, with renowned mural artist (Joe Yiu) with Shirley Mo Ching Yeung as curator/artist.
24	City University, Tech 300, Hong Kong, on "Cross Generatio Transformations with ESG for Impacts" with Renowned Artist Foo, Sai Feng, October 25, 2024.
25	Selected Lotus Painting displayed in ITS LIQUID Group Gallery, 13th Edition Contemporary London Exhibition, November 29-December 11, 2024 (https://www.itsliquid.com/call-londoncontemporary-13th.html).