

# Adapting the Entrepreneurship Model to End Poverty in Sabah

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## Abstract

Sabah's poverty issue becomes the focus of the study due to the high incidence of poverty rate. The government made several attempts, most of which were unsuccessful. To solve this challenge, effective entrepreneurial effort is required. APPGM-SDGs have been created to address this problem. The study aims to adapt the proper entrepreneurship initiative model by employing a qualitative method through focus group discussions. Using six impact evaluation indicators (Deep, Clear, Wide, High, SDG, Gender) as a guide, 10 beneficiary groups from 10 distinct districts participated in the FGDs. Interviews with beneficiaries— mostly entrepreneurs— were conducted to learn how they reacted to the models of eradicating poverty. The progress report created by the solution providers was also cross-checked as part of the data collection process. Although SHARE Model may be useful in identifying the good potential projects before the project commencement, it must also consider ROI and ROV. Noteworthy, incorporating TVET components and ensuring alignment with pertinent SDGs are imperative for entrepreneurs. TVET institutions are therefore actively encouraged to develop close relationships with the community. Additionally, TVET reduces costs, saves time, and streamlines the process. The current study purposely focuses on the main issue related to SDG 1 (No Poverty). Reports from the ten projects representing the Sabah West region become the main reference of the study. The fact that so few of them can link the relevant SDG to the initiative suggests that the community's awareness of SDGs is inferior. Previous experiences engaging in various community projects and past research argued that understanding SDGs has to be parallel with gaining the required knowledge of entrepreneurship. Henceforth, learning what the community is lacking and understanding the return of value to any project of SDGs might elevate the community's socioeconomics.

## 1. Introduction

The location of the state of Sabah at the farthest from the Government Administration Center in Putrajaya certainly deserves to be given the main spotlight. This is coupled with the state's area of 73,904 square kilometers with a

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community composition that still has many livings in rural and remote areas (Solleh et al., 2024). However, it is still unclear how well socioeconomic development initiatives are working for rural and outlying communities at the start of the twenty-first century.

In the early 2000s, reports suggested that a lack of a strategic approach was the reason behind the seeming ineffectiveness of numerous government programmes and initiatives aimed at eradicating poverty (Hatta & Ali, 2013). This has lasted until now due to several causes that have been identified (Md Shah, Hussin, & Idris, 2023). Among them is a lack of sensitivity in matching the program's suitability with the community. As a result, the poverty alleviation program becomes a touch-and-go or transient project. The community's reluctance to fully participate in the programme that the implementing agency proposed is the most evident cause. Even when there is community acceptability, it occasionally only endures the initial phase. After a while, the will to go on the programme just wanes, making it unfeasible and ultimately abandoned.

It was also found that the incompatibility of time and the duration of activities that are too long are among the main reasons for the failure of a knowledge transfer program (Ahmad et al., 2020). Limited and inappropriate program implementation spaces have caused discomfort (Zulkifli & Rahman, 2019). This also contributes to project failure. There are also situations where the community cannot convey the level of knowledge and skills they have resulting in the suitability of the implementation of the knowledge transfer project not going well (Ismail & Hassan, 2021). In addition, there are also members of the community who are not very clear about what role they have to play in the development projects brought to them (Rahim et al., 2018). Sometimes, too many advisory services are provided but the desired results are not obtained as they should be (Mustafa et al., 2022). All of these prompt community members to refuse to be fully involved in the new development programs brought to them afterward.

This suggests that the adopted model should consider the demands of the community while also recognising the community's role as a vital contributor to the development project's success. In other words, community development only happens if there is active involvement among the local community where the community is responsible for developing the quality of life of their community. Meanwhile, effective knowledge transfer models need to be introduced and implemented transparently by all parties involved. Only the participation of government and non-government departments and agencies together with the local community in every development process guarantees the success of a community development program. Notably, obstacles to Sabah's socioeconomic development are not particularly difficult.

This is because the communities in Sabah have already reached a more harmonious state of unity compared to other communities in Malaysia (Zulayti Zakaria et al., 2023). Unity is not mere rhetoric. This is the preamble to smoothly implement any entrepreneurship initiatives by the government. Cross-ethnic and racial marriages are normal and accepted with a high spirit of family harmony in Sabah Mohd Zulkepli et al., 2015; Sather, 1997). Even though family members have converted to Islam, the attitude of visiting and reaching out to the family on festival days still goes on as usual. The same goes for weddings et cetera. This social engagement practice led them to know each other better and may resolve any potential religious issues wisely (Khalli et al., 2022) Among others, the Sabahan language plays an important role in empowering the harmonious state. Apart from their ethnic languages, the Sabahan language is a crucial part that enables them to be gentle and respectful of one another (Nuradibah Nordin & Gusni Saat, 2022). Sometimes, members of different ethnic communities intersperse their friends' ethnic languages when conversing. Among them are "bilang" (ask), "akun" (agree), "palan-palan" (slowly), "logot-logot" (don't rush), and many more. This is what makes the community in Sabah stick very close to one another. In short, the harmonious factor is a vital factor to enable various entrepreneurship initiatives to be successfully conducted.

## 1.1 Community Socio-Economic Development Model

Several model frameworks have been developed involving universities as leaders of knowledge-transfer projects. Among the earliest models is based on the Triple Helix model which specializes in the production and use of knowledge involving the relationship of three entities namely university, industry, and government (Etzkowitz & Zhou, 2017). This model was later improved through the introduction of the Quadruple Helix Model, which included the community as an important component in developing their community in earnest (Nordberg et al., 2020). Through this model, the community component is no longer seen as a beneficiary as in the Triple Helix Model, but it is one of the four components that determine its absolute success. The Quintuple Helix model is introduced by emphasizing the "environmental" element (Carayannis et al., 2012). This is in line with the Sustainable Development Goals agenda which emphasizes this element. A new addition to this model is that it focuses on the socio-economic development of communities that use natural resources optimally in line with efforts to emphasize the Sustainable Development Goals. In short, the effectiveness of the model can only be ensured if the MADANI Community initiative is fully implemented among the members of the community involved (Mohammad Zaki & Faridah, 2025; Azman & Rahman, 2023). Accordingly, all the approaches in the introduced

model can be refined again, and the status of the project updated and implemented in a more focused, organized, and systematic way

Many approaches have been used in developing the socio-economic community. However, it is difficult to determine its effectiveness. In a knowledge transfer project led by Universiti Malaysia Sabah, one community, Bombon Marakau Ranau, was successfully developed jointly with the state agency and the community itself. Using a model called SHARE Model which is the abbreviation for Shared Leadership (SH), 6-Action Plan (6- Action Plan/A), and Relationship Building (RE) (Ahmedy & Dasan, 2022; Dasan et al., 2022). Shared Leadership (SH) focuses on the leadership responsibility of each entity that forms the helix as found in the Quadruple Helix and Quintuple Helix Models. Noteworthy, emphasis is placed on the leadership of the community itself which will continue to guide the commitment and determination of its community members to continue to develop their entrepreneurial activities.

The relevant ministries and agencies have initiated programs that align with the government's aim to increase living standards through entrepreneurship. This is consistent with the rapidly advancing technological and digital advancements that make it easier for anybody to enter the field of entrepreneurship. Not forgetting the importance of Sustainable Development Goals (SDGs) elements to be embedded in the projects. The business programme that was presented and put into action may hopefully help those still under the poverty level, particularly those living in rural areas. Through the MADANI approach, the government's seriousness is made evident (Mohammad Zaki & Faridah, 2025; Azman & Rahman, 2023)

## 1.2 Technical and Vocational Education and Training (TVET)

The MADANI Community, for instance, becomes one of the clear manifestations of the government's seriousness in involving communities in each constituency with various entrepreneurship initiatives. Nevertheless, to what extent those entrepreneurship initiatives will succeed in improving the life of the community involved is not certain. However, Technical and Vocational Education and Training (TVET) may provide the answer. Through TVET, beneficiaries are provided with the relevant skills, knowledge, and right attitude or competencies needed (Salleh et al., 2016). With TVET, participants automatically shift. If TVET which is embedded with the Industrial Revolution 4.0, is applied properly, the process taken is shorter (Abdul Ghafur Hanafi et al., 2023). Moreover, Abdul Ghafar Hanafi et al (2023) noted that TVET saves time and cost.

Harun et al. (2023) argued that entrepreneurship education has not yet had a very positive effect on the number of capable independent entrepreneurs. This weakness was identified by the institution's absence of an education system and several ignored aspects. It was suggested that developing a comprehensive TVET entrepreneurship curriculum should consider integrating potential fields and human behavior theories (Harun et al., 2023).

Entrepreneurship education in the field of TVET is proven to be a key factor for one to successfully enter and succeed in a business (Fayolle and Gailly, 2015). According to Fayolle and Gailly (2015), entrepreneurship education provides people with the important knowledge and skills to communicate well in business. This will directly lead to a better living due to the TVET exposure. Supported by Bakar et al (2024), findings reveal that influenced by their personality traits and values, many of the TVET's students intend to become entrepreneurs, while significant number have already established their own businesses. In fact, career planning during their studies is vital in shaping them into successful TVET entrepreneurs. (Muridan et al, 2023) Recently, Malaysia has once again applauded entrepreneurship education in TVET by continuously calling for education providers to embed TVET in the curriculum seriously. According to Fayolle and Gilly (2015) to produce graduates with entrepreneurial skills, practical exposure should be emphasised in the lesson plan. This requires a combination of business knowledge and soft skills which will enhance their entrepreneurial competencies (Mack et. al., 2024). Similarly, to generate skilled workers who will support and grow the local economy, TVET empowerment must be given top priority (Jamaludin et al., 2023). Community leaders are also encouraged to take part. To achieve this, TVET institutions should plan constructive community interactions regularly.

Notwithstanding, if an efficient model with a defined execution strategy is followed, the government's entrepreneurial activities through various programmes can succeed in achieving their objectives. Furthermore, there is a proper way to guarantee that all knowledge transfers—a crucial foundation for business management abilities—can be carried out efficiently and effectively. Efficiency refers to the amount of time needed to ensure that knowledge is successfully transferred. Meanwhile, effective means that those with the necessary experience provide the knowledge and abilities that the community needs. Based on the work that was being done, a few models of knowledge transfer can be applied and integrated. For this exploratory research, the rural communities in Sabah became the focus study.

Prior to that, it is crucial to comprehend the Malaysia MADANI concept, which is an all-encompassing integrated initiative designed to uphold decent and civilised human qualities in all things pertaining to government policies and practices in order to protect the welfare and well-being of the populace (Mohammad Zaki & Faridah, 2025; Azman & Rahman, 2023).

The people's consultation and feedback were used as a catalyst for the concept of Malaysia MADANI. At the same time, this will contribute to the prosperity of the country. The six cores underlying Malaysia MADANI are Sustainability or *Kemampanan* (M), Well-being or *sejahtera* (A), Creativity or *kreativiti* (D), Respect or *hormat* (A), Confidence or *keyakinan* (N), and Courtesy or *ihsan* (I). Sustainability refers to the comfort of a balanced life that is loaded with knowledge. Well-being focuses on strengthening the economy, and social and environmental sustainability in all efforts. Creativity targets innovation that opens the mind to innovation and empowerment of human capital. The true unity of the people is due to a high attitude of respect between one another. This understanding is important to instill confidence in achieving the desired goal. Finally, Malaysia MADANI also supports the practice of compassion for fellow human beings where efforts are focused on human empowerment. The MADANI community is certainly capable of doing something that will lead to the prosperity and well-being of the people in the state of Sabah in a better and more convincing way. The hope is that the MADANI Community will be able to play an important role in researching and reviewing the best ways and methods to bring out the people in rural and remote areas in the state of Sabah from the cocoon of poverty.

A community consists of individuals who share the same characteristics or live in the same area. Specifically, a community is defined as a group of individuals with various attributes who are connected by social bonds, share a common point of view, and work together in a particular place or environment. Based on this understanding, the MADANI Community can be described as an initiative that gathers cross-racial, multi-racial, and multi-religious communities who live together in harmony and peace to form a perfect bond of unity. Through such a community, all policies, and information on community development programs launched by the government in particular can be shared transparently and benefit all members of the community.

The MADANI community supports three main thrusts, namely, helping the marketing of government information, digitizing the community, and fostering the spirit of unity, patriotism, and nationhood. By doing so, the government's burden to improve the standard of living of the people can be lightened. In addition, the benefits of the project or any form of aid that is intended to be channeled will be able to be extended as fairly as possible. At the same time, this will improve the well-being of people in every community.

## 2. The APPGM-SDG Program

In such a way, the APPGM-SDG program can be considered a community engagement project. Community engagement involves groups of individuals who share common interests or experiences to address issues related to their well-being (CDC, 1977; Aguilar-Gaxiola et al., 2022). It is also related to a process involving local people in decision-making, policy development, and implementation (United Nations, 2020) that strengthens the locals' sense of ownership, skills, and knowledge in decision-making. Consequently, it lifts communities' appreciation in establishing strong collaboration, and they are more eager to learn and take action on the knowledge they earn (Born, 2013; Nursey-Bray, 2020). Consultation, participation, collaboration, and empowerment are some key elements that appear in explaining community engagement. A more meaningful and impactful engagement with communities will develop further since the communities feel the shared power, and empowerment leading to behavioral changes towards promoting a sustainable environment as well as developed personal interest. Other aspects of community engagement include a higher level of social inclusion, and belonging among the members. It is through strong community engagement that good solutions to the community can be matched. Strong community involvement ensures that the interventions or solutions developed are going to be effective since they are relevant to the needs of the people who will be using them (Al-Hassan et al., 2019; Singh, 2021; Bangani, 2023).

Five elements of community engagement were reported by UNICEF (2019) linking sector-specific development and humanitarian aims. Those are civic participation, inclusion, improved governance, social and behavioral change, social evidence, accountability to the affected populations, and strengthened public sector and community. There are many other approaches to community engagement. Nevertheless, the effectiveness depends on meeting the specific needs of the community and the issue at hand. The key to the successful implementation is related to how serious we are in acknowledging the community's voices.

### 2.1 Strategic Alliances in Community Development

In the effort to empower the community with SDGs, multi-stakeholders consisting of the government, businesses, civil society organisations, and academia could form a strategic alliance to ensure SDGs are well understood by the communities who are beneficiaries of the socio-economic development program (Haywood et al., 2019; Eweje et al., 2021). In line with this, Nonet et al. (2022) introduced three processes of collaboration to improve the engagement of multi-stakeholders for the SDGs. First, multi-sector (relational coupling) focuses on the relationship between different stakeholders to foster effective collaboration and engagement toward achieving SDGs. Second, operational perception alignment (cognitive coupling) deals with the shared understanding of the issue among stakeholders. Third, goal and strategic alignment (material coupling) focuses on the relationship among the stakeholders to have the same vision in aligning the goals with the SDGs. The stakeholders can be divided into two main groups, the solution providers (SPs) who are represented by the relevant agencies, and

academia, and the participating communities, who are the beneficiaries. The relationship between these two groups is successful once there is a top-down and bottom-up approach between them. The SPs provide expert knowledge and ease the decision-making process, this is following the act of a top-down approach. The communities, on the other hand, apply the bottom-up approach to ensure active participation as well as emphasising local knowledge towards achieving the desired goals (Rauss & Pourtois, 2013).

Noteworthy, is the role of learning institutions such as academia in shaping society through knowledge and community engagement (Pozi, Rahman, and Raziff, 2022). Their participation not only transfers the knowledge of particular entrepreneurial knowledge required by the communities but also disseminates information on how the knowledge is related to the targetted SDGs. Thus, this will enable the communities to inculcate SDGs in their entrepreneurial activities.

Mohd Salleh et al. (2023) highlighted the importance of creating a well-structured community engagement to inspire the communities as the beneficiaries to play a more active role in the APPGM-SDG project. Their findings showed some issues and mismanagement of projects handled by solution providers that require a relook at how the APPGM-SDG was being implemented starting from the identification of communities' issues, to the suggested solutions by the solution providers as well as how the appointment of solution providers was made. The execution process should also be well-planned and receive community feedback with relevant actions, and not simply a reaction. Impact evaluation also needs to thoroughly depict the actual implementation and real impact on the field.

Rahman et al. (2023) in their study concluded that women's participation in the projects under APPGM-SDG solution projects in Sabah had empowered them to assist in the generation of income for the family. The projects in a way managed to provide them with the relevant knowledge and skills for the entrepreneurial activities they are involved in. Most crucial for them is learning the system on how to register for proper licensing to proceed with the ventures that they are dwelling on or looking forward to engaging in related ventures.

### 3. Methodology

Participants in the qualitative surveys were ten beneficiary groups of the APPGM-SDGs from the districts of Kota Marudu, Kudat, Kota Belud, Papar, Beaufort, Keningau, and Tambunan. The necessary data was gathered via focus group discussions or FGDs. In addition, the use of the focus group method is inherently qualitative as it focuses on understanding a phenomenon or case in detail within its real-life context (Yin, 2018). This approach is particularly suitable for this research, where respondents are individuals from a specific community, as this method will provide insights that are localized (Lim, 2024) To complete the data collection process, the progress report created by the solution providers was cross-checked using the data that was gathered. As previously said, the purpose of the FGD questions is to gauge how well the entrepreneur understands how their idea relates to SDG1, No Poverty. Apart from this, literature reviews were also conducted as a comparison.

#### 3.1 SDGs' Orientation on Economic, Social, and Environment

The APPGM-SDG is a remarkable flagship program intended to localize SDGs to the Malaysian context (Ramli & Daud, 2022) while addressing various socio-economic challenges faced by communities. Seventeenth SDGs were aimed at improving global economic, social, and environmental development (UN, 2023). Likewise, the APPGM-SDG targets sustainable solutions in the aspects of the economy, society, and the environment. It carries the notion that to improve the income equality of the community, the socioeconomic life of the community must also go along with the awareness of environmental conservation. Therefore, the sustainable solutions for the APPGM-SDG project centred on these three centrefolds economic, social, and environmental. Economics determines whether participants' income increases or not from the improvement made to the entrepreneurial initiative. Social reflects the relatedness of the project to the national issues and the sustainability of the solutions. Environment concerns the environmental conservation efforts towards safeguarding the endangered ecosystem.

#### 3.2 The Four Phases of Effective Execution

The impact management on participating communities could be observed in four phases of APPGM-SDG program execution. It begins with issue mapping (design) and is followed by capacity building (planning), solutions implementation, and finally impact evaluation. The goals are to increase participants' income through entrepreneurial initiatives, to tackle prevalent social issues, and to increase awareness of environmental conservation efforts especially protecting endangered ecosystems.

Three methodologies were employed namely, impact identification, impact verification, and impact validation. First, the impact identification is based on the information reported in proposals, progress reports, monthly reports, and completion reports which measure the impact of each project. Impact verification takes place during the Focus Group Discussion (FGD), and site visits where the inputs from the beneficiaries were probed along with the observation made and document reviewed. Beneficiaries were included in the sampling and were asked to share what they have learned and how impactful is the program to their socio-economic status.

Finally, impact validation requires the evaluators to refer to the relevant stakeholders or the APPGM-SDG regional officer. The impact evaluation was concluded based on the six major elements of deep, wide, clear, high, SDG, and gender. Each of the dimensions receives a score of 1 to 5. The scoring of the six dimensions indicates the effectiveness of the projects delivered by the SPs. The higher the score, the more effective the project is. On the other hand, the lower the score, the more ineffective the project is. In brief, the evaluation shows which project is successfully implemented and caters to the needs of the beneficiaries.

The APPGM-SDG Meta-Integral Framework (Meta-Integral, 2020; Rashila & Sity, 2023) is a multilayer framework consisting of four dimensions of impact namely, deep, clear, wide, and high. Deep refers to the psychological knowledge gained from knowledge transfer activities. The deep impact is related to the cognitive, behavioral, and emotional state of the stakeholders. Psychologically, beneficiaries will gain new knowledge, become motivated, and undergo mindset and behavior change. In brief, people with deep impact become more knowledgeable, spiritually inspired, and psychologically adjusted to the challenges confronted.

The clear dimension concerns the skills developed or sharpened from the knowledge transfer activities.

People who have a clear impact are capable of handling tasks faster than before. For entrepreneurial skills, the one participating as a beneficiary might show his or her ability to use digital marketing after attending such a course.

High designates the capability of the beneficiaries to systematically manage the activities. It is related to the way the operation was handled which sees improvement or the introduction of a systematic way of handling matters. The systematic approach enables the endeavors to be smoothly and sustainably operated.

The wide dimension indicates one's ability to widen one's networks associated with the business or the entrepreneurial activities one deals with. In particular, good rapport with the relevant agencies and stakeholders may further improve one's connection to stay long in one's venture. According to Roddin et al (2020) and supported by Sharifah Syahirah et al. (2023), the head of household among the Indigenous women was able to improve their income gap after attending the upskilling training on product development such as handicraft courses. Not only do they learn the skills, but they are also capable of building networks and making full use of the connection. As long as the upskilling program conducted is gender appropriate, there is a higher chance of getting employed even after undergoing imprisonment (Mohd Alif Jasni, 2022). Meanwhile, digital literacy is found to be a game changer (Choudary & Bansal, 2022) since it is crucial for learning this skill to be resilient in the entrepreneurial activities of a larger segment of the market governed by technological advancement and digitalization.

**Table 1** *Impact evaluation indications*

No	Impact	Meaning	Examination
1	Deep	A change in stakeholder experience	Self-evaluation, psychometrics, satisfaction surveys, mood inventories
2	Clear	A change in stakeholder performance based on skills assessments	Analytic tools, observational instruments, KPI
3	Wide	How stakeholder relationship will change	360-degree assessments, relationship mapping, interviews, social impact evaluations
4	High	The evolution of stakeholder systems	Environmental impact assessments, financial impact assessments, input indicators, KPI
5	SDG	Beneficiaries' comprehension of SDG	Indicators and objectives
6	Gender	Evaluate the proportion of women on committees and among beneficiaries	Numbers of disaggregated data

## 4. Results and Discussions

### 4.1 The Credibility of the Reports

Noteworthy, the APPGM-SDG project still needs to be improved despite its ability to reduce income inequality (Wong and Chua, 2021). It was learned that some of the success stories reported by the solution providers (SPs) did not tally with what was being shared by the beneficiaries during FGD and site visits (Abd Rahman et al., 2023). Reports lacked credibility in solving issues experienced by the beneficiaries in which impact sustainability is in doubt. Based on the FGD and the site visit conducted, it was learned that those four phase execution principles

were not properly adhered to (Sharifah Syahirah et al., 2023). When the observations were compared to the SP's reports, they seemed to be falsified. In a similar tone, Puteh and Wan (2023) agreed that the reports by SPs sometimes contradicted other reports and were not consistent with what was stated by the beneficiaries. Hence, the validation process took time to be verified and required the secretariat of APPGM- SDG intervention for some clearances.

## 4.2 Project Not Needed

Somehow the knowledge transferred was not what the beneficiaries needed. Instead, the idea to offer courses comes directly from the SPs. Yet, the four approaches still can be improved by identifying and prioritizing the critical issue in the community, as well as ensuring that the execution is guided by the right solution.

## 4.3 Incompetent SPs

Interventions should be from the experts and not any academics with unrelated expertise to ensure the successful implementation of projects like APPGM-SDG. Academics who are in the related field can formulate the right solution before the project takes place. The appointment of credible SPs needs to be done conscientiously to avoid more occurrences of failing projects that may widen the incidence of poverty. Expanding the issue of poverty may only bring political instability in the long run (Teh, Teh, and Sumaila, 2020).

It is important to ascertain that only the right SPs with the right approaches are involved in the project so that the beneficiaries may acquire the needed knowledge and skills (Rahman et al., 2023). Perhaps, according to Rahman et al. (2023), the impact evaluators should be appointed earlier to assess the credibility of the SPs and their proposed approaches to ensure that only workable strategies are implemented in the APPGM-SDG program.

## 4.4 Unclear Indicators and Improper Mechanisms

Some intriguing issues on project evaluation include identifying the right indicators for project evaluation, the poor mechanisms to collect feedback, and the lack of resources to properly evaluate the programs. In addition, the difficulty in finding honest and competent SPs deteriorates the issues further. Thus, to ensure the successful implementation of any socio-economic projects geared towards improving the life of the communities, it must be carefully supervised and given to those having expertise in the related project as SPs.

## 4.5 The Perplexities of SDGs

Puteh and Wan (2023) argued that some APPGM-SDG projects might not meet the objective due to unclear SDG targeted for the selected beneficiaries. Thus, it is crucial before focusing on the well-being of individuals and society (Pozi et al., 2021), it is also imperative to educate the beneficiaries about the SDGs. In addition, the implementors or the solution providers need to have the right approach on how to ensure that the SDGs' message is easily understood by the beneficiaries for a sustainable and impactful SDG-related project. Strong recommendations were proposed that in the future, clear communication about how the APPGM-SDG should be properly conducted needs to be well-understood by all parties involved (Puteh & Wan, 2023). Puteh and Wan (2023) urged the improvement of the program design and targeted the right and proper policy development to ensure sustainable solutions on economics, society, and the environment.

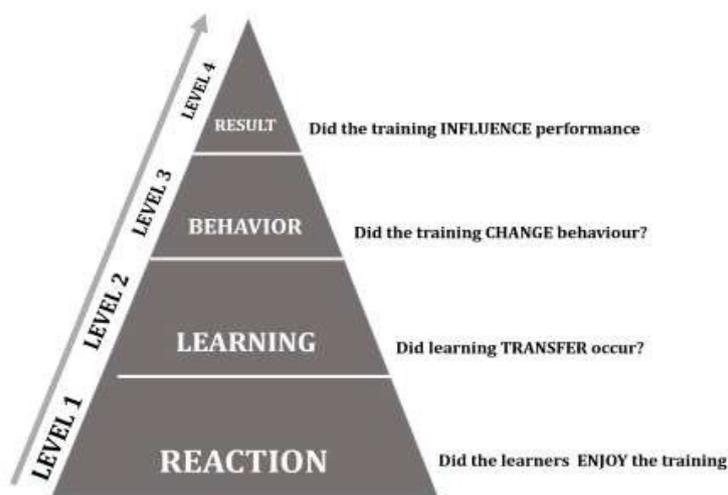
Rahman et al. (2023) disputed the effectiveness of the APPGM-SDG program due to the beneficiaries' failure to relate SDG elements to the courses provided by SPs. The beneficiaries only know about the SDGs involved in the course after being informed by the course instructors or the SPs once the courses end. The beneficiaries are unable to put into practice practices related to the SDGs. This is because when they were asked by the impact evaluators about the SDG they were engaging with, all of them only memorized the name of the SDG but were unable to explain the relationship with the entrepreneurship initiatives.

## 5. Various Project Implementation Models

In the past, the socio-economic projects mainly on entrepreneurship initiatives might either have a model to ascertain the success of the projects or not have a model at all. In other words, methods of delivery were not fixed or verified and were based on what the solution providers thought was appropriate. As a consequence, less successful stories were heard. Projects might endure a short period before being completely abandoned and considered failed. Hence, identifying models that secure the potential of the socio-economic project in generating income for the community before project implementation and throughout the project is crucial. Some models seem to have effectively fulfilled this expectation if they are applied together.

### 5.1 Kirkpatrick Model

The Kirkpatrick model (1995) could be considered one of the earliest models in evaluating the impact of training effectiveness. The model is capable of measuring the impact of training that took place in the knowledge transfer project as well. Four levels are measured in this model as shown in figure 1. Kirkpatrick (1996) argued that the training delivered in Levels 1 and 2 did not necessarily determine whether participants could perform well in their job context later on. At Level 1, participants were evaluated on their reaction, while at Level 2, the participants were examined on their understanding and ability to make changes when returning to their workplace. In Level 3, the participants should be able to apply the knowledge and skills learned to the job context. Level 4 shows the results in the form of decreased costs, improved quality, enhanced customer satisfaction, and increased quality and productivity. Even though the model provides a good tool to assess the impact of an individual’s training, it does have a limitation related to the contextual influences on the judgment.



**Fig. 1** Kirkpatrick 4-level training evaluation model  
 Source: Kirkpatrick (1959)

### 5.2 Phillips ROI Model

Phillips (2003) ROI Model is the expanded version of the Kirkpatrick model. Every level was enhanced and an additional level of Level 5 which is on evaluating Return of Investment (ROI) was added (Table 1). Level 1 not only focuses on reaction but also on satisfaction and planned action. This level measures participants’ satisfaction with a program and whether they have plan to use what they have learned or not. Level 2 still on learning which assesses how much participants have gained by attending the training. Yet, Phillips (2003) argued that it is not ascertained whether participants bring home what they have learned or not. Concerning Level 3, participants’ tendency to practice what they have learned justifies behavioral changes. Level 4 looks at the impact of training on the business. Meanwhile, Level 5 is the new level measuring Return on Investment (ROI). This level displays the return on money invested in the training in which the relativity of profit to investment cost is shown. Despite improving the Kirkpatrick Model, the Phillips ROI Model also faced criticism on the timing and usefulness.

**Table 2** The Phillips ROI model

The Phillips model measures training outcomes at five levels:

Level	Brief Description
1 Reaction, Satisfaction, & Planned Action	Measures participant reaction to and satisfaction with the training program and participant’s plans for action.
2 Learning	Measures skills and knowledge gains. Noteworthy, no assurance that these skills and knowledge will be used.
3 Behavior, Application and Implementation	Measures changes in on-the-job application, behavior change, and implementation.
4 Business Impact	Measure business impact to see if improvements were made
5 Return on Investment (ROI)	Compares the monetary value of the business outcomes with the costs of the training program

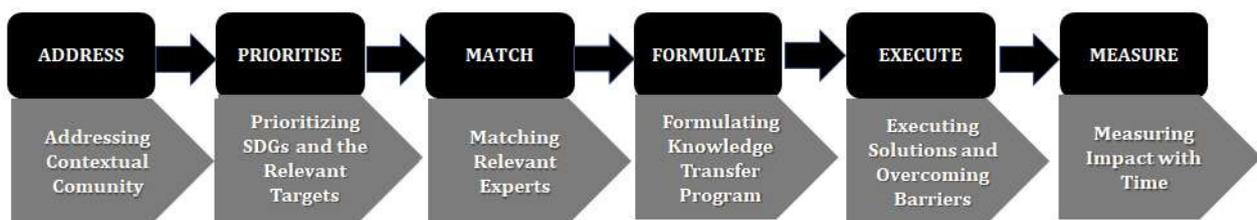
Note. Taken from Bailey (2005)

### 5.3 Return of Value

ROI can show financial benefits, but it is unable to take into consideration the creation of value, reputation, or personal fulfilment. The Return on Value (ROV) is therefore important. Stated differently, return on value (ROV) evaluates the return on non-financial aspects to determine the impact and effectiveness of an investment. Regarding the knowledge and skills imparted, ROV controls the extent to which participants are satisfied. How the participants have benefited and been further motivated by the course. The ability to be more productive is also determined by the newly gained skills of the participants. Additionally, the participants will be prepared to advance if they can comprehend pertinent processes and procedures and how to put them into practice. In addition, ROV facilitates better stakeholder relations, decision-making, and the development of sustainable business models for individuals and organisations.

### 5.4 SHARE Model

An action-based 6-step plan technique as shown in Figure 2 is used to deliver the action-based domain which is derived from the SHARE Model (Ahmedy & Dasan, 2022; Dasan et. al, 2022). The SHARE Model was developed in response to the need to provide knowledge beyond that of the quadruple helix framework for sustainable community and social development. It is based on three main domains: shared leadership, action-based learning, and relationship-building. These domains are essential for developing practical and effective strategies.



**Fig. 2** The 6-step action plan of SHARE model  
Source: Ahmedy & Dasan (2022)

Following a site visit to the communities where participants and the academics have interaction sessions, the first two steps of addressing and prioritising are completed. Understanding the community's primary challenges about socioeconomic growth, equality, accessibility to health and education, and the relationship between men and the environment is the first step. The root cause of the current problems must be identified through a root cause analysis based on these difficulties. Following the identification of the root causes, the primary goals become evident, and the pertinent SDG is ranked accordingly. The essential component of Step 2 is aligning the primary goals with the desired SDGs. These steps are carried out beforehand to facilitate the seamless execution of the programme, and the results will be presented as case study evaluations inside the programme.

Participants in the programme will proceed with the task of finishing the Action-based 6-Step Plan after considering the conclusions as mentioned earlier. Finding the expertise to suggest the optimal formula and approach based on the desired SDG and goals is necessary for Step 3. In this case, the expertise is not only concentrated on the academic specialisations but also on determining the necessary connections with the government agencies and business entities that make up the quadruple helix framework. Step 4, which comes next, is crucial because it calls for teamwork to come up with a solution that is not only workable now but also sustainable in the long run. In this case, community members must be actively involved as important participants, which is why any plan to be adopted must be actively studied and acquired by the community. In this step, an overview of the techniques and knowledge transfer initiatives that will be used must be created.

The latter two steps center on the primary challenges that many academics encounter when attempting to engage universities and society in community development. The hardest aspects of a project to carry out are frequent implementation and monitoring, primarily attributable to a lack of sustained community and university involvement, results in subpar long-term effects after the initiative is put into action. The goal of this programme is to create estimated milestones that would improve the delivery of execution within a workable time frame while addressing anticipated barriers and ways to measure the long-term impact of tackling sustainability issues.

By integrating all the practices in the models and their approaches, a proposed model can be used in sustaining entrepreneurship initiatives to eradicate poverty in Sabah as follows;

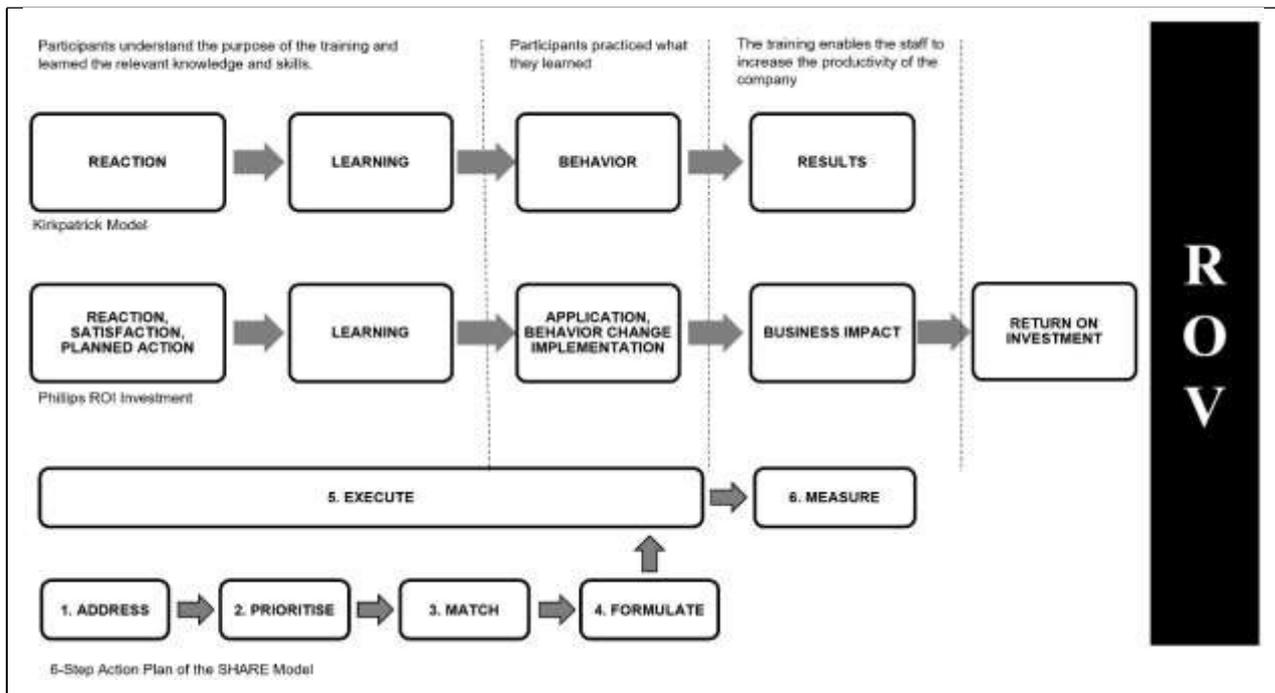


Fig. 3 The integrated innovative model

## 6. Conclusion

It is undeniable that the Malaysian government has launched and implemented various programs to ensure progress is achieved and felt throughout the country. However, despite these ongoing initiatives and programs, poverty remains an issue in Malaysia, with Sabah recording one of the highest poverty rates. To understand this complex issue, this study employs a qualitative method through focus group discussions. Ten beneficiary groups of the APPGM-SDGs from the districts of Kota Marudu, Kudat, Kota Belud, Papar, Beaufort, Keningau, and Tambunan are involved in the data collection. Overall, the findings of this study indicate that entrepreneurship initiatives can be enhanced by adopting the appropriate model, which can be guided by the MADANI Community. The SHARE Model can be used to identify the important problem that requires a practical knowledge transfer initiative. It is possible to properly match important challenges with the appropriate academics or solution providers after they have been recognised. Subsequently, as demonstrated by the Kirkpatrick Model and Phillips ROI Model, it is imperative to comprehend the significance of receiving appropriate training to take meaningful action following the training. Noteworthy, the ROV components should be stressed in addition to ROI to help the participants become sustainable business owners.

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## Conflict of Interest

Authors declare that there is no conflict of interest regarding the publication of the paper.

## Author Contribution

The authors confirm their contribution to the paper as follows: **study conception and design:** Jakaria Dasan; **data collection:** Jakaria Dasan, Salleh Wahab, Faerozh Madli, Shaierah Gulabdin, Bibianah Thomas; **analysis and interpretation of results:** Jakaria Dasan, Salleh Wahab, Faerozh Madli, Shaierah Gulabdin, Bibianah Thomas; **draft manuscript preparation:** Jakaria Dasan. All authors reviewed the results and approved the final version of the manuscript.

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