

Research Article

Accelerating Creative Techno-preneurship Through Innovative Design and Technology Integration

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Abstract.

Creative techno-preneurship investigates a new frontier in the integration of creative technology to design more innovative entrepreneurship models to suit their business model and the goals of their organization. Entrepreneurs use this technology and approach creatively to identify opportunities from advanced creative technology research and development that can be used for entrepreneurship activities. To remain competitive, businesses must innovate. Simultaneously, technology is constantly advancing, and work-related tools are constantly changing. This forces organizations to stay current with technology and puts pressure on employees to use the technologies at their disposal to create innovative solutions that further the organization's goals. It is hoped that this integration model will be a milestone in the trend to support future developments of digital content in particular to uplift the digital comic development in Malaysia.

Keywords: creative innovation, digital technology, creative techno-preneurship, incubator

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Published 15 August 2023

Publishing services provided by
Knowledge E

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Selection and Peer-review under the responsibility of the ICADECS Conference Committee.

1. INTRODUCTION

Creative technology is a broadly interdisciplinary and transdisciplinary field combining computing, design, art and the humanities. The field of creative technology encompasses art, digital product design, digital media or advertising and media made with a software-based, electronic and/or data-driven engine. Examples of creative technology include multi-sensory experiences made using computer graphics, video production, digital music, digital cinematography, virtual reality, augmented reality, video editing, software engineering, 3D printing, the Internet of Things, CAD/CAM and wearable technology [1].

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Figure 1: Wide range of Creative Technology cluster.

In this study, we will propose the sustainable creative technology multi-cluster entrepreneurship incubator integrated model to support the ecosystem toward accelerating the creative techno-preneurship through innovative design services and digital technology integration. It is expected to give many advantages to accelerate the sustainable of creative techno-preneurship development in the country.

2. CREATIVE TECHNO-PRENEURSHIP DEVELOPMENT

Creative technology and entrepreneurship innovation are two areas that are rapidly growing and transforming industries worldwide. Creative technology is the fusion of technology and creativity, which includes the use of new media, software, and hardware to create innovative products, services, and experiences. On the other hand, entrepreneurship innovation involves identifying and pursuing new opportunities, developing and implementing new ideas, and creating value through innovation.

The combination of creative technology and entrepreneurship innovation has led to the emergence of new startups and businesses that are disrupting traditional industries and creating new markets. This intersection has also opened up new avenues for artists, designers, and creatives to develop innovative products and services that engage and inspire audiences in unique ways.

Hence, Creativity, innovation and entrepreneurship are important things of the launch each innovative products and services that comes with advanced technology. Entrepreneurship is considered a key factor in economic development [2].

3. ACCELERATING CREATIVE TECHNO-PRENEURSHIP THROUGH INNOVATIVE DESIGN AND DIGITAL TECHNOLOGY INTEGRATION

Commonly, entrepreneurs are required to have the capacity to create, to invent into new form or to bring existence into something new that gives more value to customer. This ability is rather not inherited or naturally in one's but it is something needs to be learnt. Therefore, supportive ecosystem could be develop to accelerate the process of learning creative techno-preneurship through various cluster of creative technology specialization to create symbiosis integration of innovation design via digital technology integration. Creativity and innovation in entrepreneurship link by which creativity is the intellectual activity to create new ideas while innovation is the action taken to transform the new ideas into a result.

TABLE 1: Technology Creative Cluster, Digital technology, and Creative Techno-preneurship Innovation.

Creative Technology Cluster	Digital Technology	Creative Techno-preneurship
Visual Art	Creative Art Software	Digital Artwork Services
Performing Art	Digital Broadcasting Software	Digital Concert Event (Virtually via Internet)
Music	Multimedia Authoring Software tools (Software / Hardware)	Digital Music Production
Literature		Professional services & masterpiece
Content Creation	Cloud Application & Digital Publishing Platform	Professional Services & digital content production
Fashion	Application software for Product or Training Module Design	Professional Services and tangible product
Traditional and Cultural Arts		
Culinary Art		
Design		
Creative Education		

Therefore, potentials of Creative Techno-preneurship activities. The are various opportunities for more innovative products and services could be created through the integration of digital technology. To encourage more innovative product and services, a unique entrepreneurship incubator integrated model was introduced to provide and alternative approach for the implementation.

4. SUSTAINABLE CREATIVE TECHNOLOGY MULTI-CLUSTER ENTREPRENEURSHIP INCUBATOR INTEGRATED MODEL

A unique Sustainable Creative Technology Multi-Cluster Entrepreneurship Incubator Integrated Model introduced to empower the integration of digital technology and innovation design to accelerate the creative techno-preneurship development in industry.

The sustainable creative technology multi-cluster entrepreneurship incubator integrated model is a new approach to fostering innovation and entrepreneurship in the creative technology industry. This model is designed to promote sustainable growth, social responsibility, and environmental stewardship by integrating the principles of sustainable development into the entrepreneurship and innovation process.

At its core, this model brings together entrepreneurs, investors, mentors, and other stakeholders to collaborate and develop new ideas and solutions that leverage the latest advancements in creative technology. The multi-cluster approach enables the incubator to support a wide range of industries, from film and animation to gaming, design, and digital media.

By focusing on sustainability, the incubator seeks to promote responsible innovation that benefits society and the environment. This includes identifying new opportunities for environmentally friendly products and services, promoting sustainable business practices, and fostering a culture of social responsibility among entrepreneurs and stakeholders.

The integrated model also incorporates various support services, including mentorship, networking opportunities, and access to funding and resources, to help entrepreneurs and startups grow and succeed. By bringing together diverse stakeholders and resources, this model enables entrepreneurs to develop their ideas and businesses in a collaborative, supportive environment.

Overall, the sustainable creative technology multi-cluster entrepreneurship incubator integrated model offers a holistic approach to fostering innovation and entrepreneurship in the creative technology industry while promoting sustainable growth and social responsibility. This model has the potential to create a positive impact on the industry and society as a whole.

Simultaneously, technology is continually advancing, and tools to facilitate work are frequently changing. This forces organizations to stay in touch of current technologies

and puts pressure on employees to utilize the technologies available to them to create innovative solutions that further the organization’s goals. Therefore, adoption of creative technology and innovative design in creating new business ventures prospering the development of entrepreneurship development create more value to the business.

5. PILOT IMPLEMENTATION AND RESULTS

A pilot project was launched to test the feasibility of the Sustainable Creative Technology Multi-Cluster Entrepreneurship Incubator Integrated Model for Creative Technopreneurship’s new business venture through development of Creative Technopreneurship Service Incubator called “Cre8tivation Lab UMK” [3].

The integration model included people (creative technology expertise and talent), process (integration process and activities), and technology (mechanics—integration enablers). Significant issues, challenges, and opportunities have been highlighted and discussed in order to validate the model’s practicability and best practices for accelerating creative techno-preneurship activities in the industry. Finally, the proposed model could be used as a model for industry players to create a complete, supportive, and innovative ecosystem for the development of creative techno-preneurship in the future.

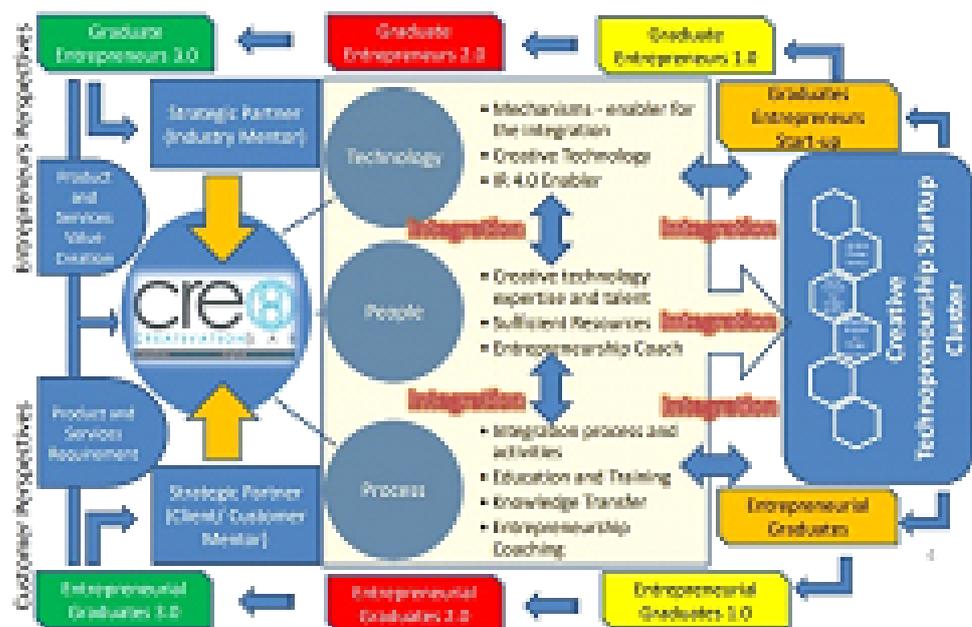


Figure 2: Sustainable Creative Technology Multi-Cluster Entrepreneurship Incubator Integrated Model.

The sustainable creative technology multi-cluster entrepreneurship incubator integrated model is a complex approach that requires multiple elements to be effective.

The incubator integrated model is the demonstration of the following concept and practices adaptation :

5.1. Sustainable Development

The incubator model emphasizes the principles of sustainable development, which includes social responsibility, environmental stewardship, and economic growth. This ensures that the innovation and entrepreneurship process is driven by responsible practices that create long-term value for society and the environment.

5.2. Multi-Cluster Approach

The incubator supports a diverse range of industries by adopting a multi-cluster approach. This enables the incubator to foster innovation and entrepreneurship across different creative technology sectors, from film and animation to gaming, design, and digital media. The multi-cluster approach also promotes cross-sectoral collaboration and knowledge sharing.

5.3. Collaboration and Networking

The incubator model fosters collaboration and networking among entrepreneurs, investors, mentors, and other stakeholders. This provides a supportive environment where entrepreneurs can exchange ideas, seek advice, and identify potential business opportunities. By building a strong network of stakeholders, the incubator model creates a vibrant ecosystem of innovation and entrepreneurship.

5.4. Mentorship and Support Services

The incubator model offers mentorship and support services to entrepreneurs, which includes access to funding, resources, and expertise. This support is critical in helping entrepreneurs navigate the challenges of starting and growing a business, and it ensures that they have the resources and guidance needed to succeed.

5.5. Integration of Technology

The incubator model integrates the latest advancements in creative technology to foster innovation and entrepreneurship. By leveraging technology, entrepreneurs can develop new products and services that are innovative, efficient, and effective. The integration of technology also ensures that the incubator stays relevant and competitive in a rapidly evolving industry.

5.6. Social and Environmental Impact

The incubator model emphasizes the importance of creating a positive social and environmental impact. This includes identifying new opportunities for environmentally friendly products and services, promoting sustainable business practices, and fostering a culture of social responsibility among entrepreneurs and stakeholders. By focusing on social and environmental impact, the incubator model ensures that entrepreneurship and innovation are aligned with the broader goals of sustainable development.

In summary, the sustainable creative technology multi-cluster entrepreneurship incubator integrated model is a comprehensive approach that promotes sustainable growth, social responsibility, and environmental stewardship in the creative technology industry. By adopting a multi-cluster approach, fostering collaboration and networking, offering mentorship and support services, integrating technology, and emphasizing social and environmental impact, the incubator model creates a supportive and innovative environment for entrepreneurs to thrive.

6. CONCLUSION

In conclusion, creative technology and entrepreneurship innovation are two important areas that are driving innovation and transformation in various industries. The integration of technology and creativity has created new opportunities for entrepreneurs and creative professionals to develop products and services that not only solve problems but also engage and inspire audiences in unique ways.

Moreover, entrepreneurship innovation has enabled startups to disrupt traditional markets and create new ones, leading to economic growth and job creation. The combination of creative technology and entrepreneurship innovation has paved the

way for new business models and strategies that challenge the status quo and drive progress.

As the world becomes more interconnected and technology continues to advance, the importance of creative technology and entrepreneurship innovation will only continue to grow. By leveraging the power of technology and creativity, entrepreneurs can create value, generate new business opportunities, and drive positive social and economic impact.

As technology continues to evolve at an unprecedented pace, entrepreneurs who understand the value of creative technology and entrepreneurship innovation will be well-positioned to thrive in the dynamic and competitive business landscape of the future.

References

- [1] Insider B. "Creative technology is key for connecting the next billion". Business Insider India, 2022 Jan 17. Available from: <https://www.businessinsider.in/>
- [2] Muhamad IS. The Roles of Creativity and Innovation in Entrepreneurship. *Adv Soc Sci Educ Humanit Res.* 2019;470:213.
- [3] Video pencalonan Kategori Anugerah Inkubator Terbaik Cre8tivation Lab [Internet]. Cre8tivation Lab. 2022 Aug 11. Video: 4:58 min. Available from: <https://www.youtube.com/watch?v=1hIB8cOg-2Y&t=33s>