CREATIVE CAMP, COWORKING SPACE, AND INNOVATION LABS AS LEARNING RESOURCES FOR STARTUP-ENGAGED STUDENTS

Ulfa Nabila Tafrienda
Sugeng Bayu Wahyono
Universitas Negeri Yogyakarta
E-mail: ulfanabila.2022@student.uny.ac.id

Abstract: This study explores the role of Creative Camp, Coworking Space, and Innovation Labs at Indigo Space Padang as innovative learning resources for student startup activists. The background addresses global challenges in critical learning and the untapped potential of Indonesia's creative industry. Using a descriptive qualitative approach with a prospective case study, data were collected through observation, in-depth interviews, and documentation involving 12 student users of the facilities. Key findings reveal: (1) Creative spaces foster collaborative environments through comprehensive facilities, training programs (workshops, mentoring), and professional networks; (2) Enhanced technical competencies (technology, prototyping) and non-technical skills (business management, communication), alongside access to startup funding; (3) Driving factors include free facilities, structured programs beyond campus curricula, and an experiential learning-based ecosystem. The study concludes that integrating these three spaces successfully bridges academic theory with industrial practice, strengthening students' career readiness in the digital era. The collaborative model can serve as a reference for universities and policymakers to support digital economic growth by empowering the younger generation through innovative learning ecosystems.

Key words: creative camp, coworking space, innovation labs, startup, learning resource

Abstrak: Penelitian ini mengeksplorasi peran Creative Camp, Coworking Space, dan Innovation Labs di Indigo Space Padang sebagai sumber belajar inovatif bagi mahasiswa pegiat startup. Latar belakangnya mencakup tantangan global dalam pembelajaran kritis dan potensi industri kreatif Indonesia yang belum optimal. Menggunakan pendekatan kualitatif deskriptif dengan studi kasus prospektif, data dikumpulkan melalui observasi, wawancara mendalam, dan dokumentasi terhadap 12 mahasiswa pengguna fasilitas. Temuan utama menunjukkan: (1) Ruang kreatif menciptakan lingkungan kolaboratif melalui fasilitas lengkap, pelatihan (workshop, mentoring), dan jejaring profesional; (2) Peningkatan kompetensi teknis (teknologi, prototipe) dan non-teknis (manajemen bisnis, komunikasi), serta akses pendanaan startup; (3) Faktor pendorong meliputi fasilitas gratis, program terstruktur di luar kurikulum kampus, dan ekosistem berbasis experiential learning. Kesimpulannya, integrasi ketiga ruang ini berhasil menjembatani teori akademik dengan praktik industri, memperkuat kesiapan karier mahasiswa di era digital. Implikasinya, model kolaboratif ini dapat menjadi acuan bagi perguruan tinggi dan pemangku kebijakan untuk mendukung pertumbuhan ekonomi digital melalui pemberdayaan generasi muda.

Kata kunci: creative camp, coworking space, innovation labs, startup, sumber belajar

Learning is a crucial element in individual development, serving to expand insights, competencies, and ways of thinking. This lifelong process forms the foundation for success across various spheres of life. However, the implementation of learning is often met with obstacles. UNESCO (2023) highlights key challenges such as cognitive barriers, weak critical analysis of information, difficulties in problem-solving and decision-making, and reliance on external parties in self-directed learning (Unisco, 2023). Additionally, a lack of skills in managing autonomous learning risks hindering progress, ultimately resulting in an inability to independently navigate complex situations.

These learning challenges remain a complex global issue, requiring holistic and

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sustainable solutions as they risk hindering individual development. On the other hand, the growth of Indonesia's creative industry offers new opportunities. Many local startups operate in visual communication design (VCD), game development, interior design, advertising, animation, and other creative sectors. According to Luhung & Cahyono (2020), the creative industry leverages individual creativity, expertise, and talent to generate economic value (Luhung & Cahyono, 2020).

In today's digital era, the education sector is compelled to adapt and innovate to enhance society's readiness in facing digital transformation, which has become a top priority. Deri Wanto, (2023) notes in his study that post-pandemic, digital technology has become a critical component in education, giving rise to the concept of "digitization of education," which transforms academic services, learning materials, and teaching methods (Deri Wanto, 2023). This shift holds potential to improve the learning competencies of the digital generation, though many students remain unprepared to fully leverage digital spaces for self-development. Human resources (HR) must be equipped with professional skills such as effective communication proficiency, creativity, information technology mastery, and teamwork collaboration to support career readiness in this dynamic era (Ratnanenci, 2022).

Survey data from the Center for Data and Information of the Ministry of Education, Culture, Research, and Technology (2023) reveals that students' utilization of digital spaces remains limited: 40% for accessing learning information, 30% for attending online classes, and 20% for honing new skills. Aligning with this, Kusuma (2023) emphasizes the importance of enhancing students' active participation in leveraging digital platforms for optimal learning and potential development (Kusuma, 2023). Therefore, societal support in providing a conducive learning environment is a key factor in achieving educational goals and ensuring the future success of the younger generation.

The learning process should ideally be designed to encourage active student participation in exploring and seeking knowledge. This is where learning resources play a critical role, not merely as tools but as media that facilitate students' engagement in independently constructing understanding. Thus, learning resources are pivotal in enabling effective and meaningful learning (Wey-Amaewhule & Okoronkwo, 2024).

The evolution of learning resources continues to advance alongside developments in science and technology, demanding adaptive utilization by society. Technological advancements such as smartphones, laptops, the Internet of Behavior (IoB), artificial intelligence (AI) engineering, cybersecurity systems, and cashless transactions have simplified access to flexible learning resources. Concurrently, creativity and innovation particularly those rooted in artistic approaches are key to enhancing the effectiveness of leveraging these technologies to support learning needs. Wey-Amaewhule and Epelle (2022) assert that educational institutions worldwide have recognized the significance of technology in creating effective learning ecosystems (Wey-Amaewhule, B., & Epelle, 2022)

In 1997, the Association for Educational Communications and Technology (AECT) defined learning resources as encompassing various elements such as data, individuals, or objects that learners can utilize independently or collaboratively, typically in informal environments, to support the learning process. Learning resources play a vital role in helping individuals acquire information, knowledge, experience, and skills during teaching-learning activities (Junindra et al., 2022). The availability of relevant learning resources is a key factor in enhancing the quality of education (AS et al., 2024). This aims to create deeper and more meaningful learning experiences for students.

In the current era, numerous locations provide internet access to support the creation of learning resources, such as campuses, digital libraries, cafes, and public spaces including coworking spaces. The concept of coworking spaces originated from creative innovation born out of transformations in work patterns, while also encouraging society to be more productive

and generate meaningful work (Rajendra Putri & Wilianto, 2022).

Public space managers typically provide shared office facilities (coworking spaces) as collaborative hubs for participants in business incubation programs. These spaces are designed to be multifunctional, integrating office facilities and community interaction centers in one location (Putri et al., 2020). Coworking spaces offer collaboration areas tailored to support professional activities, particularly for startup businesses and communities. These facilities are designed to foster interaction, enable the exchange of ideas, and build synergy among members through customizable shared spaces. According to Mathias in (Kintari et al., 2020), coworking spaces are "more than a place to work," signifying that they transcend mere workspaces.

Coworking spaces are not merely workplaces but are also managed to support startups in developing their businesses and enhancing their potential through programs such as creative camps and innovation labs. These spaces serve as alternative work environments for those weary of the isolation of working from home or who find cafes unproductive. They enable individuals and groups from diverse backgrounds to interact, exchange ideas, and collaborate (Ananda et al., 2018).

Though the concept of coworking spaces is relatively new, their global growth has been rapid. The number of coworking spaces surged from 1,130 in 2011 to 11,300 by 2016 (Foertsch, 2013). In Asia, this trend has also shown positive momentum, with annual growth rates of 10-15%. In Indonesia, growth has been exponential starting with just one coworking space in 2010, the number skyrocketed to over 50 by 2016. This phenomenon is driven by the transition from a conventional to a digital economy, which has spurred the emergence of numerous startups, particularly in the creative industry sector (Cheok, 2017).

One concrete example is the Digitalent program initiated by Indonesia's Ministry of Communication and Informatics (Kemenkominfo). Unfortunately, this opportunity has not been optimally utilized by many students. For instance, while some students have established certified digital skill-based startups, many face obstacles midway due to insufficient funding, even after formulating business development plans. On the other hand, the pandemic era has fueled students' innovative spirit to create a 21st-century digital ecosystem, fostering a culture of startup enthusiasts. To support this, there is a need to manage virtual learning environments that not only facilitate education but also promote collaboration and strengthen community networking (Oyedele et al., 2023).

The main challenge faced by Indigo Space Padang is the low understanding among participants regarding creativity and innovation, leading to suboptimal utilization of the facilities. The creative skill development programs have not been maximized, resulting in low learning participation. Limited social networks among participants also hinder collaboration and the exchange of ideas. Additionally, insufficient management support and low community awareness have caused Indigo Space's role as a hub for creativity and innovation development to not function optimally.

Connectivism theory, proposed by George Siemens, integrates principles from chaos theory, network theory, complexity, and self-organization, emphasizing that learning occurs through interaction, idea exchange, and continuous knowledge updating in the digital era, with technology playing a pivotal role in strengthening learning networks (Malikah et al., 2022). This theory aligns with the function of Indigo Space's Creative Camp, Coworking Space, and Innovation Labs as innovative learning resources for student startup activists, where internet and information technology facilitate access to diverse information and foster collaboration through digital tools like online platforms, social networks, and electronic communication devices. Ultimately, connectivism highlights the strategic value of connections, interrelations, and networks in modern learning processes, positioning technology as a central component in bridging startup actors and enhancing collaborative learning.

Previous studies have explored the impact of coworking spaces and innovation labs on startup development, yet limited research has investigated the synergistic

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integration of Creative Camps, Coworking Spaces, and Innovation Labs as a comprehensive learning ecosystem.

Furthermore, no prior studies have specifically examined Indigo Space Padang as a case study within Indonesia's unique socio-cultural and entrepreneurial context. This research addresses these gaps by analyzing how each component Creative Camp, Coworking Space, and Innovation Labs collectively enhances innovation, collaboration, and experiential learning for student startup activists, while also providing insights into the effectiveness of such hybrid models in fostering entrepreneurial growth in local settings.

Learning resources are integral components of educational systems, whether intentionally designed (e.g., coworking spaces) or naturally adaptable for use in learning activities. Leveraging digital educational resources in coworking spaces creates flexible and engaging learning environments that prioritize flexibility and teamwork, as the environment itself is a critical component of learning resource categories (Alenezi, 2023).

The objective of this study is to:

1. Describe the utilization of Creative Camp, Coworking Space, and Innovation Labs at *Indigo Space Padang* as learning resources,
2. Identify the outcomes perceived by startup-oriented students in utilizing these facilities, and
3. Determine the underlying causes or motivations driving students to select and leverage these three creative spaces as part of their learning process.

Thus, this research not only outlines the forms of facility utilization but also analyzes their practical impact on students and the primary factors driving their use in the context of entrepreneurship and innovation development.

Based on the above description, this study focuses on the utilization of the Creative Camp, Coworking Space, and Innovation Labs as learning resources for students involved in startups in Padang City. The role of these three spaces is deemed crucial in fostering an adaptive, collaborative, and innovative learning environment, particularly in the context of educational digitalization. The use of these facilities at Indigo Space Padang is hypothesized to have a positive impact on enhancing the competencies of startup-oriented students, particularly in creativity, collaboration, and innovation. Additionally, the successful utilization of these facilities is thought to be influenced by factors such as students' internal motivation, management support, and a conducive learning environment. If the management and utilization of these facilities are optimized, more students are likely to be encouraged to leverage these creative spaces as platforms for self-development and digital entrepreneurship. This could ultimately strengthen the startup ecosystem in Padang and support the growth of innovation-driven education in the region.

METHOD

The research method is a scientific approach to obtain data for specific purposes and uses (Sugiyono, 2019). The method used in this report is descriptive qualitative research. In general, qualitative research is descriptive and tends to emphasize analysis. Descriptive data is written in detailed sentences, prioritizing the process and meaning (subject perspective). The author uses a descriptive qualitative method to systematically and accurately describe facts and relationships between observed phenomena.

This research employs a prospective case study approach, chosen to track the use of the creative camp, coworking space, and innovation labs by students active in startups in Padang City, as well as the impact on their startup development over time. This study also helps predict the growth potential and success of student-involved startups leveraging Indigo Space's facilities. The research observes real-world occurrences, tracks changes, analyzes them, and generates new findings (Fenny Aprillia et al., 2020).

The study was conducted at Indigo Space Padang, located at Jl. Batang Tarusan No. 3, Alai Parak Kopi, Padang Utara District, Padang City, from July to August 2023. The subjects were 12 students who frequently use the facilities,

selected via purposive sampling. The participants came from diverse academic backgrounds, including Business/Management (4 students), Computer Science/IT (5 students), Engineering (2 students), and Design/Communication (1 student).

Data collection techniques represent strategic steps in research, with the primary goal of obtaining valid and reliable data (Sugiyono, 2019). In this study, data were gathered through three main methods: (1) direct observation using structured observation sheets to document participant activities and interactions within Indigo Space's facilities; (2) in-depth interviews conducted with all 12 student participants, employing a semi-structured format to explore their experiences, challenges, and perceived impacts of the facilities on their startup development; and (3) documentation including photographs, field notes, and archival records from Indigo Space to provide supplementary contextual data. To ensure data validity, triangulation was implemented through two approaches: (1) source triangulation, by comparing responses across multiple participants to identify consistent patterns, and (2) method triangulation, by cross-verifying findings from interviews, observations, and documentary evidence.

RESULT

Research Location

After eight years of operation, DILo (Digital Innovation Lounge) has successfully trained over 52,000 digital talents across Indonesia, as reported on Telkom Indonesia's official website. Responding to the digital industry transformation, on September 7, 2021, PT Telkom Indonesia Tbk (Persero) launched Indigo, an innovation hub focused on startup incubation and accelerator programs. Indigo operates in two formats: Indigo Space, which facilitates training and scouting for creative startups, and Indigo Hub, a collaborative space for startup founders under Indigo's mentorship. Its primary mission is to build a collaborative ecosystem that bridges digital talents, startups, and communities, fostering new digitalpreneurs and empowering society while accelerating Indonesia's digital economic growth. Indigo Space supports this goal through programs like Creative Camp and Innovation Labs, equipping participants with digital entrepreneurship knowledge and startup development resources.

Indigo Space Padang, located at Jl. Batang Tarusan No. 3, Alai Parak Kopi, Padang Utara, Padang City, West Sumatra, operates under the leadership of Syafira Ennisa, S.I.Kom (Manager), alongside Raka Maulana, S.I.Kom (Public Relations & Community Coordinator), and Annas Tasya Utami, S.Ak (Administration & Event Officer). The facility primarily serves the creative digital industry, targeting local youth, particularly students and university attendees, to encourage their contributions to Indonesia's digital economic growth. Many visitors participate in workshops, digital development training, or use the space for academic purposes such as thesis work, group assignments, and discussions. With experienced mentors from various fields, Indigo Space fosters a valuable learning environment where visitors can collaborate on diverse topics.

Additionally, its incubator programs attract individuals seeking to enhance their skills, deepen knowledge, develop creative-innovative ideas, and expand professional networks. With comprehensive facilities and support, Indigo Space not only nurtures startups but also serves as an education and collaboration platform for young generations to tackle challenges in the digital era.

Figure 1: Indigo Space Padang Building

Data Presentation

The preparation stage of this research began with data collection, where the researcher first obtained direct permission from the research subjects. Observation was conducted as a primary data collection

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method by directly observing the research object. This technique involved systematic recording of how Indigo Space Padang is utilized as a learning resource.

Next, the researcher refined the interview instrument guidelines to collect data from the 12 selected subjects, chosen based on specific characteristics. Once the interview guidelines were finalized, the researcher conducted face-to-face interviews at the research location, Indigo Space Padang. These guidelines served as the primary reference during the information-gathering process, ensuring alignment with the research objectives and consistency in data collection.

1) Benefits of Creative Camp, Coworking Space, and Innovation Labs for Startup-Oriented Students at Indigo Space Padang as Learning Resources

Indigo Space reflects PT Telkom Indonesia's commitment to supporting the government in empowering community potential, particularly among youth, through digital transformation. Through various strategies, Indigo Space Padang targets local youth to develop their creativity by offering Creative Camp, Innovation Labs, and a fully equipped coworking space that fosters innovation. Visitor data is tracked to map user capacity, ensuring optimal participation in advanced programs, as revealed in an interview with MFI.

Beyond a public space, Indigo Space Padang aims to build a creative community through structured programs. Designed as a hub for developing students' digital skills, it creates a collaborative learning environment that fosters camaraderie among members, as explained by MKG in an interview. Students eagerly utilize the space for training, workshops, and mentoring aligned with digital-era demands, motivating them to explore their potential. This aligns with DAP's statement that awareness of digital adaptation is students' primary motivation.

MFI explained in an interview that Indigo Space Padang is not only utilized for completing academic tasks but also serves as a venue for discussions, brainstorming, and participation in seminars and workshops. The Creative Camp program is his favorite, as it connects participants with digital creative industry practitioners to cultivate job-ready aspiring entrepreneurs (*digitalpreneurs*).

HS added that students leverage the space for both independent and group learning, as well as to access business matching and startup gathering programs. These facilities are regarded as incubators for creative ideas and a source of new knowledge, fostered through the dynamics of discussion.

As a learning resource, Indigo Space Padang fulfills four main functions: (1) providing direct learning experiences, (2) facilitating access to concepts that are physically difficult to access, (3) broadening perspectives, and (4) presenting integrated and accurate information. Students like ZAA and MKG acknowledge being motivated by programs that open opportunities for collaboration with startup activists, while the free facilities provided reinforce Indigo Space's role as a bridge between academia and industry. The support of experienced mentors also adds value, particularly for participants aiming to develop innovative projects.

2) Outcomes Experienced by Student Startup Activists in Utilizing Creative Camp, Coworking Space, and Innovation Labs as Learning Resources at Indigo Space Padang

The programs and facilities at Indigo Space Padang have successfully stimulated creative-innovative thinking, particularly among student startup activists who utilize the Creative Camp, coworking space, and Innovation Labs as learning resources. Based on interviews with MFI, participation in these programs not only hones soft skills such as interpersonal and intrapersonal abilities but also provides hands-on experience in developing projects, such as the bilingual (Indonesian-English) game startup he is pioneering. MKG added that interactions within these spaces spark new ideas for startups with diverse themes, supported by technology resources and collaborative events that enrich their insights.

For FM, Indigo Space serves as a means for self-development through intensive

training and access to experienced mentors. Collaboration among startup activists in this space enables seamless idea exchange, while administrative support eases the resolution of technical issues. ZAA confirms a similar experience: through the Innovation Lab, he developed business skills (*hustler skills*) such as negotiating with investors and strategic planning, which he now applies to his MSME (Micro, Small, and Medium Enterprises) funding startup.

DAP emphasizes that workshops at Indigo Space boost learning motivation through open discussions between mentors and participants, creating a knowledge-sharing ecosystem. From NRS's perspective, diverse programs like mentoring and bootcamps not only solve startup challenges but also expand technological understanding. The inspiring coworking space distinct from conventional offices encourages productive interactions, as experienced by FO, who collaborated to solve startup issues through discussions with other visitors. BP highlights improved competencies after attending training sessions, which now serve as assets in facing digitalization challenges.

The social impact of Indigo Space is also significant. MKG states that its presence boosts the local economy and fosters a tech-literate society. The growth of student-led startups, such as those initiated by ASZ, reflects a paradigm shift in acquiring digital skills beyond academic curricula. There is hope that intensive programs like bootcamps can elevate startups to *hectacorn* status.

3) Causes of Student Startup Activists Utilizing Creative Camp, Coworking Space, and Innovation Labs as Learning Resources at Indigo Space Padang

Efforts to Optimize Facilities and Reasons for Utilizing Indigo Space Padang by Students Indigo Space Padang is committed to improving its facilities to support creativity development, particularly for students. An analysis of supporting and inhibiting factors in utilizing the creative camp, coworking space, and innovation labs has been conducted to understand why students choose this environment as a learning resource, as explained by MKG in an interview.

With Structured Program Support, MKG stated that Indigo Space does not merely provide physical space but also organizes special events and mentoring for startup development. Unlike foundational learning at universities, this facility offers intensive mentoring up to the stage of project presentations to investors, creating opportunities for business collaboration. FM added that the mentoring program helps students transform innovative ideas into ready-to-use prototypes, bridging the gap between academic theory and industry needs.

According to MKG, the challenge of balancing time between university studies and startup development in the 5.0 technology era which relies on AI and digitalization is alleviated by Indigo Space's facilities. DAP emphasizes that the strength of this space lies in its institutional legitimacy as an official platform for innovators, complemented by systematic training stages to sharpen technical and business competencies. ASZ utilizes Indigo Space to network with fellow creators and experienced mentors. The collaborative environment enables interdisciplinary idea exchange, while expert guidance accelerates the learning process. NRS highlights the free mentoring services both pre and post program and administrative support in resolving technical startup or academic issues.

The comfortable work environment, comprehensive facilities, and variety of technology-based workshops and seminars are key attractions. As revealed in research, the combination of an inspiring coworking space and structured training programs allows students to test ideas while deepening their understanding of the startup ecosystem. Beyond hard skill development, participation in Indigo Space's programs fosters adaptability in the professional world. FM notes that the experience of building a startup through this facility offers added value compared to mere campus activities or student organizations.

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DISCUSSION

1) Benefits of Creative Camp, Coworking Space, and Innovation Labs for Student Startup Activists at Indigo Space Padang as Learning Resources

Startup actors in Indonesia are spread across major cities, and Indonesian startups have contributed significantly (Rohendi et al., 2023), including in Padang City. The term *startup* is generally categorized as companies that operate their businesses using information technology and the internet. The learning process is essential as an activity to leverage an organization's human resources to achieve various goals. Startup actors in Padang City, for instance, focus on the education sector, where they direct their products or activities to educate the community, both academically and non-academically. In response to the growing number of startups, a creative camp and coworking space called the *"Digital Innovation Lounge"* (abbreviated as *DILo*) was established in Padang City (Tafrienda, 2021). DILo has since undergone rebranding under the new name *Indigo Space*, aligning its objectives with Indonesia's digital transformation needs.

Several factors can influence the success of a startup. Ruiz-Palomino & Martínez-Cañas found that entrepreneurial social networks, which include the surrounding environment, are one such factor (Ruiz-Palomino & Martínez-Cañas, 2021). The importance of a conducive learning environment in enhancing learners' outcomes plays a critical role in improving learning objectives and fostering interest in education (Chandra, 2024). Thus, student startup activists require adequate learning environments to support effective learning processes.

The creative camp, coworking space, and innovation labs at Indigo Space Padang serve as new learning resources that support the application of educational technology. These resources provide students with the necessary tools to grasp foundational concepts of learning technology, develop essential skills, and generate innovative ideas. Through these utilization platforms, educational technology can become a valuable asset for students in honing the skills and knowledge required in the era of digitalization or digital transformation. Additionally, it is crucial to accommodate factors that drive entrepreneurship, such as implementing entrepreneurial education and training programs and building entrepreneurial social networks (Rohendi et al., 2023).

The shifting economic landscape has created a demand for new work configurations, with coworking spaces emerging as an innovative solution. Independent workers, such as digital nomads, are no longer bound to traditional workplaces and seek flexible, adaptive workspaces (Asyhar, 2019). The process of intentionally managing one's environment to enable learning and the demonstration of specific behaviors in response to particular situations (Gagne et al., 2005; Loilatu et al., 2021), underpins the behavioral patterns of students utilizing the creative camp and coworking space at Indigo Space Padang as learning resources. Features like high-speed internet and comfortable facilities enhance student productivity.

Research findings highlight Indigo Space Padang as a platform for students to develop their potential, broaden their perspectives, and refine their skills. Pratama (2020) explains that Indigo Space is critical for advancing the digital creative industry. The concept and characteristics of these learning resources align with the objectives of educational technology at Indigo Space Padang. Effective utilization of these resources also depends on learning strategies and learner engagement. It is hoped that seamless integration between resource use and learning activities will ensure educational technology is bolstered by the necessary infrastructure for effective learning at Indigo Space Padang (Damanik et al., 2023). Consistent with Weijs-Perrée et al., (2019) study of 219 users in Dutch coworking spaces, three key design principles emerge for collaborative learning environments like Indigo Space: integrated accessibility, semi-open layouts, and homey interiors - creating evidence-based, inspiring spaces for learners and entrepreneurs.

2) Outcomes Experienced by Student Startup Activists in Utilizing Creative Camp, Coworking Space, and Innovation Labs as Learning Resources at Indigo Space Padang

Indigo Space offers a coworking space equipped with extensive facilities, infrastructure, and resources (Widhiyasa et al., 2020). Its numerous programs act as a bridge for collaboration among diverse stakeholders. Through the creative camp and innovation labs, Indigo Space advances its primary goal of accelerating digital economic growth and nurturing Indonesia's startup ecosystem. This is evident in its educational and training programs, which enhance participants' comprehension and skills (Irmawan et al., 2023). Efforts to facilitate learning are achieved by leveraging diverse learning environments (Prawiradilga, D.S & Chaeruman, 2018).

Research findings reveal that students gain tangible outcomes from learning at Indigo Space, such as developing startups incubated in the creative camp and innovation lab. The coworking space provides ample opportunities for learning, building, and scaling ventures. This aligns with Januszewski & Molenda's assertion that learning occurs at the individual level and subsequently impacts organizational (startup) performance, as education extends beyond formal processes to include flexible training programs (Januszewski, A., & Molenda, 2013)

Each activity at Indigo Space Padang concludes with assessments by mentors and teams to evaluate participant progress. Those meeting competency criteria gain opportunities for internships or direct involvement with Indigo Space's partner startups. Additionally, annual business matching programs connect young innovators with investors focused on funding student projects, given their high motivation and growth potential.

Beyond training, Indigo Space provides access to expert mentors who share technical knowledge and even assist students with technology-related academic assignments. Interactions among startup activists in this space foster mutualistic symbiosis: sharing experiences, critiquing projects, and broadening perspectives through cross-disciplinary discussions. The innovation lab functions as a multidisciplinary experimentation hub (spanning technology, business, and public services) equipped with cutting-edge hardware/software tools and collaborative spaces. Meanwhile, the creative camp bridges digital creative enthusiasts with industry professionals, cultivating industry-ready digital entrepreneurs (*digitalpreneurs*). This concept aligns with Edgar Dale's *Cone of Experience* theory, which emphasizes that abstract learning becomes more effective when combined with hands-on practice.

The rapid growth of Indonesia's startup sector has spurred the expansion of coworking space businesses. Within this ecosystem, innovation labs act as catalysts, enabling student startup activists to secure funding from unicorn companies like Tokopedia, Gojek, or Bukalapak—contributions that not only boost the national economy but also elevate community human resource quality.

Innovation labs play a strategic role in producing creative, innovative, and highly competitive talent. These spaces embody open innovation initiatives, merging collaborative, user-centric approaches with organizational capacity-building. Through participatory models, innovation labs create environments that support dynamic solutions for enhancing business competitiveness and adaptability in a disruptive era (Yang et al., 2019)

Research findings indicate increased learning motivation among student startup activists who utilize the creative camp, coworking space, and innovation labs as learning resources, driven by Indigo Space's structured education and training programs. Learning activities conducted in realistic contexts allow students to gain decision-making experience, receive feedback, and engage in iterative skill refinement over time (Cahyono, 2021).

3) Reasons Student Startup Activists Utilize Creative Camp, Coworking Space, and Innovation Labs as Learning Resources at Indigo Space Padang

Indigo Space is chosen as a primary learning resource due to its provision of

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adequate facilities, aligning with Warsita, (2013) criteria for effective learning resources. Cahyono (2021) adds that the realistic learning contexts offered by this space strengthen the relevance of education to real-world practice (Cahyono, 2021). Furthermore, Indigo Space regularly organizes diverse free training programs and workshops. Prospective users are guided to register as members first, undergoing a skill identification process (e.g., *hipster* for design/creativity, *hustler* for business, or *hacker* for technical expertise) to tailor mentoring programs.

Students also receive guidance from experienced mentors to resolve technical or strategic challenges in startup development. Consistent with Januszewski and Molenda's (2008) concept, Indigo Space optimizes learning resource functions through technology integration and process management that enhance performance and facilitate collaborative learning.

Today's learners increasingly prefer digital-based learning approaches, such as online platforms, educational apps, and virtual labs that adopt cutting-edge technological trends. Modern learning, supported by technology and educator guidance, offers dynamic methods unrestricted to traditional home or classroom environments. This shift transforms the paradigm from textbook-centric models to interactive, flexible approaches suited to contemporary demands (Melati et al., 2023). Advances in educational technology further enable adaptive diversification of training methods to meet emerging learning needs (Kovalchuk et al., 2023).

The shift in learning modes at Indigo Space Padang reflects a critique of conventional education. Students' learning styles in the digital era are increasingly diverse, no longer confined to classrooms. They now engage in self-directed learning, leveraging internet-based resources. This shift is influenced by *resources by utilization*, emphasizing optimal resource allocation. Learning occurs when individuals interact with their environment (natural, social, cultural), resulting in lasting behavioral changes (cognitive, affective, psychomotor) (AS et al., 2024). Findings indicate heightened student engagement in discussions and idea-sharing, fostering increased learning motivation (Yuwanita et al., 2020). This research highlights the urgency of providing collaborative spaces, where coworking spaces are viewed as flexible work environments that facilitate interaction among professionals, both in private and open settings.

CONCLUSION

Indigo Space Padang serves as an innovative learning hub for student startup activists through three key aspects. First, it fosters collaboration and creativity via Creative Camp, Coworking Space, and Innovation Labs, offering training, mentoring, and networking with industry professionals. Second, students gain essential startup competencies business (hustler), technical (hacker), and creative (hipster) while engaging in prototyping, competitions, and business partnerships, leading to increased motivation and startup growth. Third, its free facilities and structured programs enable flexible, experiential learning, bridging academic theory with industry practice to support real-world innovation and digital-era skill development.

RECOMENDATIONS

Based on the research findings, students are encouraged to actively utilize Indigo Space to develop their skills, insights, and creativity through free training programs while building networks with mentors and peers. Indigo Space Padang should maintain existing facilities and expand opportunities for young people, particularly students, by sustaining structured mentoring, collaborative programs, and partnerships with industry stakeholders. The Padang City Government is recommended to support initiatives that enhance youth skills and foster students' creative ideas by allocating resources to strengthen the innovation ecosystem, such as funding startup incubators or upgrading technology infrastructure.

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