E-BULLETIN

TOWARDS INNOVATIVE MINDSET

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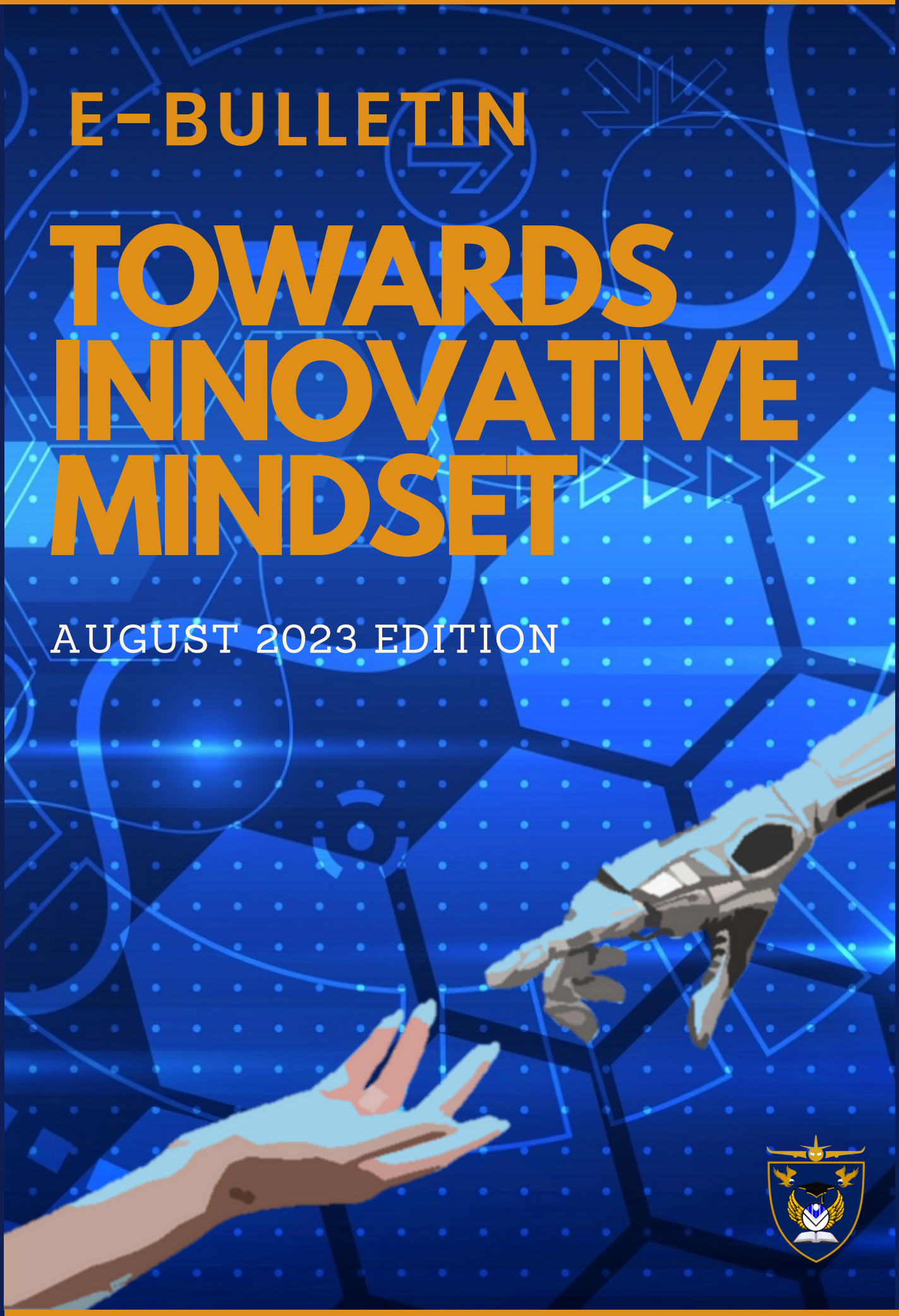

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TABLE OF CONTENT

PREFACE

From The Editorial Team

First and foremost, we would like to praise to Allah the Almighty, the most Gracious and most Merciful for His blessing because at the end we had completed the first edition of E-Bulletin for 2023.

We would also like to express our deepest gratitude to beloved Chairman, Captain Ab Manan bin Mansor, Advisor, Madam Salina binti Ahmad, Chief Executive Officer, Sir Faiz Aizat bin Ab Manan, Provost, Sir Muhammad Nurulfaqih bin Mohd Sajali, Dean of Faculty of Science and Technology, Sir Muhammad Zulhiqmi bin Mohd Jamil and Dean of Faculty of Hospitality and Management, Madam Norulbaiti binti Mohd Nor for the endless support and encouragement to make this publication a success. E-bulletin is the platform for UniCAM staff to share their piece of mind on issues related to aviation, health, leisure, aerospace and many more. This edition is only possible due to hard work and contribution of all UniCAM staff. Therefore, we would like to thank all UniCAM staff for their cooperation.

We really hope that you take the time to read what this E-bulletin has to offer and feel free to provide feedback and comments for us to improve in the future.

Thank you for all the love and support!

What's Inside This Issue:

Yours sincerely,
Editorial Team

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AVIATION INDUSTRY TRANSFORMATION THROUGH ARTIFICIAL INTELLIGENCE (AI)

by Faiz Aizat Ab Manan

Chief Executive of UniCAM

INTRODUCTION

Movies such as I,Robot or Enemy of the State acted by the Oscar winner, Will Smith mesmerizes people. Then it is not a wonder, to relate yourselves with Artificial intelligence (AI). AI can be interpreted as the computing technology that has made it possible to invent intelligent machines that execute tasks that requires high order human intelligence (Bag et. al, 2021). Although its original use cases were constrained, it has been decades that the aviation industry is one of the prime sectors which has been embracing the development of AI. Right from predictive maintenance for MRO, Flight Operations and Optimization for despatching, Air Traffic Management for the Air Traffic Controller; to a more sophisticated Engineering AI Design of an aircraft pioneered by Boeing and Airbus, AI is considered a necessity in the aviation industry. The advent of artificial intelligence has been extremely beneficial to the aircraft industry because it currently possesses relevant information available that would otherwise be challenging to acquire using conventional methods. Imagine with simply key in the configuration on the avionics, the aircraft can fly by itself!

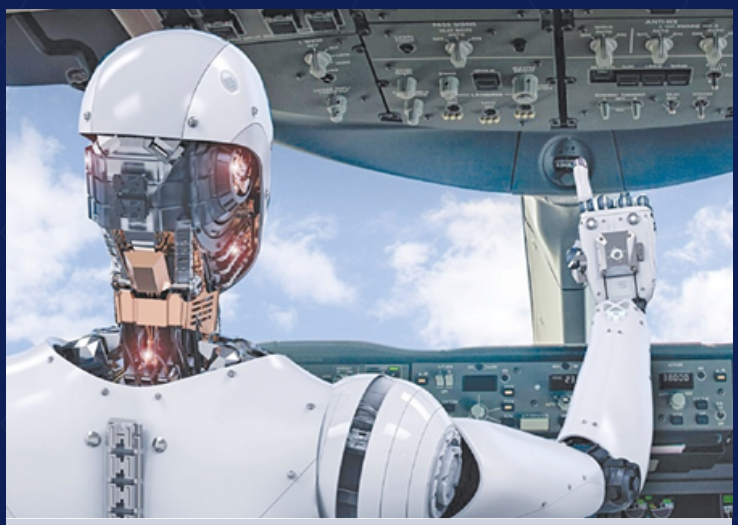

Figure 1: Representation of an AI robotic pilot (Credit: https://podbay.fm)

ASTARTES

The Air Superiority Tactical Assistance Real Time Execution System is an Artificial Intelligence (AI) project that aims to digitise the human-level experience to support operators with their tactical coordination tasks in the context of the Future Combat Air System (FCAS).

AI IN AVIATION

From the perspectives aviation experts, it is proven that, AI plays a key role in aviation industry mainly in boosting speed and efficiency, assisting with workload management, and enhancing safety. (Song et. al, 2022). In fact, Airbus has elevated the AI technology to an extended level by introducing Air Superiority Tactical Assistance Real-Time Execution System (ASTARTES), which will serve as a digitised version of human-level competence to assist operators of aircraft with strategic coordinating duties. The Future Combat Air System (FCAS) would be employed for such duties. FCAS, commonly identified as a European "system of systems" for warfare, is built with advanced weaponry and other equipment for airspace conflict. (Airbus, 2023)

Boeing, on the other hand is utilizing as part of their countermeasure research for safety purpose. Following two fatal 737 Max crashes, Boeing Co. is utilizing artificial intelligence to sift through mountains of data and pinpoint potential risks within its aircraft and airline operations. This represents the effort to strengthen its safety culture. According to Boeing's Chief Aerospace Safety Officer - Mike Delaney, , the corporation has developed a safety analytics tool that employs cutting-edge mathematical models and machine learning to identify and eliminate hazards before they result in mishaps, injuries, or fatalities. It is a component of a larger safety management system that Delaney and his group created as a result of the deaths. (Johnsson, 2023)

The 2018 and 2019 737 Max crashes seriously damaged Boeing's credibility. Numerous investigations into the incidents revealed that the lack of a safety framework contributed to communication breakdowns and other problems that led to inadequate designs for the aircraft. Thus the enhancement of AI is required as part of the countermeasure initiatives to avoid such accidents – Source: The Star (25th May 2023)

Airlines too are adopting AI rigorously with the goal of reducing the tall expense in order to offer much affordable ticket price to the market. Despite the consecutive rise and unstable fuel price, AI plays a key role to smartly determine the fuel efficiency of a flight. Air France is among the pioneers which managed to eliminate the fuel consumption by up to 5%. By adopting the “Sky Breathe” AI back in 2020, Air France not only managed to slice their fuel usage, but correlatedly eradicated the CO2 emissions. Under this AI program, it is mentioned that beyond $150 million cost of fuel saved and 590,000 tones of CO2 emission eliminated in the year 2019. (England, 2020)

This is a clear indication that AI is immortal in the aviation industry, as we have yet to touch on Autonomous flight, CIMON, Space Technologies, Unmanned Traffic Management, Drone Combat System and plenty more! In University College of Aviation Malaysia (UniCAM), AI is included as part of our syllabus for both Diploma and Bachelor Degree, with the likes of Radio Aid & Navigation module, Air Traffic Management module, Navigation module and many more. The new RM300,000 system that UniCAM is investing (Completion in 2024) will automate the entire learning process which will benefits the students, all easily be reached within your fingertips.

Thus, if you are ever interested to learn more not just about the aviation industry, but AI behind it, do contact our admission team for further guidance. Happy landings!

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EXPLORING THE ROLES, TREND AND ADVANCEMENT OF EMERGING INNOVATIVE TECHNOLOGY IN AVIATION SECTOR

By Muhammad Zulhiqmi Bin Mohd Jamil
Dean of Faculty Science & Technology

INTRODUCTION

In the rapidly evolving landscape of the digital age, technology continues to reshape the way we live, work, and interact. Emerging innovative technology trends and advancements are not only revolutionizing industries but also shaping the future of human civilization. From artificial intelligence to autonomous system, from virtual reality to the Internet of Things, these transformative technologies are bringing us into an era of unprecedented possibilities and opportunities (Thums, Künzel, Klumpp, Bardmann, & Ruiner, 2023). The aviation sector, renowned for its continuous pursuit of technological advancements, is significantly impacted by the emerging innovative technology trends of our time too. The integration of these technologies in aviation promises to enhance safety, efficiency, passenger experience, and sustainability.

ARTIFICIAL INTELLIGENCE

Figure 1: Application of Artificial Intelligence in Flying an ATR72-600

Artificial intelligence (AI) has the potential to revolutionize aviation by improving operational efficiency, air traffic management, and aircraft maintenance. AI-powered algorithms can analyze vast amounts of data, enabling more accurate flight planning, predicting maintenance requirements, and optimizing fuel consumption. Additionally, AI can enhance air traffic control systems, enabling better coordination and reducing congestion in airspace. With AI-powered systems, airlines can enhance passenger experience by providing personalized services and real-time information (Kashyap, 2019).

INTERNET OF THINGS

The next imminent technology that shall be highlighted is the Internet of Things (IoT). The technology can transform the aviation sector by connecting various components within an aircraft and enabling real-time data collection and analysis. IoT sensors and devices can monitor aircraft systems, including engines, components, and cabin conditions, facilitating predictive maintenance and reducing the risk of in-flight failures (Rodrigues, Carvalho, Rito Lima, Lima, & Lopes, 2022). Moreover, IoT technology can enhance the efficiency of ground operations, baggage handling, and passenger flow within airports, ensuring a smoother travel experience.

UNMANNED AERIAL VEHICLES

Figure 2: Drone Piloting Course offered at University College of Aviation Malaysia

Other than that, autonomous systems in the aviation sector, specifically unmanned aerial vehicles (UAVs) or drones can be considered as fast-paced technology too. Drones are aircraft that are piloted remotely or autonomously without an onboard human pilot. They have gained significant attention and adoption in recent years due to their potential to transform various applications within the aviation industry. Cargo delivery is one area where autonomous drones hold great

promise. Companies are exploring the use of drones for last-mile delivery, transporting packages from distribution centers to customers' doorsteps. With autonomous capabilities, drones can navigate predetermined routes and deliver packages more efficiently, especially in areas with challenging terrain or limited infrastructure (Kellermann, Biehle, & Fischer, 2020). Search and rescue operations can also benefit from the use of autonomous drones. In emergency situations, drones can be deployed to quickly survey large areas, locate missing persons, or provide real-time situational updates to rescue teams.(Hoang et al., 2023)

VIRTUAL REALITY

Figure 3: Virtual Reality in Aviation Training

Virtual reality (VR) and augmented reality (AR) have the potential to revolutionize pilot training, maintenance procedures, and passenger entertainment. VR can provide realistic flight simulators, allowing pilots to practice in immersive environments without the need for physical aircraft. AR technology can assist maintenance technicians by overlaying digital information onto real-world views, guiding them through complex procedures and reducing errors (Eschen, 2017). For passengers, VR and AR can enhance in-flight entertainment, offering immersive experiences and personalized content.

IMPLICATION

Moreover, the integration of these emerging technologies in aviation aligns with the industry's commitment to sustainability. By leveraging AI and data analytics, airlines can optimize flight routes and reduce fuel consumption, leading to lower emissions and improved environmental performance (Chung, Ma, Hansen, & Choi, 2020). IoT sensors can monitor fuel usage, aircraft performance, and maintenance needs, enabling proactive measures to minimize environmental impact. As the aviation sector adopts these emerging technologies, it must address various challenges. Safety and security remain paramount, necessitating rigorous testing, certification, and protection against cyber threats. Additionally, the implementation of these technologies requires significant investments, training, and infrastructure upgrades, posing challenges for airlines, airports, and regulatory authorities.

CONCLUSION

In conclusion, the aviation sector stands to benefit significantly from the integration of emerging innovative technology trends. AI, IoT, UAVs, and VR/AR have the potential to enhance safety, efficiency, passenger experience, and sustainability in aviation. By embracing these technologies, the industry can continue its trajectory of progress and ensure a seamless and transformative aviation experience for passengers and stakeholders alike.

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FROM STUDENTS TO INNOVATORS: NURTURING AN INNOVATIVE MINDSET IN GRADUATES

By Norulbaiti Mohd Nor
Dean of Faculty Management & Hospitality

INTRODUCTION

Along the present rapidly changing world, nurturing an innovative mindset among graduates has turn a benchmark for their success and adaptability. This article explores the significance of fostering an innovative mindset among students and discusses the strategies implemented by University College of Aviation Malaysia (UniCAM) in cultivating this mindset, enabling our students to shine as future innovators.

DEFINITION

Foremostly, let us define the concept of an innovative mindset. According to Dweck (2006), an innovative mindset refers to a way of thinking that embraces creativity, curiosity, and problem-solving. It travels beyond mere knowledge and technical skills, empowering individuals to tackle challenges with individuality and broad mind.

An innovative mindset is characterized by several attributes and characteristics. Amabile (2017) highlights creativity as a core aspect of an innovative mindset. Creative individuals possess the ability to generate novel and valuable ideas, challenging conventional thinking and exploring latest possibilities. Additionally, Sternberg and Lubart (2016) emphasize curiosity as an essential attribute of the innovative mindset. Curiosity embarks the desire for consecutive learning and discovery, enabling individuals to seek new knowledge and perspectives.

Moreover, the sustainable benefits of nurturing an innovative mindset among graduates are extensive. Florida (2002) asserts that graduates with innovative mindset are more adaptable to changing circumstances, embedding them for success in dynamic work environments. They possess the skills and mindset required to identify emerging trends, seize opportunities, and drive positive change.

CULTIVATING A CULTURE OF INNOVATION IN UNICAM

Figure 1: UniCAM graduates on their Convocation Day

Portraying a culture that supports and promotes innovation is crucial for nurturing an innovative mindset. West and Farr (1990) emphasize the necessity of fostering a culture that upholds risk-taking, experimentation, and collaboration. Educational institutions like UniCAM plays a vital role in this process by offering environments that foster creativity and a willingness to explore out of the box.

Predominant strategy for cultivating a culture of innovation is to **encourage risk-taking**. In UniCAM, we have boosted our students to feel empowered to step outside their comfort zones and pursue innovative visions especially during group activity, public speaking and class assignment, even if they carry the risk of failure. By embracing calculated risks, students develop resilience and adaptability, essential qualities in an era of rapid change.

Second strategy is by nurturing **creative problem-solving skills**. For instance, Google encourages employees to pursue personal passion projects, resulting in numerous ground-breaking products and technologies (Levoy, 2013). Same goes to UniCAM as well which we had developed the creative and critical thinking methodologies, fostering an environment that nurtures creative problem-solving and innovation through Project Paper (PRP) and Project-based Learning (PBL) subjects. With this, students will understand how to approach problems from multiple angles, think critically, and develop innovative solutions.

Additionally, **collaboration and teamwork** are highly appreciated in nurturing innovation mindset among students. UniCAM have furnished the collaborative environments where students from diverse backgrounds associate together in collaborative projects, group discussions, and team-based assignments which drives the students to leverage their unique perspectives and skills, fostering collective intelligence and leading to more creative and impactful solutions.

Moreover, to reinforce the reality of innovation, it is applicable to engage the students to **real-world applications**. At UniCAM, we are incorporating experiential learning, internships, and industry collaborations allows students to emphasise their knowledge in authentic settings, further enhancing their innovative mindset.

IN A NUTSHELL, nurturing an innovative mindset among graduates is vital for their victory and adaptability in currentrevolutionizing world. By understanding the concept of an innovative mindset, cultivating a culture of innovation, manifesting creative problem-solving skills, sparking creativity and imagination, encouraging collaboration and teamwork, embracing a growth mindset and resilience, and integrating real-world applications, educational institutions can effectively nurture an innovative mindset in students, transforming them into future innovators.

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THE ROLE OF INNOVATIVE LEADERSHIP IN DRIVING ORGANIZATION SUCCESS

By Hazlin Jamaluddin
Registrar

INTRODUCTION

Are you innovative? This is the tricky question that needs a comprehensive answer. How we can define you are innovative person? A person considered innovative is someone who often creates and executes new ideas, approaches, or solutions which result in positive change. Innovative leadership is a leadership style that values creativity, vision, and the capacity to drive and manage organisational innovation. It requires adopting unconventional strategies, accepting change, and developing an environment that promotes and supports innovation at all levels.

DEFINITION

According to Şen & Eren's findings (Şen & Eren, 2012), innovative leadership refers to introducing a brand-new method, product, service, technique, or an idea to satisfy individuals' needs and find solutions to current and future problems.Innovation leadership thus refers to a technique and philosophy, which combines various leadership styles to influence and motivate employees to generate products, services, and creative ideas (Horth & Buchner, 2014). An innovative leader is someone whom helps and motivate a group or organisation or accept and use new ideas and ways of doing things.

10 UNIQUE BEHAVIOURS FOR INNOVATIVE LEADERS

Strategic vision - The most successful innovation leaders could clearly communicate their future vision.

Have a strong customer focus - They made an effort to get into the client's mind.

Positive culture and climate of the organization - Not all new ideas succeed. These extremely innovative CEOs established friendly, collaborative ties with the innovators who worked for them. They made themselves quite approachable. When something went wrong, employees understood that their leader would have their backs and not throw them under the pressure. People were never penalised for making honest errors.

Consistent commitment - Pleasing the boss or another higher-level executive always took a back seat to doing the right thing for the project or the company.

Encourage idea from below - The best and most creative ideas, according to these leaders, would emerge from below. They tried to make an environment where good ideas could come from the bottom up. People often said that they were upbeat, full of energy, and always open to new ideas.

Persuasive - These people were very excellent at convincing others to embrace their ideas. They didn't pressure their teams to adopt or support their values.

Set unbelievable goal - These objectives demanded that people do more than just work harder. For these goals, they had to find new ways to reach a high goal.
8.Speed- These leaders believe speed can become the main contribution to the organization success.

Straightforward communication - These leaders are known for giving straightforward and often sincere criticism. The belief among followers was that the leader will always provide them with honest responses.

Walk the talk - For innovation to happen, you must be inspired. This is because people have a strong sense of why they do what they do and how important it is.

Figure 1: UniCAM students with the leader of Capital A, Mr. Tony Fernandes

IMPORTANCE OF INNOVATIVE LEADER

There are numerous scholars who provide opinion on the innovative leader. But how this innovative attitude can lead for organization success? Organization is the place where the innovation can be practiced or implemented. Within the organization, there are resources and support ready to use. Organization can allocate some budget to ensure the resources are up to date and can give benefit to the organization. There are also the group of employees who have different background, skills, and perspective. This diversity can promote the critical thinking and collaboration among them. Sharing of knowledge can be done within the organization and makes it possible for employees to rely on what they already know and use it to come up with new ideas and ways of doing things.

Figure 2: UniCAM students during Career Week

As an innovative leader, the risk management skill is highly required. With this skill, organization can invest new things or idea without any hesitation. Although it is true that people may initiate outside of organisational contexts, organisations offer a favourable ecosystem that fosters and facilitates the innovation process. Organisations may maximise their capacity for effective innovation by fostering an inventive culture, offering resources and assistance, and utilising collective knowledge and skills.

Innovative leadership establishes the environment, creates the culture, and offers the necessary encouragement for innovation to prosper within an organization. Innovative leaders lead the organization towards success in today's dynamic and competitive business environment by promoting cooperation, empowering people, managing risks, and remaining adaptable.

The organization with this innovative leader will always be the best organisation with the newest ideas that contribute to its success. The employees can be as productive as possible when they have equal opportunities for advancement. This is the most important factor, since workers are the heart of an organization. Innovativeness may demonstrate itself in a variety of ways, such as new product development, which can increase revenue for the organization, and upgrading existing processes, which can save costs.

CASE STUDY

A case study of Elon Musk and Tesla. The innovative leadership of Elon Musk has brought Tesla to the top of the electric vehicle and green energy industries. Musk has guided Tesla's success through visionary thinking, innovation, risk-taking, and the promotion of an innovation ecosystem. Its market dominance, advancements in battery technology, energy storage solutions, and industry influence demonstrate the company's influence. Musk has led Tesla's commitment to sustainability and innovation, which has not only changed the car industry but also helped the world move towards a greener, more sustainable future.

Figure 3: Elon Musk, Chief Executive Officer of SpaceX and Tesla and owner of Twitter (Credit: REUTERS/Gonzalo Fuentes/File Photo)

CONCLUSION

In a nutshell, organization can success when they have innovative leader and employee. When innovative leaders and employees collaborate, a great synergy is created. Innovative leaders give the vision, support, and structure required for innovation, while innovative people contribute their creativity, talents, and unique points of view. This collaboration develops an innovative culture within the organisation, driving it to success by staying ahead of the competition, adjusting to change, and always improving products, services, and procedures.

Figure 4: UniCAM Students leading the Community Service Responsibility project to nurture their leadership skills

Figure 5: CSR Student representing UniCAM at Pertubuhan Warisan Suci

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THE FALL OF NOKIA: THE IMPORTANCE OF INNOVATIVE MINDSET

By Dr. Helmey Ramdhaney Mohd Saiah
Lecturer of Faculty Science & Technology

INTRODUCTION

The era of mobile phones started from a portable brick, the Motorola DynaTac 8000x (Figure 1). As years past, from a handheld brick, they evolved to a slimmer and definitely more pocketable design. Samsung Galaxy S23 Ultra, as shown in Figure 2, is one of the most advanced mobile phones to date (GSMArena team, 2023).

Figure 1: Motorola DynaTAC 8000x (1984) (Source: https://www.firstversions.com/2015/01/motorola)

Figure 2: Samsung Galaxy S23 Ultra (2023) (Source: https://www.samsung.com/my/smartphones/galaxy-s23-ultra)

THE GOLDEN AGE OF NOKIA

Figure 3: Nokia 1100 (Source: https://www.gsmarena.com/nokia_1100-pictures -512.php

In the early 2000, Nokia took the mobile phone world by storm. There were two Nokia phones responsible for this. The first was Nokia 1100 series, as can be seen in Figure 3. It holds the record for the most sold mobile phone ever (The Telegraph, 2016 and Williams, N. 2023). One might think it was the most advanced technology during its time, but it was nowhere near that assumption. The innovations in Nokia 1100 series were the most basic phone features paired with the affordable price range. During the six years of its service, Nokia 1100 was sold for around 250 million units.

The second wave was the mythical being called Nokia 3310. Some say it can survive a drop from 5 stories building. Some say the battery could last for months in a single charge. Some say it was used to cut diamonds. Alas, none of those were technically proven. Due to the numerous rumors, the 3310, as shown in Figure 4, is still being discussed nowadays.

Figure 4: Nokia 3310 (Source: https://www.androidauthority.com/nokia-3310-20-years-1153703/)

Early 2000 was the peak sales period for the Finnish mobile manufacturer. Along with its boost in sales, their confidence boosted as well. Innovations rolled out one by one, handheld gaming device (Nokia N-Gage), GPS map enabled phone (Nokia 6610 Navigator), camcorder like phones with Carl-Zeiss optics (Nokia N90 series) and many more. Software-wise, all of these phones were operated by Symbian Operating System (OS). Symbian OS, a joint development OS from Psion, Ericsson, Motorola and Nokia was probably the most used OS pre-2010. It was the most popular OS during that time. However, all that started to change when Android 1.0 was first introduced in 2007 (Callaham, 2023).

In order to keep a foothold in the industry, phone manufacturers have to be innovative and sensitive to the current trends. Along with its high sales, Nokia has been one of the most promising companies in the early 2000.

OPERATING SYSTEM

When Android 1.0 OS came up in the late-2007, none considered them as a threat included Nokia. As the years past, all that began to change. With its latest instalment, Android 14, Android OS became one of the two OS beside iOS to dominate the smartphone world.

There were other attempts to dethrone Android's OS, but many stumbled in doing so. Samsung failed to overcome Android OS with their Bada OS, same goes for other OS such as BlackBerry, Palm, webOS and Windows Mobile OS. Since

Figure 5: Android OS Logo

Figure 6: Apple iOS Logo

Figure 7: Bada OS Logo

its debut, way back in 2007, Android have swallowed these OS bit by bit. If you cannot beat them, join them. This is the approach that many phone manufacturers have taken. The only OS, Android could not take down is Apple's iOS. The green robot only managed to take a small bite.

In terms of innovativeness, many would agree, that there was a time where Apple shines. However, comparing between Android OS and Apple iOS, the innovation of Apple iOS has been getting dimmer. There are two major reasons for its stable foundation in mobile phone industry; first the cult members, and second is the consistency of Apple making the same bite over and over again, feel the same. Its software reliability in its ecosystem, the quality of the products, and the aftersales services, these are the roots kept the Apple tree standing tall.

Being innovative does not necessitate advanced cutting-edge technology. Traits of innovative mindset demands adaptability, creativity, persistence, and strategical vision. Failure may be in line if one of these traits is not achieved. Failure however, is not the end. It should be the beginning of a comeback, an important input for the strategical planning. Samsung, being one of the giants in smartphone industry, has its success walks hand in hand with its failure. The failed Bada OS and the literal time-bomb Galaxy Note 7 (Sathiah, 2022), are its biggest blunders. Does these stop them? With heads held up high, they ploughed through the hurdles and came back to its throne.

THE FALL OF NOKIA

Nokia had their time with the 3310 and 1100. But sadly, they began downhill from when they tried to stick to Symbian OS when most of the mobile phone manufacturer have jumped on the Android ship. Nokia did try a different boat, so as the other mobile phone manufacturers, Windows Mobile OS. Borrowing the achievement of Windows PC OS, the outcome did not meet their expectation. Due to the lack of interest from third-party application developers, Windows Mobile OS was not successful in over taking Android OS. Nokia also have tried assimilating Android OS into its line-up. Back in 2014, Nokia X and Nokia XL were the company's first green robot line-up. However, it was short lived. Trying to capture entry level market, many compromise were made on the X and XL series. Unfortunately, the strategy didn't work. Competitors offered better hardware line-up with only slight difference in price (Bhutani, 2020).

Peltonen (2018) did a case study on the collapse of Nokia's business. The research summarized that Nokia's failure came from various factors such as lack of visionary leader, egocentric and arrogant due to its success, too many bureaucracies in the company, and lack of initiatives to capture current market demand. Nokia, without a doubt had been overcoming obstacles one after the other before its huge success in early 2000. However, without innovative mindset and perseverance to success, they were deemed to be dethroned.

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INNOVATIVENESS IN RESPONSE TO THE COVID-19 PANDEMIC: THE CASE OF SOFTINN SOLUTIONS

By Mohamad Alif Azmiezal Bin Mohd Azmi
Lecturer of Faculty Management & Hospitality

September 13, 2019 was the date when I left the emerging travel-tech start-up company, Softinn Solutions. I still vividly remember the atmosphere at work during that time. Doing our best to convince some merchants who are interested in our Property Management System (PMS). That same week we talked about plans to integrate our Booking Engine with other third-party Channel Managers. All the efforts were made to ensure that the hotel reservation system developed by Softinn Solutions remains competitive and innovative in the industry. It was a tough and ambitious task as Softinn Solution needs to compete with all the giants in the industry such as ABS Software, Oracle Hospitality, eZee Reservation and many more.

Figure 1: My last day at Softinn

COVID-19 PANDEMIC

Fast forward to March 2020, just six months after I left the company, Malaysia was hit by the Covid-19 outbreak. The Movement Control Order (MCO) was enforced in four phases for 47 days, from March 18, 2020 to May 3, 2020 (Ting, 2021). The restrictions led to room cancellations from travellers who had booked their rooms prior to pandemic. This situation has affected hotel occupancy rates, thus reducing their revenue (Ntambu and Loang, 2022).

INNOVATIVE RESPONSE

This situation greatly affected Softinn Solutions as they heavily depend on the booking made through their booking engine. With the significant decline in demand for the hotel and homestay accommodation services, Softinn Solutions must crack their head in order to survive in the industry. This is what have been done by the Chief Executive Officer (CEO) of the company, Jeeshen Lee. Preferred to be addressed as Jason, he saw the opportunities when he read the news about many hotel owners were forced to put their hotels for sales. Some hotel owners have listed their buildings for sale on the real estate portal such as iProperty (Soliano et al., 2023).

With the exchange in the ownership of the hotels, Jason noticed that these new owners must be looking for the new hotel reservation system as to replace the existing one. Plus, the price set by Softinn Solutions for their reservation system was much competitive compare to the other brands. With that in mind, Jason and his team change their focus by approaching all these hoteliers who concerns about the operating cost and at the same time looking for reliable system. It was a worth strategy. This circumstance motivated Jason to come up with another innovative strategy.

Figure 2: PMS by Softinn (Source: https://page.mysoftinn.com/)

Since many countries have adopted social distancing regulation in every public place (Qian and Jiang, 2022), Softinn Solutions introduced **Hotel Self Check-In Kiosk.** This kiosk will allow the guests to perform self-check-in procedure by themselves. The room key will be dropped by the kiosk once the check-in process done. All processes can be done without any interaction with the hotel representatives which is a preferable circumstance at that time due to concerns about the spread of the Covid-19 virus. Walk-in guest can also book for the room using this kiosk. This was a major success as Softinn Solutions became the pioneer for the Hotel Self Check-In Kiosk. They manage to gain attention from many hotels in Malaysia including some four stars hotel such as Kaizen Hotel & Suites Melaka.

Figure 3: Softinn Hotel Kiosk at Mangga Hotel (Source: https://www.linkedin.com/products/softinn-hotel-kiosk/)

FOUR YEARS LATER

On April 27, 2023, after almost four years since I left the company, finally I got the chance to visit their office at Ayer Keroh, Malacca. The vibe is still the same, the enthusiasm among the staffs is still the same and smile on the face of my former leader, Jason, is still the same. They greeted me with a warm welcome and I have a chance to have a conversation with Jason for almost an hour. He also showed me the Hotel Self Check-In Kiosk placed at Softinn Solutions and demonstrated how it work. Jason did share with me that all the efforts he made during Covid-19 pandemic became a stepping stone for him to innovate many things so that the company can survive. Thanks to that, Softinn Solutions manage to become a profitable company after the pandemic and can even afford to develop their own Channel Manager system. It was a fruitful and nostalgic visit and I am looking forward to visit them again because I am sure, the next time I visit them, there will be new innovative product developed by them.

Figure 4: With CEO of Softinn, Mr Jason (middle) & COO/CFO of Softinn, Mrs Caren (right)

Figure 5: With Softinn team members 4 years later

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THE FUTURE OF DIGITAL TRANSFORMATION IN EMERGING MARKETS

By Zaris Safira Zulkifli
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Global adoption of digital platforms and services have accelerated since the Covid-19 struck in 2020. The pandemic has changed the way of life around the world where digital transformation has resulted in many organizations beginning invest in technology in order to meet with the requirement. Technology was already playing a bigger role in the workforce before the Covid-19 outbreak. However, due to pandemic, businesses are highly reliance on technology and they try to find innovative digital solution so that they can continue their operation remotely. There are three areas that the company should focus in digital transformation.

DIGITAL TRANSFORMATION

Customer experience should be the primary area of digital transformation. Customer demands are always changing. Investing in digital transformation is a powerful way to keep up and keep the customer experience getting better. Whether on a desktop, tablet, or phone, a website must be well-designed and simple to use. It will contribute to boost up your brand's image while also helping to turn visitors into paying clients.

Figure 1: Customer can book for a flight ticket via online platforms (Source: https://ischoolconnect.com/)

Apart from that, the use of **live chat and chatbots** is becoming more common. By offering this service, users can immediately find solutions to their issues. Faster communication results in happier consumers because there is no longer a need to wait for an email answer or to listen to hold music. Automating procedures whenever possible is another approach to lessen the effort for your staff. For instance, refunds and exchanges can frequently be handled online in the retail industry without the need for a client to come in touch. The entire process is automated, accelerating the workflow and preventing pointless delays.

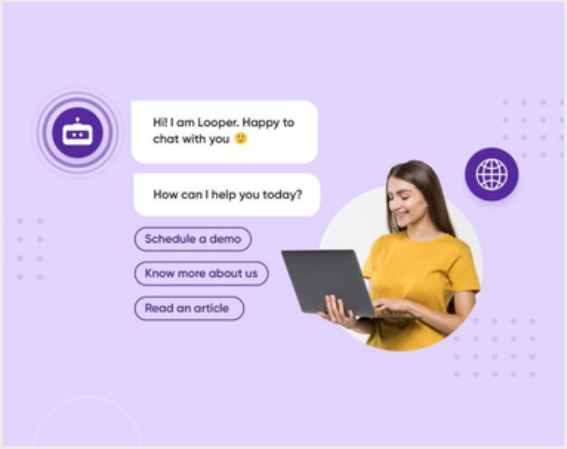

Figure 2: Representation of a Chatbot(Source: verloop.io)

The second important area in digital transformation is **data analytic**. Utilising digital tools to gather and evaluate data will benefit your firm in a variety of ways. Many organisations continue to contend with unreliable, inaccurate, and poorly kept data. The first step in resolving issue is to establish a digital model. As a result, your organisation will profit significantly from improved analytics and more trustworthy data sets. Information sharing and departmental collaboration are hampered when one area of your company has exclusive access to a data source. This obscures the

greater picture and offers various teams and departments a restricted view of the overall business. Data centralization enables quicker access and more accurate analysis.

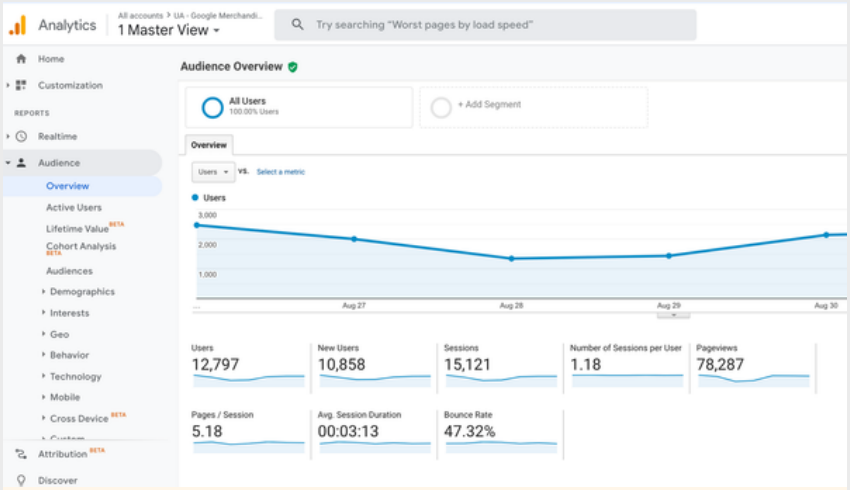

Figure 3: Google Analytics (Source: https://www.indeed.com/)

The last crucial aspect is concentrating in **business model transformation.** Companies that quickly adjust to the changing digital landscape have a big advantage over their rivals. Your business model needs to be reimagined in response to technological progress. Businesses are working harder than ever to comprehend their clients better. When understood in direct relation to their business operating model capacity, this knowledge is especially helpful. Value engineering, customer segmentation, and journey mapping are all crucial parts of this.

CONCLUSION

Businesses can gain benefits from digital transformation in a many ways. Long-term savings from this investment will put companies in a better position to make wise business decisions. The digitalisation made easier for organisations to update and change applications in response to the demand. When government implemented lockdown and social distancing, digital transformation helps the businesses during the challenging condition by helping the organization to carry on functioning as normal as possible.

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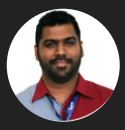
AN ECO-FRIENDLY INNOVATION FOR AVIATION ERGONOMIC SUSTAINABILITY



By Ts.K. Vikneshwaran
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INTRODUCTION

"MRO" which is probably known as Maintenance, Reliability and Overhaul is a crucial department in Aviation that assures an Aircraft is technically safe and reliable. Inefficiency in joining techniques during maintenance of airframe leads to constraints during lift process of an aircraft. This situation has caused hazardous consequences due to irrelevant dry operating weight of the aircraft. Riveting technique is technically essential joining technique to ensure the airframe surface joints in both lateral and longitudinal axis are firmly embedded. Executing riveting technique without harming the atmosphere is a huge challenge. As a remedial measure, to protect the environment and prevent consequences in future, an eco-friendly Portable Rivet Lander Machine is designed and constructed to embark solutions for above mentioned technical problems (Fränzle, Markert and Wünschmann, 2012).

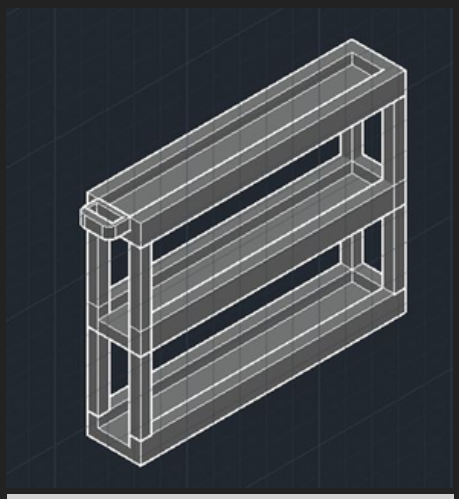

Figure 1: The 3D Dimensional design of Portable Rivet Lander Machine using AutoCAD 2022 Software

INNOVATION FEASIBILITIES

Portable Rivet Lander Machine is an incredible eco-friendly innovation nurtured by UniCAM. The predominant objective is to eradicate environmental pollution caused by human factors during maintenance process on the airframe. This user friendly, equipment is constructed using many eco-friendly raw materials. The structure of Portable Rivet Lander Machine is made of Cold-Rolled Steel. The core advantage behind this steel is the massive thermal conductive capacity of 1700 Fahrenheit @ 927°C. This feature helps to absorb high temperature from hot processed materials such as hot welded materials (TWI, n.d.). This advantage leads to prevention of hot gases immersing in atmosphere.

Additionally, pneumatic system is used for rivet gun accessibility process. This measure helps to prevent from using hydraulic system which applies hydraulic fluids that leads to environmental pollution due to improper handling and disposal. The tensile strength of Cold-Rolled Steel is 600 MPA which turns the greatest advantage for the equipment to absorb heavy duty loads without depending on forklifts. The pillars are assembled with Philips screw joints, which is manually executed and eco-friendly during assembly and dismantle process. Finally, wheels are assembled at the bottom level for the mobility purpose from one place to another at the maintenance hangar without producing any exhaust smoke or extreme sound that effects the environment.

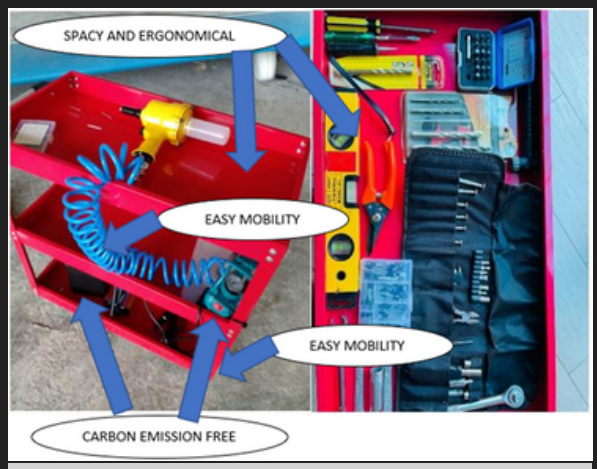

Figure 2: Drone Piloting Course offered at University College of Aviation Malaysia

NOVELTY OF INNOVATION

Portable Rivet Lander Machine is Non-Environment Pollutant due to fully operating using electronic and pneumatic system. It does not produce any Carbon Emissions due to non-combustion system. Portable Rivet Lander Machine uses Power Inverter and Car Battery as an independent Power

Supply to prevent from Power Socket dependency at the Hangar. This technique able to prevent excessive electric current consumption. Portable Rivet Lander Machine is constructed using recyclable Raw Materials to uphold the goal of being Eco Friendly.

Portable Rivet Lander Machine is used as a Training Equipment for Practical Sessions at UniCAM Hangar for hands-on skill development process and learning purpose. Portable Rivet Lander Machine is a solution centric invention with Cost Efficient expenditure.

Figure 3: The block Diagram of Portable Rivet Lander Machine working principle

COMMERCIALISATION POTENTIAL OF INNOVATION

Portable Rivet Lander Machine is easily marketable due to cheap production cost which nearly RM 1000.00. Portable Rivet Lander Machine utilises recyclable material such as car battery, cold rolled steel, rivet screws for structure and performance. Portable Rivet Lander Machine is portable solution for emergency and scheduled maintenance purpose with mobility potential at 90-95%. Portable Rivet Lander Machine causes affordable maintenance cost due to light duty raw materials used for the structure. Portable Rivet Lander Machine is an efficient hands-on skill learning resource applicable at any Maintenance Hangar.

Figure 4: The riveting process using Portable Rivet Lander Machine at UniCAM Hangar

Figure 5: The result of Portable Rivet Lander Machine

CONCLUSION

Innovation is the pathway to uphold maverick assets to the nation. We as a growing nation under Industrial Revolution 4.0 era, need to produce more stalwarts with innovative mindset. As concerned, Modern Problems requires instant solutions.

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INNOVATION AS A LIFESTYLE IN YOUR DAILY STARTUP & AT WORK

By Noorjana Abdul Rani
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Innovation is actually a broad set of skills and a comprehensive process. Its importance not just to apply in our daily lifestyle but this creativity and innovation are important for companies. People just need to be ready and willing to explore their own abilities to find out their creative best (Brower, 2020).

HOW TO DEVELOP INNOVATION

The first step to become innovative in your life or career is to develop a mindset that is open to change. Anyone can be more innovative because according to the popular opinion, innovation can be learned and it can be encouraged to develop. Innovation involves various skills, and you can build and leverage your own unique contributions to the innovative process. (Brower, 2020). In work, employer can create occupations that revolve around innovation and make it a requirement for a job. Employees must be given the flexibility to try new things and explore new possibilities.

LEVERAGING SKILL FOR INNOVATION

Second step in innovating is to be confident about your abilities. You can start by finding a great material or ideas and know your abilities. The key word is Positivity. You can find positivity internally and externally by connecting with people who have a cheerful or hopeful disposition, and making positive affirmations at the start of each day. (Team, 2022). Exploring the landscape of a topic of spanning the environment for diverse perspective create the fodder for innovative ideas. (Incentius, 2022).

Figure 1: FST Lecturer, Ts. Vikneshwaran sharing the Wind Tunnel Mock Up Innovated by UniCAM Students

INVOLVE OTHERS – SUPPORTERS & CUSTOMER FEEDBACK

To survive any new innovation, we need a group of supporters. The most valuable resources are the individuals you work with. Customer input can support companies in the effective launch of wanted and required products and services to the market. This input can challenge the company to stay ahead and develop more innovative solutions. (Incentius, 2022)

Figure 2: UniCAM Students and their customers during Entrepreneurship Day 2023

LEARNING, REFLECTING AND SUPPORT CREATIVITY

Every great innovation needs to be visualised and came out to be seen by others. It needs to be handled by a people who have specialized skill to process and put the innovation into practice or outcomes. It is also need to be observed, learn for improvement and ready to give a good reflect. Innovation also necessitates a certain amount of risk. This risk can lead to failure. The simplest way to stifle innovation is to institutionalize a corporate culture that punished failure and take smart risks. (Incentius, 2022).

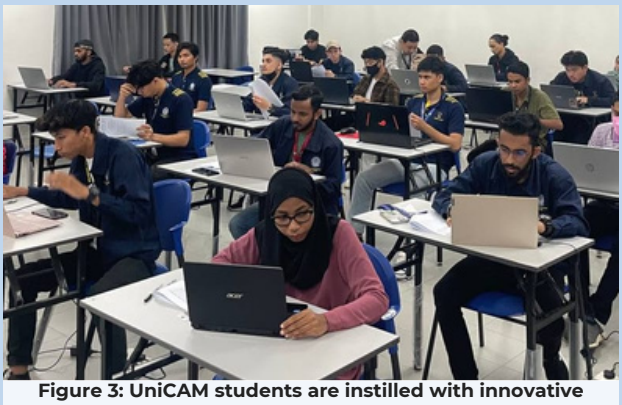

Figure 3: UniCAM students are instilled with innovative learning during their studies in the institution

IMPLEMENT, EXECUTE AND MAKE IT HAPPEN

Of course, any new idea is only valuable if you have the ability to take it to the finish line. An innovation workshop is a way to get dedicated learning and professional development session that can facilitate creative growth and encourage innovative thinking. (Team, 2022). The complete employee is the emphasis of how work is done with design thinking, which removes any needless workplace complexity.

CONTINUOUSLY IMPROVE & ENTER DESIGN THINKING

·When it comes to learning, professionals must pay close attention to the tools and technology they employ while disseminating information and updating abilities. (Brower, 2020). The best innovation is the one that never stopped. The innovation benefit others from the start – from developing the ideas, realizing the idea, doing review and revision until next innovation because people keep see opportunities for improvement.

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UNVEILING THE TRUTH OF GIG'S ECONOMY WORKERS

By Umi Nazira Rafie
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SOURCE:NSTP ARCHIVE PHOTO

INTRODUCTION

The spectacular growth of digitalization has paved an urban way of delivering any products or services via online or in a hybrid way. Especially, in education, trade, banking, medical services, etc. Similarly in current technological advancement era, the use of smartphones, and online platform have ushered in a new form of economy, the gig economy. Gig economy is also commonly referred as the "sharing economy", "platform economy" and "access economy" (Keith et al, 2021). In fact, the sharing economy has become central to the modern business landscape. The sharing economy spans sectors such as home-sharing (e.g., Airbnb), ride-hailing (e.g., DiDi), car-sharing (e.g., Zipcar), bike-sharing (e.g., Mobike), and fashion-sharing (e.g., My Wardrobe HQ).

Traditionally, any freelance or short-term employment is embraced under the umbrella of the gig economy. Nevertheless, due to the booming demand of the gig economy, it has a broader perspective and outcome. In other words, this concept does not only restrict food delivery or short-term employment, it also included entire categories of professional services in digital or remote mode. Nonetheless, this paper context aims to address the precarity of food riders.

GIG WORKERS IN MALAYSIA

The rise of gig workers has seen unprecedented challenges in embracing flexible work styles and technological urbanization. Current education system has also been disrupted by the new generation. This is justified by the surveys conducted by the previous scholar. The latest survey conducted by Montgomery et al., (2022) revealed about 53% of gig workers, belongs between 18–34-year-old, rely on gig work as their primary source of income. Meanwhile, 26% of Malaysia's total 15.3 million Malaysian labor force form part of the growing gig economy. (DOSM,2023). This figure is approximately equal to 4 million freelancers in Malaysia, as indicated by the recent survey of the Department of Statistics Malaysia (DOSM). In this similar vein, DOSM demonstrated that the gig economy workforce in Malaysia flourished with 31% in 2017,

surpassing the growth in the conventional workforce. DOSM data shows that as of previous year, the gig economy already accounted for 18.5% of Malaysia's gross domestic product (GDP) and has been projected to grow to 30% as of last year. DOSM also demonstrated the gig economy is expected to grow into a major contributor to GDP over the next five years, with the increasing development of digitization and digitalisation. Therefore, this figure depicts a glimpse that the gig economy's growth is more intense than expected, and it will boom even rapidly in Malaysia.

GLOBAL GIG ECONOMY

Figure 1: Uber Service (Source: https://www.etax.com.au/)

Global Gig Economy 2020 index revealed the top ten countries with the fastest growing earnings for freelance in which USA leads the list, followed by UK and the remaining Western countries. Besides that, Philippines is the individual Asian country that manages to one among the top ten list. Even though Malaysia is still at the nascent stage in this sharing economy it is crucial for us to understand the precarity of the gig workers, which will be discussed below. Precarious work refers to "employment that is uncertain, unpredictable, and risky from the point of view of the worker" (Keith, Harm and Tay, 2018). According to previous scholars. (Yao et al., 2021), the precarious work of the sharing economy workers may have an influence on physical (e.g. exposure to weather and traffic, and social distancing challenges), psychological (e.g. changes in autonomy, environmental mastery etc.), social (e.g. impact of distancing on recurrent disconnection concerns) and subjective (e.g. changes in cognitive and affective evaluations of their life such as happiness and life satisfaction).

UNIQUENESS

One of the unique perspectives of gig economy is gig workers uphold the liberty to select their hours of work and they are not beholden to any type of employment services. Likewise, they are flexible to execute their task., and have control among their work schedule. Nevertheless, since they are paid for job/per task, they are unprivileged to enjoy a fixed payment structure and it remains uncertain depending on how many job/tasks they are able to execute. Hence, those who rely on these earning patterns feel burdened to accommodate personal and family obligations. Besides, previous research has indicated that non-standard work is related to emotional exhaustion (Myhill et al.,2021), sleep deprivation (Yao et al., 2021), and poor physical health and mental health (Glavin, 2022). Exposures to routine instability in their work schedules are also related to social isolation as well as unhappiness (Scuotto et al., 2022). In order to garner more revenue and earnings, they usually select late-night deliveries and peak hours due to high market demand at the selected hours. Apart from inconsistent financial earnings, it poses double challenges to gig workers as there is an ambiguous employment relationship. Since social security falls under the employment traditional approach, gig workers ineligible for retirement benefits or any fringe benefits.

Apart from work patterns and time pressures, gig workers also worry about their ratings. Customer ratings measure customer satisfaction with the employee performing their job. Organizations use customer ratings to incentivize their employees by rewarding employees who maintain a certain score or to penalize employees whose ratings are below a certain score. Those employees whose customer ratings are low would have the fear of deactivation or dismissal (Scuotto et al., 2022). Insecurity around customer ratings may be particularly stressful for gig workers.

Figure 2: Lalamove Service (Source: https://www.passionateinmarketing.com/)

CONCLUSION

The exponential growth of the gig economy undermines the economic status of the society. It may ignite the long-term sustainability of all sectors nowadays. Therefore, it is imperative to reflect on the corollaries of new employment in the gig economy.

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