



**Process of making visual design  
in the 3DEXPERIENCE Works Innovation Day 2025 event.**

Kritsakorn Wanjing  
Advisor: Asst. Prof. Dr. Pitipong Pimpiset

*Communication Arts division,  
International College,  
Khon Kaen University, Thailand*

## Acknowledgement



**Figure 1:** The author with the marketing team of Metro Systems Corporation Public Company Limited's Design and Engineering Solutions Department

I would like to express my sincere gratitude to the marketing team of the Metro Systems Corporation Public Company Limited's Design and Engineering Solutions Department for accepting me to do the cooperative education internship at the company. As well as taught me many necessary skills that will become important in my career in the future. Especially to Ms. Natpalin Sangatsap and Mr. Araya Sa-ngobpun, who took good care of me throughout my internship period, and Ms. Punyaporn Komkay for teaching me the techniques of using Adobe Illustrator; her patience to teach me is very meaningful and will always be remembered.

I also would like to sincerely thank Asst. Prof. Dr. Pitipong Pimpiset for assisting me during the whole process of my cooperative education internship and the writing process of the paper.

**Abstract** 3DEXPERIENCE Works Innovation Day is the annual event of the reseller of the CAD (Computer Aided Design) software "SOLIDWORKS" of each country and region around the world. In Thailand, one of the authorized resellers of SOLIDWORKS is the Design and Engineering Solutions Department of Metro Systems Corporation Public Company Limited, which is the department in the company where the author works as an intern in the position of graphic designer. On October 4, 2024, they held an event to announce the new features of SOLIDWORKS 2025, along with the seminar events that are related to designing and engineering and have the partners of the company set up their booth in the event. The author, as an intern, got to help the company organize the event and help them reach their goals successfully and smoothly. This paper explores the methods and the behind-the-scenes process of designing artworks and preparing for the event through the lens of the cooperative education student.

**Keywords:** Graphic design, visual design, communication, event, SOLIDWORKS

## Table of Contents

### Chapter 1: Introduction

1.1 Background	1
1.2 Objectives of the Study	2
1.3 Definition of Terms	2

### Chapter 2: Literature Reviews

2.1 Characteristics of Thai Companies	3
2.2 CAD Software	3
2.3 Characteristics of the Engineers	4
2.4 Graphic Design	4
2.5 Collaboration with Partners	5

### Chapter 3: Research Methodology

3.1 Conceptual Framework	6
3.2 Research Timeline	6
3.3 Research Design	7
3.4 Research Instruments	7
3.5 Data Collection	8
3.6 Data Analysis	8

Chapter 4: Result	9 – 34
-------------------	--------

Chapter 5: Conclusion	35
-----------------------	----

Chapter 6: Discussion	36
-----------------------	----

Chapter 7: References	37 – 38
-----------------------	---------

Chapter 8: Appendix	39 – 46
---------------------	---------

## **Chapter 1**

### **Introduction**

#### **1.1 Background**

Every year in the first half of October, Metro Systems Corporation Public Company Limited's Design and Engineering Solutions Department (Metro DES) hosts the annual 3DEXPERIENCE Work Innovation Day, which features a speaker who announces the new version and features of SOLIDWORKS. SOLIDWORKS is CAD (Computer Aided Design) software, or, to put it simply, computer software used by engineers to create, design, and test their products before they are manufactured (3DEXPERIENCE SOLIDWORKS, 2024). Dassault Systèmes, a multinational French firm formed in 1981, developed the software program. They specialize on software for 3D product design, simulation, manufacturing, and other 3D-related applications (Dassault Systèmes, 2022). SOLIDWORKS is one of their core products, and Metro Systems Corporation Public Company Limited's Design and Engineering Solutions Department is one of the authorized SOLIDWORKS reseller in Thailand (Wikipedia, 2024).

The event will feature not just a speaker from Dassault Systèmes who will discuss the next new version of SOLIDWORKS in 2025. Guest speakers from Metro Systems Corporation Public Company Limited, the Design and Engineering Solutions Department, and other partners will talk about a variety of design and engineering-related matters (Metro SOLIDWORKS, 2024). There are also several booths from the company's partners set up throughout the venue for event attendees to visit and discuss solutions that can make their design and manufacturing businesses easier and more efficient. The partners of the company include Apple, UltiMaker, and SHINING 3D.

This year's event is no different from previous years; the company held it at the Novotel Bangkok Suvarnabhumi Airport Hotel, as usual. However, this time, the company targeted the number of guests to attend the event at 300, which is higher than the previous year's target of 200, because they are attempting to achieve the high number of guests seen prior to the global economic downturn following the COVID-19 pandemic, where they can reach as many as 600 guests in 2020 (Metro SOLIDWORKS, 2024).

As a graphic designer intern in Metro Systems Corporation Public Company Limited's Design and Engineering Solutions Department, the author is responsible for supporting the company with event planning by creating visual artwork for both online and offline platforms. To develop artwork for the 3DEXPERIENCE Works Innovation Day 2025, one must apply knowledge from a number of areas. According to William Pepple, to achieve good graphic design, a graphic designer needs to consider the way to combine the use of space, texture, typography, color, line, and shapes together when designing an artwork (Pepple, 2021). In order to communicate with their target audience for the 3DEXPERIENCE Works Innovation Day 2025 event, the company will use these visual artworks to encourage them to attend and inform them of the advantages of doing so, the topics that will be covered, the number of guest speakers who will take the stage to share their thoughts on SOLIDWORKS, design, and engineering, and even how they can get to the venue on the day of the event.

Therefore, as a university student, the author has an excellent chance to explore and build critical skills for the industry on 3DEXPERIENCE Works Innovation Day 2024. It is a major event that takes place once a year and involves collaboration with a lot of people, including international guest speakers. In order to gain experience working with a large event and how to collaborate with different departments within the company and outside partners to make the event run as smoothly and successfully as the company hopes, the author then decided to undertake a project during the planning process of this major annual event of Metro Systems Corporation Public Company Limited during the author's cooperative education internship.

## **1.2 Objectives of the Study**

1.2.1 To explore the process of event organization in Metro Systems Corporation Design and Engineering Solutions department.

1.2.2 To plan and deploy appropriate marketing strategies to boost the awareness of the event.

1.2.3 To design and create the engaging artworks for the event in both online and offline formats.

## **1.3 Definition of Terms**

Graphic design: An action where a graphic designer designs or crafts the visual content to convey the message through it, along with using the principles of color, layout, typography, and picture, that meet with the specific need or interest of the user or viewer.

Visual design: Like graphic design, it involves crafting graphic elements using the principles of color, layout, typography, and pictures. But visual design is based on the content that is displayed on the screen, like websites, posts, and user interfaces.

Communication: A process of sharing information between people to make the receiver understand the context or to convince them into believing with the sender.

Event: A planned and organized activity that gathers people into it to do something together to achieve the result in something.

SOLIDWORKS: Software that is used to design and simulate engineering mechanical pieces or machines before manufacturing. As well as inspecting and reverse engineering the mechanical machines that are not in production anymore.

## **Chapter 2**

### **Literature Review**

#### **2.1 Characteristic of Thai Companies**

According to Terdpaopong et al. (2016), more than half of Thai companies have an institutional structure, where the main shareholders are the Bank of Thailand, commercial banks, insurance and financial institutions, and other mutual funds. In this type, the Chief Executive Officer (CEO) is also the head of the board and sometimes oversees the company's financial and strategic planning. If the CEO and the owners are the same person, they will call it 'duo manger' but in Thai, mostly they are the different person. For the size of the board of directors, 11 to 20 is the most popular in most Thai companies. For the fairness, they surprised to find that the lower-ranked companies have higher equity than those in high-ranked companies. And in the audit sector, most of them are not using the service from the big four (the four largest accounting firms in the world who provide accounting and auditing services, including external audits, taxation services, management and business consultancy, and risk assessment and control).

Punturaumporn & Hale (2003) stated that when Thais are doing business, building trust and relationships are essential first step. People should build their connections through networking and then the opportunity and negotiations will follow. Since trust and confidence will help boost the likelihood of agreement in the business world and reduce the chance for conflict. Unlike in the Western where the person can search for the contact of the company and contact them directly at that moment.

#### **2.2 CAD Software**

According to Allen and Kouppas (2012) CAD software has evolved through time, from the uses of designing aircraft to automotive to architecture to animation and to artificial intelligence. At first, CAD was only for 2D designing and was used to replace traditional drawing boards, producing predominantly orthographic and isometric drawings. From the key features that it can duplicate elements for modification and share the file effortlessly, sped up the time in designing dramatically. Then many of the 2D CAD developed to have the 3D capability, in the 1940s, the engineer would use wood stripes called 'splines' to place on the key point of the model (node) to create the template for aircraft then those splines were placed on paper to trace the template to use for the construction of the aircraft. Later in the 1960s, 3D CAD software started to get adopt by the industry and in the 1980s that the software got standardized and use the same computing for the curve section of the model, which allow CAD software to open file from other CAD software. Today, CAD software has evolved into many form that can be use to do things like cartoon animations, designing and testing the model before manufacturing, and produce lifelike visual representations of the model.

Almashani et al. (2023) stated that SOLIDWORKS is the CAD software for the engineer involved in product design and development. It can perform a wide range of stress analyses, including static analysis, dynamic analysis, thermal analysis, and fatigue analysis. Which allowed the engineers to forecast and refine the performance of their model and resolve the issues before it happened.

Moreover, SOLIDWORKS 2021 also has been used for simulate studies and the results from the simulation have been verified by hand calculations, making it very trustworthy.

### **2.3 Characteristic of the Engineers**

Research by Williamson et al. (2013) indicates that the engineers have 9 unique personality traits that are related to their career satisfaction: assertiveness, customer service orientation, emotional stability, extraversion, openness, optimism, teamwork, tough-mindedness, and work drive. All of those traits are significantly scored lower than people who are not engineers, yet they are scored higher on intrinsic motivation and tough-mindedness.

Hertzum & Pejtersen (2000) also said that engineers like to find information through their college, as well as finding people who are knowledgeable from many documents to get the information they want. But the obstacles are that the use of speaking to them is the lack of certainty, since the context can change if the receiver understands it incorrectly or forgets some part of it, making it impermanent. And for the written form, the engineers think that this form of asking for information they want gives the incomplete context of what they actually want.

### **2.4 Graphic Design**

One component of graphic design is modern graphic design; it needs imagination, innovation, and analytical thinking to perceive and create. Nowadays, it is used across technological platforms to communicate a certain message through visual design that combines design and fine art together with some specific goals the publisher hopes to achieve (Xie, 2023). Like what Rice and their team of researchers did in 2022, where they designed a poster with the supervisor of the City of Missoula Conservation Lands managers to encourage the hikers to change their behavior by leashing their dogs while they are on the conservation lands to protect the trail and native plants from the damage done by their pets and to encourage them to clean their shoes in order to stop the spread of invasive plants that might stick to the side or the bottom of their shoes (Rice et al., 2023)

According to Tomita (2015), to achieve good graphic design, several principles can guide designers to make visual design decisions; they need to consider the principles of balance, unity, proximity, contrast, emphasis, and alignment. While for the elements of visual design, the designers need to think about line, shape, form, value, color, space, texture, and typeface. These principles are only a brief guideline for the designers to use; it still needs to use the experience and creativity from the designers to cooperate with to result in a good graphic or visual design.

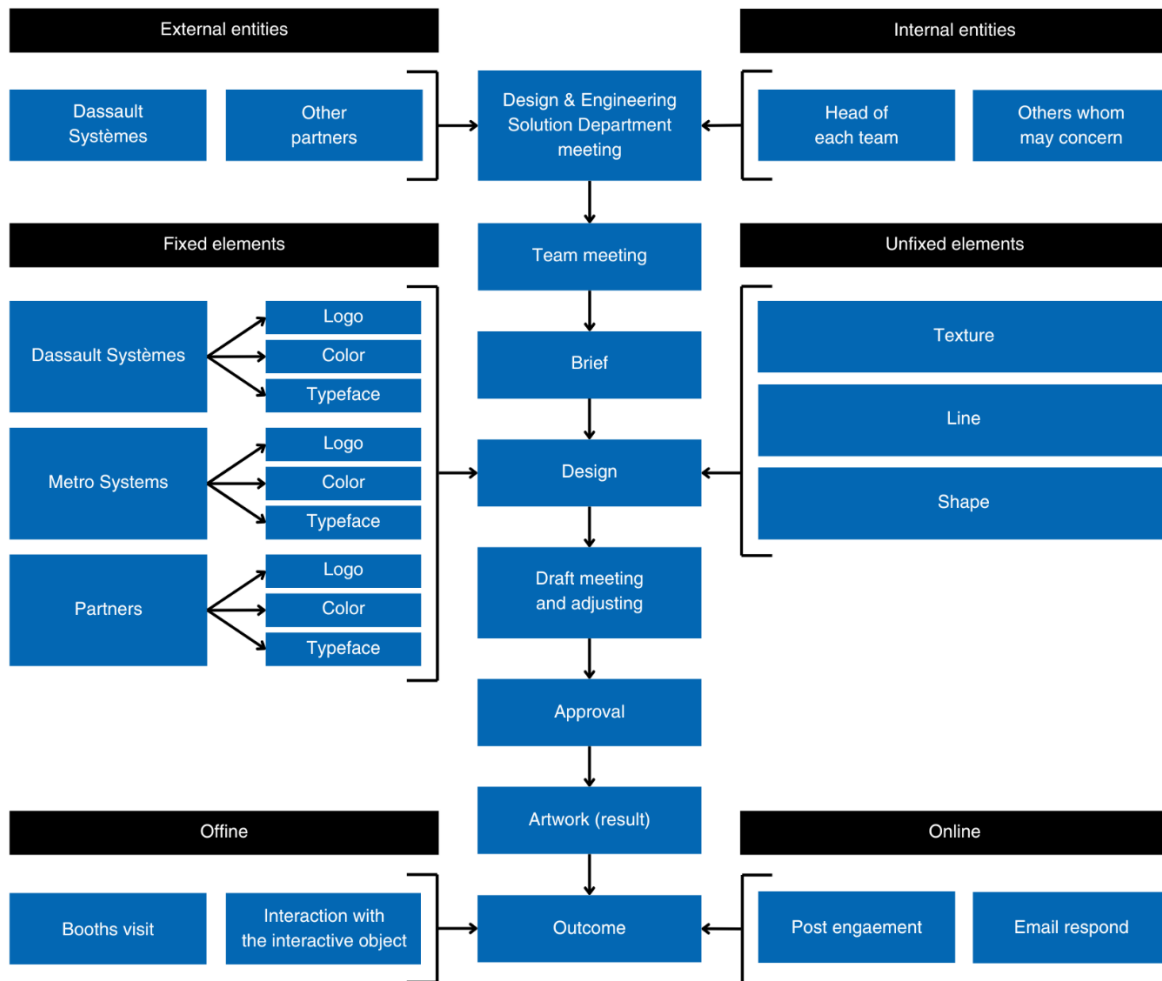
## **2.5 Collaboration with Partners**

Lee stated that, in the business world, a partnership is established between the organization and the organization seems that they have shared long-term goals and can improve each other along the way to achieve that goal together. Many partnerships support each other by bringing their own expertise, like financial assistance, employee volunteering, or mechanisms to help each other, and this will be beneficial to both sides (Lee, 2011).

Frick pointed out that most of the companies wanted to optimize the cost and time-related processes, so they collaborated with their partners to enhance this. Other than that, the distributor-type business focuses more on the collaboration activities that were transparent and trackable to ensure transparency from the stakeholders and the public. While sharing information between partners is also one of the key reasons to form the collaboration, it is not as important as enhancing their time and cost-related processes (Frick, 2007).

## Chapter 3 Research Methodology

### 3.1 Conceptual Framework



**Figure 2:** The timeline and factors that influence the design of the artworks during the designing process of the 3DEXPERIENCE Works Innovation Day 2025 event.

### 3.2 Research Timeline

End of August 2024: Team meeting and work assigning.  
 September 2024: Production phase.  
 October 3, 2024: Set-up Day at the venue.  
 October 4, 2024: The day of the event.  
 Early October 2024: Event evaluation.

### **3.3 Research Design**

By using various designing techniques and computer programs to assemble ideas and briefs into artworks that can convey the message to the receiver with the attractive design that makes them want to join the 3DEXPERIENCE Works Innovation Day 2025 event.

The writer will have a meeting with the marketing team to discuss the main objectives and the brief of the artworks together. During this meeting, the author will note the important points on the iPad using the Notability application to use as a reference during the working process. When the meeting and discussion are concluded, the author will progress with the drafting stage by designing multiple designs of the same artwork for the team to discuss together and choose one design to continue further development to the final stage. Next step, the author will consistently inform the team via email about the drafting process as well as receive feedback or concern to adjust the artwork to be better. Finally, the final draft goes into the small meeting where the members of the marketing team discuss together to approve the artwork, which will be sent further to the head of the team and be published or printed out.

For the outcome, the author collects the data using an already existed Google Form from the company's marketing team and combine it with the engagement report from the Metro SOLIDWORKS Facebook page to track how many engagements the artwork that was produced by the author will receive.

### **3.4 Research instruments**

The tools that the researcher used to conduct this project can be categorized into two groups: hardware and software.

#### **3.4.1 Hardware**

- Lenovo LOQ 15ARP9
- Apple iPad Pro (11-inch) (3rd generation)

#### **3.4.2 Software**

- Adobe Illustrator
- Adobe Photoshop
- Notability
- Google Form
- Meta Business Suit
- Microsoft Excel
- Microsoft Word
- Canva

### **3.5 Data Collection**

The main method to gather data to measure the outcome of the event is via a Google Form that was already produced by the marketing team to let the customers fill in when the event is concluded. Which will have the questions asking their satisfaction about each topic in the event. As well as incorporate data from the Meta Business Suit Engagement Report to track how many times the posts were viewed and clicked by the customer and the general public.

Combined with the signatures signed at the registration front desk at the entrance of the event, this was used to count how many attendees were there on the day of the event and who could not attend but had registered.

### **3.6 Data Analysis**

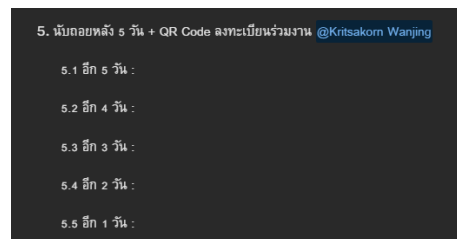
Visualize data by converting it into graph and table then put it alongside the artwork to show the outcome result of the author's artworks and the 3DEXPERIENCE Works Innovation Day 2025 event as a whole.

## Chapter 4

### Result

The author got to design various artworks and assets to use inside 3DEXPERIENCE Works Innovation Day 2025, some will be used in the event in many years to come. In this report, the author will explain the workflow of each work, sorted by the final draft submission order to the marketing team and get approved.

#### 4.1 Countdown



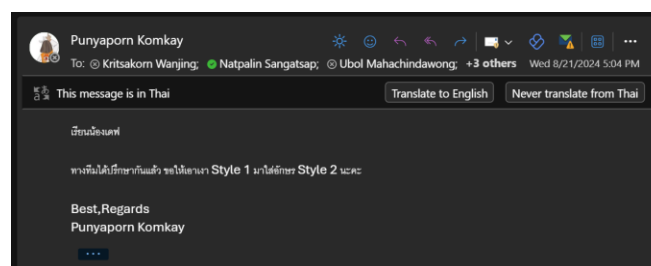
**Figure 3:** The briefing via email about the countdown images.

To make the attendees get ready for the event, the first work that the author got assigned to that is related to 3DEXPERIENCE Works Innovation Day 2025 is the countdown images that will be posted on all social media of Metro DES during the last 5 days before the event.



**Figure 4 – 6:** The 3 drafts of the countdown images of the 3DEXPERIENCE Works Innovation Day 2025.

The author chose to design the artwork with the theme “hologram”, since the assets from Dassault Systèmes in this year’s event are many forms of hologram. The team then chose to combine style 1 with style 2 in the discussion and informed the author via email to let the author proceed with that decision.



**Figure 8:** The email that informs the author about the decision of the team.

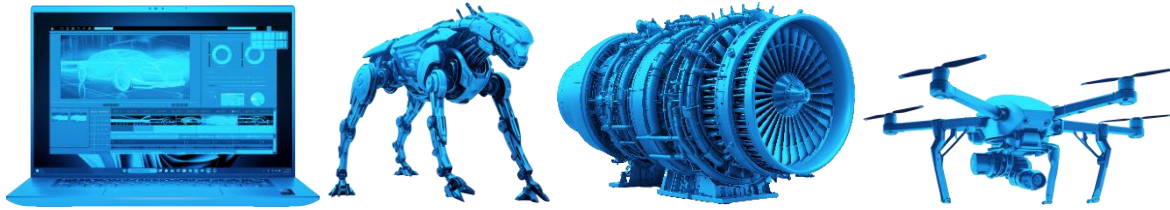


Figure 9 – 12: Hologram assets from Dassault Systèmes for this year's Innovation Day event.

After further development of the assigned work by combined style 1, which is the hologram and style 2, which is the 3D text effect, the author submitted the final draft to the team and got approved.

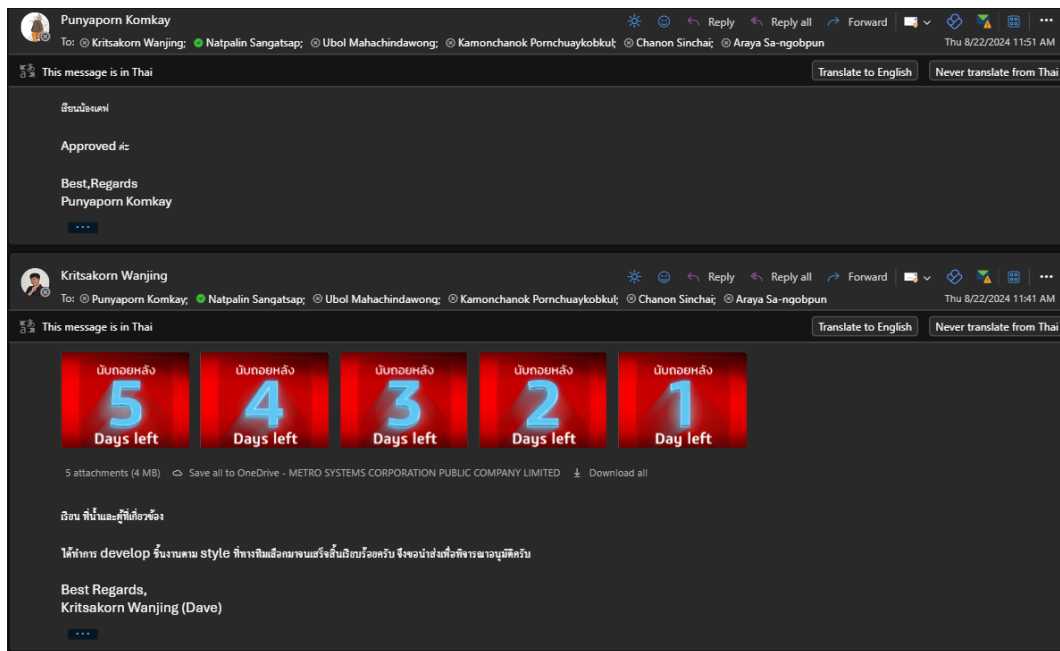
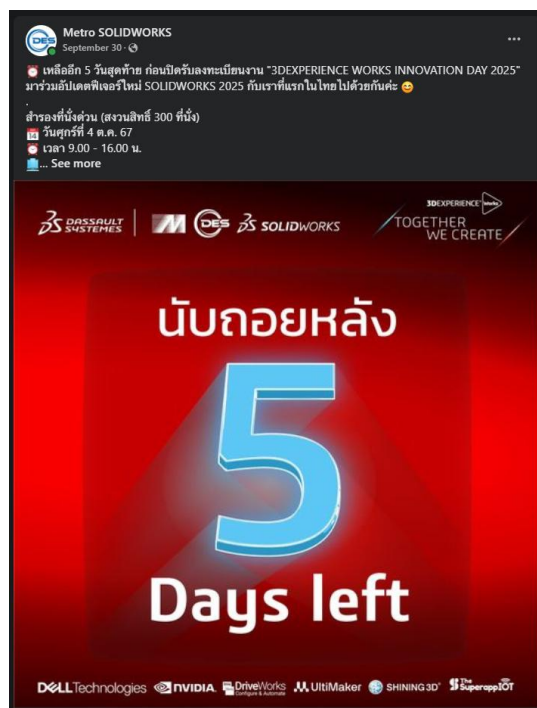


Figure 13: Final draft submission and approval from the team.



Figure 14 – 18: Final artwork of the countdown work assignment.



**Figure 19:** The author's work got posted on the Metro SOLIDWORKS Facebook page.

	Impression	Reach	Reaction	Comment	Share	Total click
Amount	1,125	977	7	0	1	11

**Table 1:** The total engagement of all 5 countdown artworks on Metro SOLIDWORKS's Facebook page.

The total number of engagements of all the five artworks is 1,125 impressions, 977 reaches, 7 reactions, 0 comment, 1 share, and 11 total clicks.

## 4.2 How to get to the 3DEXPERIENCE Works Innovation Day 2025



**Figure 20:** The brief of the How to get to the 3DEXPERIENCE Works Innovation Day 2025 and the example from last year's event.

The second work that the author got assigned is the map of how to get to the event, which was held at Novotel Bangkok Suvarnabhumi Airport. The map was already made from the year before, so the author only had to place it in the background template provided by Dassault Systèmes.

The writer chose to design a big red square background for the name of the event along with the arrow that points to the venue to make it easy to read and complement together with the overall color of the artwork.

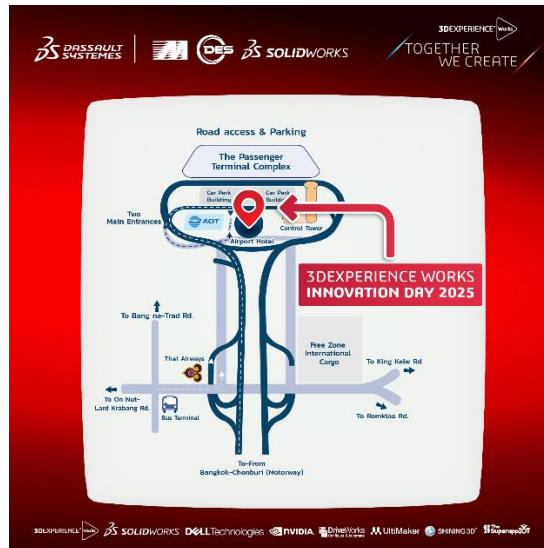


Figure 21: The first draft of How to get to the 3DEXPERIENCE Works Innovation Day 2025.

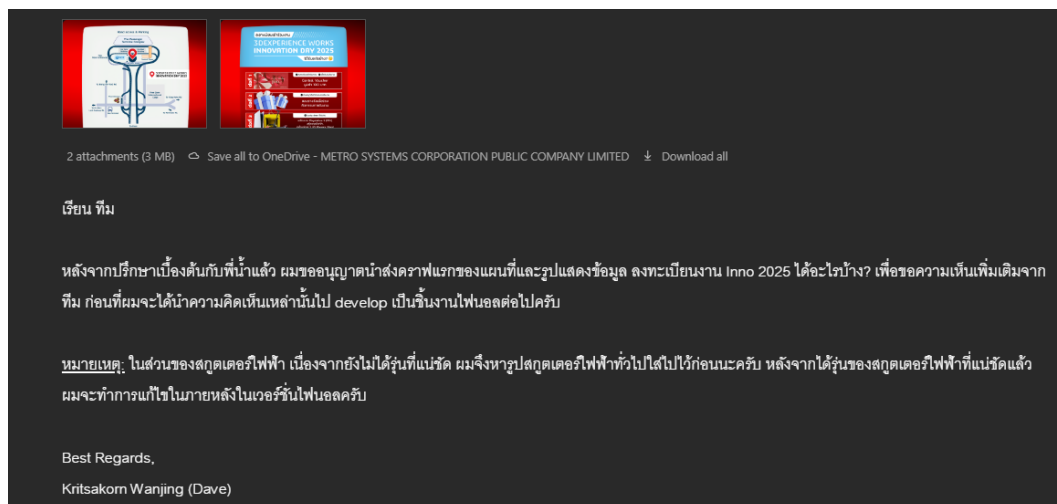
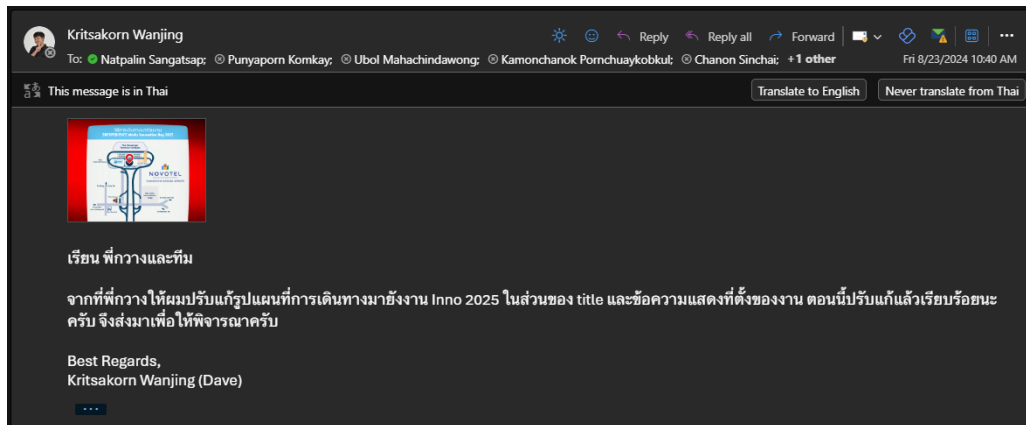


Figure 22: The final draft of How to get to the 3DEXPERIENCE Works Innovation Day 2025.

After submitting the first draft, the team asked the author to adjust the design by adding the title at the top and using the icon with the logo and name instead of using an arrow to point at where the event was held. Because the arrow is covering some part of the map and might make the customer confused.

Process of making visual design in the 3DEXPERIENCE Works Innovation Day 2025 event.



**Figure 23:** The final draft of How to get to the 3DEXPERIENCE Works Innovation Day 2025.

After the adjustment, the author submitted the final draft via email alongside the changelog and got approval from the team.



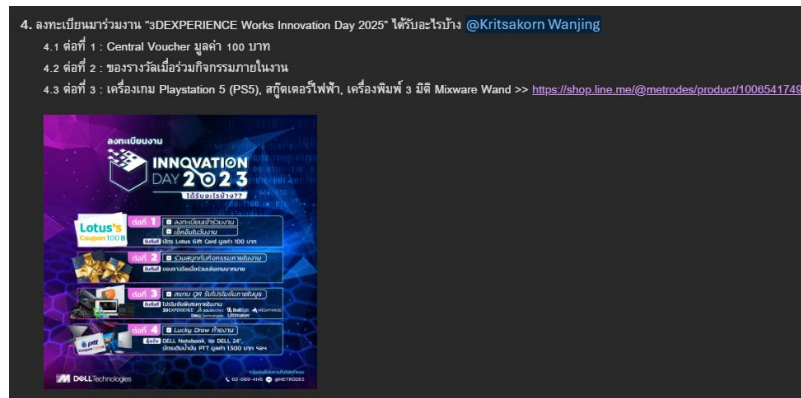
**Figure 24:** The final product of How to get to the 3DEXPERIENCE Works Innovation Day 2025.

	Impression	Reach	Reaction	Comment	Share	Total click
Amount	196	169	3	0	0	4

**Table 2:** The total engagement of How to get to the 3DEXPERIENCE Works Innovation Day 2025 on Metro SOLIDWORKS's Facebook page.

The total number of engagements of How to get to the 3DEXPERIENCE Works Innovation Day 2025 artworks is 196 impressions, 169 reaches, 3 reactions, 0 comment, 0 share, and 4 total clicks.

### 4.3 The benefit of registering to the 3DEXPERIENCE Works Innovation Day 2025 event



**Figure 25:** The brief of the benefit of registering to the 3DEXPERIENCE Works Innovation Day 2025 event and the example from last year's event.

The third work that the author got assigned in the 3DEXPERIENCE Works Innovation Day 2025 event is the benefit that the customer will get when they register to join the event. This artwork will show 3 things that the customer can get in the event, which are: a 100 THB Central gift voucher, a prize at each partner's booth in the event, and a lucky draw at the end of the event. This will encourage the customer to register and come to the event even more, which will later lead to the likelihood of achieving the goal of the event.

The first draft was submitted without the image and name of the electric scooter because the company has not been confirming the model of the scooter yet.



**Figure 26:** The first draft of the benefit of registering to the 3DEXPERIENCE Works Innovation Day 2025 event without the electric scooter image.

When the marketing team informed the author about the model of the scooter, the second draft got submitted with the image of the scooter as the author intended.



**Figure 27:** The second draft of the benefit of registering to the 3DEXPERIENCE Works Innovation Day 2025 event.

Later, the prize for the lucky draw got changed from the Mixware Wand 3D printer to Keychron K4 Pro then to the Samsung Galaxy Tab A9 in order to attract the general audience even more, since not all of the attendees will be engineers who are interested in 3D printers. The author got to adjust it again and submit it as a final version of this assigned work. With the chance to adjust the work, the author also redesigned the coupon voucher to pop out a bit to make it less still and more standout.



**Figure 28:** The final draft of the benefit of registering to the 3DEXPERIENCE Works Innovation Day 2025 event.

	Impression	Reach	Reaction	Comment	Share	Total click
Amount	224	174	1	0	0	4

**Table 3:** The total engagement of the benefit of registering to the 3DEXPERIENCE Works Innovation Day 2025 event on Metro SOLIDWORKS's Facebook page.

The total number of engagements of The benefit of registering to the 3DEXPERIENCE Works Innovation Day 2025 event artworks is 224 impressions, 174 reaches, 1 reaction, 0 comment, 0 share, and 4 total clicks.

#### 4.4 Where to register to the 3DEXPERIENCE Works Innovation Day 2025

The fourth one is the QR code for the customers who are interested in joining the event to register for a seat at the event, and if they have the potential to be customers for the company, they will get the invitation via email to attend the event onsite. Because the venue can hold a limited number of attendees. And others will get the online link to attend the virtual event online.

This work is one of the simplest to do. The writer only had to put the QR code onto the template that was already made for other artworks, and it is done.



**Figure 29:** The final draft of Where to register to the 3DEXPERIENCE Works Innovation Day 2025.

This artwork is also the first assignment that the author got approved by the first draft since the start of his cooperative education internship from how simple it is to make.

	Impression	Reach	Reaction	Comment	Share	Total click
Amount	196	169	3	0	0	4

**Table 4:** The total engagement of the Where to register to the 3DEXPERIENCE Works Innovation Day 2025 on Metro SOLIDWORKS's Facebook page.

The total number of engagements of How to get to the Where to register to the 3DEXPERIENCE Works Innovation Day 2025 artworks is 196 impressions, 169 reaches, 3 reactions, 0 comment, 0 share, and 4 total clicks.

#### 4.5 You are invited!

When the customers register to join and the company sees the potential to do business with them, or if they are the customer for a long time, they will get the invitation via the email that they have provided in the registration form. The invitation not only says that the customers are invited to join the onsite event at Novotel Suvarnabhumi, but also the attendee's number of each person to join the lucky draw if they stay until the end of the event.



**Figure 30:** The example of the invitation to the 3DEXPERIENCE Works Innovation Day 2025 along with the attendee's number at the top.

At first, the attendee's number was 3DEX0001–3DEX0300 but later got changed to 3DXW 0001–3DXW 0300 to match the name scheme from Dassault Systèmes.

#### 4.6 Prizes of the lucky draw

To encourage people to join the event, the company put an effort into the lucky draw prizes to make the customer want to join this event. The prizes are originally PlayStation 5, electric scooter, and the Mixware Wand 3D printer.



**Figure 31 – 33:** The 3 original lucky draw prizes of the 3DEXPERIENCE Works Innovation Day 2025 event.

But later, due to appropriation reasons mentioned in 4.3, the company changed the third prize from the Mixware Wand 3D printer to Keychron K4 Pro and later to Samsung Galaxy Tab A9, which they wish would attract more customers to join the event. Other than these 3 prizes, the company also added 10 Xiaomi Watches to the prize pool.



**Figure 34 – 36:** The 3 final lucky draw prizes of the 3DEXPERIENCE Works Innovation Day 2025 event.

	Impression	Reach	Reaction	Comment	Share	Total click
Amount	318	273	5	1	0	9

**Table 5:** The total engagement of the Prizes of the lucky draw in the 3DEXPERIENCE Works Innovation Day 2025 on Metro SOLIDWORKS's Facebook page.

The total number of engagements of Prizes of the lucky draw artworks is 318 impressions, 273 reaches, 5 reactions, 1 comment, 0 share, and 9 total clicks.

#### 4.7 Prize signs

The old prize signs have been in use for many events over the years and started to wear out; the company then assigned the author to design the new one for them to use for at least the next 3 years. This sign will be debuted in the 3DEXPERIENCE Innovation Day and continue to be used in many events of the company in the future that have a prize given to the attendees.



**Figure 37:** The email that assign the task for designing the new prize signs along with the brief and the current logo to the author.

The author then proceeds to design 3 styles for the new prize signs and presented them to the marketing team and the head of Metro DES to choose the style that is suitable for further development process.





**Figure 38 – 40:** Three styles for the new prize signs designed by the author for the company to choose.

Figure 38 (Style 1) was inspired by the liquid blob that is one of the popular design trends in 2024. While figure 39 (Style 2) was inspired by the stacking card/paper. And figure 40 (Style 3) was inspired by the current prize signs but was reimagined to be trendier and match with the current color scheme of the department.

The majority of the office chose style number three to continue further in the development process and suggest the author adds more minor detail to it to make it less plain and also change the logo of Metro DES to a new one, which is the circular logo in the figure 41.



**Figure 41 – 42:** The final design and the printed piece of the new prize signs.

The final design of the prize signs also got adjusted to have a balance of deep blur parts on both the left and right sides. According to what Tomita stated with the principles of balance in designing, this made the sign much more balanced to look at and have more space to put the decoration elements in.

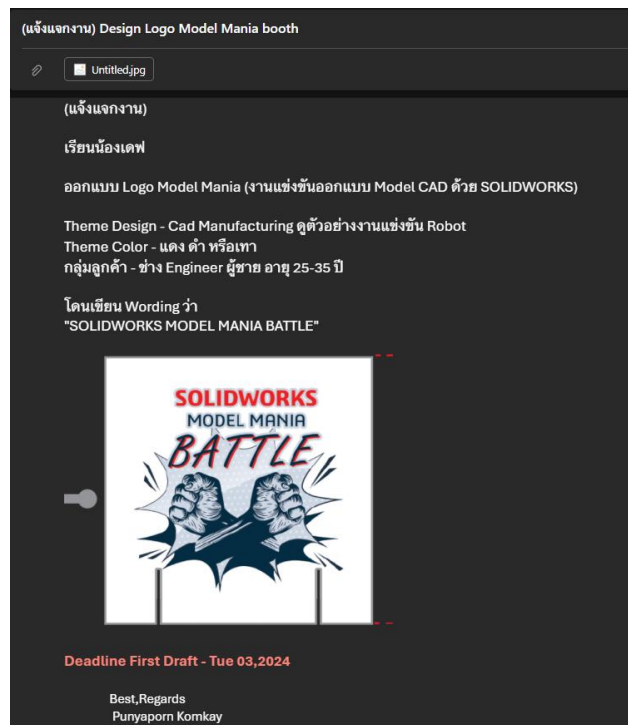


**Figure 43 – 45:** The use of the new prize signs in the event.

#### 4.8 Model Mania Battle logo

Model Mania Battle is the competition within the event for the participants who want to try out their SOLIDWORKS skills in drawing and constructing a model with the fastest speed among all the attendees and win the prize. This type of competition is very popular among the Innovation Day in many countries around the world because it made the attendees relax and have fun in the event full of engineering terms.

For the logo, each organizer in each country can design their own to use in the competition without any criteria from Dassault Systèmes. The old logo of Model Mania was designed and used by Metro DES for many years, and it started to fall out of trend in the design world, so the company, via the marketing team, assigned the author to design the new one that will be used for at least 5 years from now.



**Figure 46:** The email that assign the task for designing the new logo for Model Mania Battle along with the brief and the current logo to the writer.

After brainstorming both with the marketing team and the engineering team to ensure that the author can include everything that can be seen as “Model Mania Battle” together, the author came up with 3 drafts for the design.

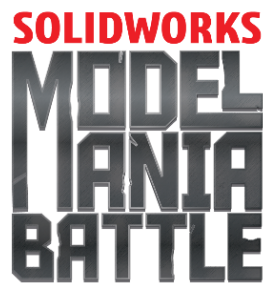
### STYLE-1



เป็นการต่อยอดจากโลโก้เก่า  
ของปีก่อน ๆ แต่เปลี่ยน  
ในเรื่องการสื่อถึงการต่อสู้ด้วย  
กำปั้นมาเป็นโล่ และเพิ่มหุ่นยนต์  
กับตัวอักษร แบบ metal / steel  
เข้าไปเพื่อสื่อถึงวิศวกรรม

\*มีแบบเพิ่มเติมอีก 2 แบบ

### STYLE-2



เน้นที่ wording เป็นหลัก  
แทรกด้วยตัวหนังสือที่มีรอยมันและ  
texture ของเหล็กเพื่อสื่อถึงวิศวกรรม

\*มีแบบเพิ่มเติมอีก 9 แบบ

### STYLE-3

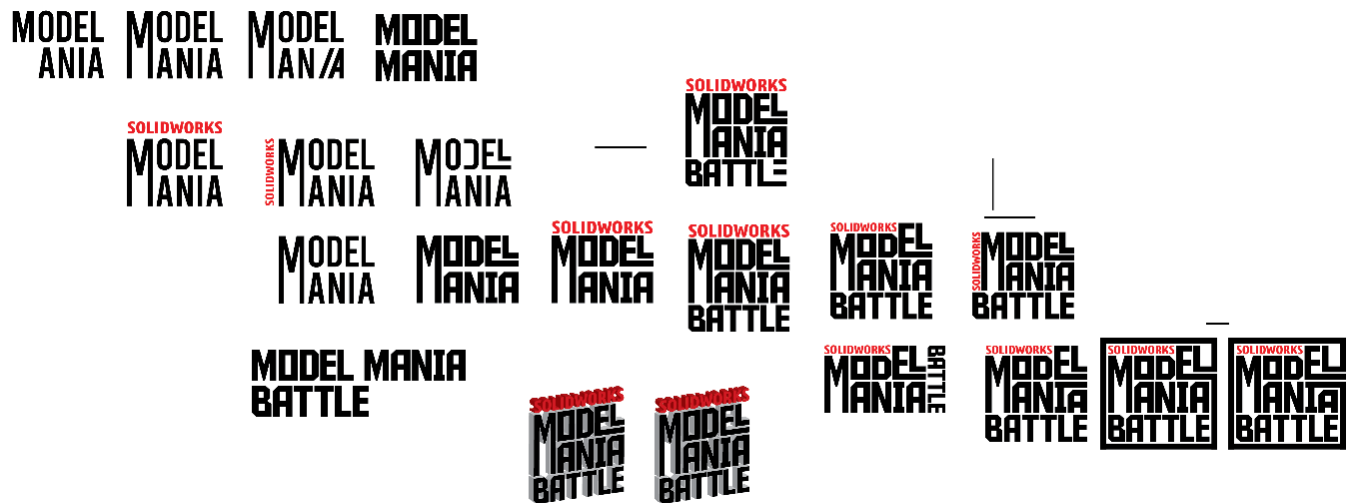


เป็นรูปแบบที่ได้จากการพูดคุยกับทีม  
engineer ของบริษัทถึงหัวข้อ  
"หากนึกถึง SOLIDWORKS  
และ Model Mania Battle แล้ว  
นึกถึงอะไรเป็นหลัก?"

\*มีแบบเพิ่มเติมอีก 6 แบบ

Figure 47 – 49: Three proposed drafts for the new Model Mania Battle logo.

After presenting all three drafts to the marketing team, the team discussed and chose style-3 for the further development stage. They also gave the additional comment to make the design less brutal and more approachable. Moreover, the writer also has many designs that were rejected by himself to pass into the discussion with the marketing team, as seen below in figures 50-52.



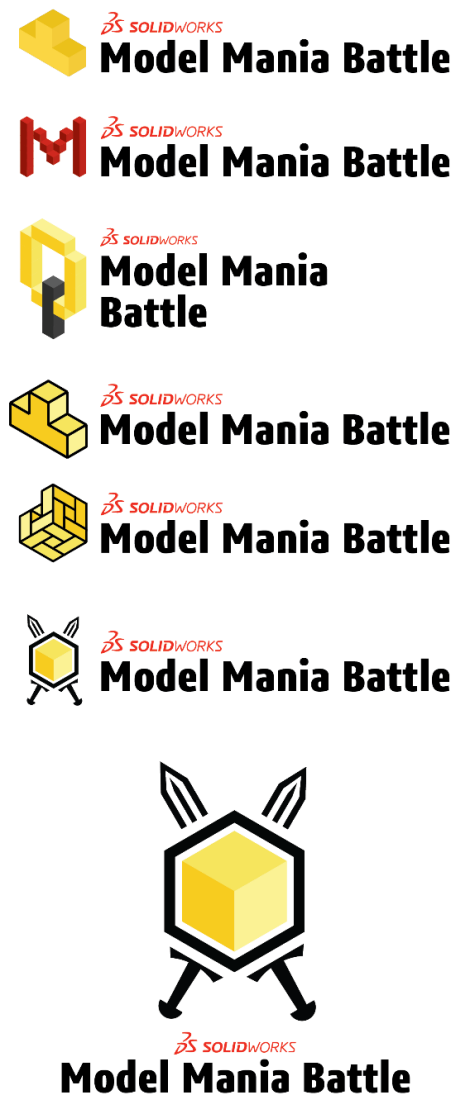


Figure 50 – 52: The rejected draft by the author of each style.



Figure 53: The author presenting the proposed draft to the marketing team.

After the development process, adjust the logo to the comment of the marketing team, which results in the change from the cracked skull to a scarred gladiator since it resembles more about competing in the competition or war than a skull that might seem like a negative message, in this case, death.



**Figure 54 – 55:** The final product of the new Model Mania Battle logo in light and dark version.

This logo not only got used in the online format but also got printed out into many forms, like stickers, signs, and the partition that were used to separate each contestant from each other when they were in the competition.



**Figure 56 – 57:** The printout version of the logo in the partition and sign.

#### 4.9 Sticker set

To leave the impression and sense of belonging to the customers, the company also assigns the author to make a sticker sheet at the size of A5 paper to hand out to every customer who joins the event as a souvenir, together with the hat with the logo of the department. The new logo of the Model Mania Battle that the author designed was also put into one of the stickers in the sticker set.



**Figure 58:** The first draft of the sticker set.

The draft then received some comments to adjust, like enlarging the logo of the event even more and adding the name and date to it and reorganizing it to be more in order of importance, which matched with the principle of emphasis stated by Tomita. After the final touch, the sticker sheet got approved and printed out.



**Figure 59:** The final printout product of the sticker set.

#### 4.10 Interactive Wall

On September 16, 2024, the marketing team held the meeting about 3DEXPERIENCE Innovation Day 2025 to discuss the status of each design artwork that was assigned to Ms. Punyaporn Komkay, the graphic designer of the Metro DES, and the author. This meeting also assigned them several tasks, and one of them that was assigned to the author was the interactive wall.

An interactive wall is the way that allows the customers to have some interaction with the event even more. By providing them with a space to express their interest or opinion, this will make the

customer feel more about the sense of belonging, and it is the method to show that the company is willing to listen to their customers. Because not only the customers can place stickers on the board to share their idea, but the company can also look at what is the most interesting topic or concern from the result of the interactive wall and then use it to improve the company to be even better.



Figure 60: The first draft of the interactive wall.

At the designing stage, the author asked the back-end support engineer department and the sales department of the company about the questions to put on the interactive wall and got some interesting suggestions, some of which even ended up on the final draft.

Since this event is funded by Dassault Systèmes, all the artworks must also get approved by them. This interactive wall is not the exception. Later, after the approval process, Dassault Systèmes suggested changing some of the questions on the interactive wall to match their vision more.



Figure 61: The final draft of the interactive wall.

The writer also changed the color of the text bubble from white to blue in order to boost the visibility of it and make it more engaging. Aligned with the principles of emphasis by Tomita. This is also matched with the real text message bubble in most of the messaging platforms; the similarity will encourage the guests to interact with it even more.



Figure 62 – 63: The printed product of the interactive wall and the customer interacting with it.

The result of the interactive wall is quite fascinating; more people than what the company predicted came to put on the sticker on the interactive wall and generate the information that can be used after the event further to the company as they wish.

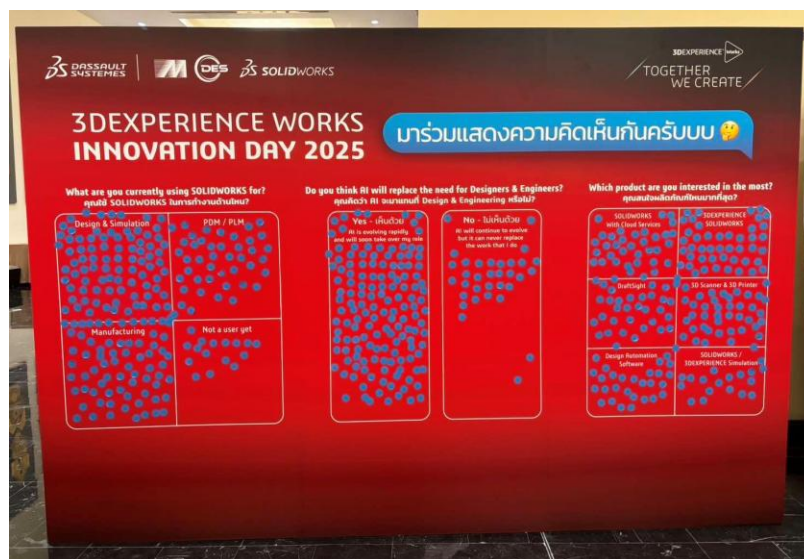


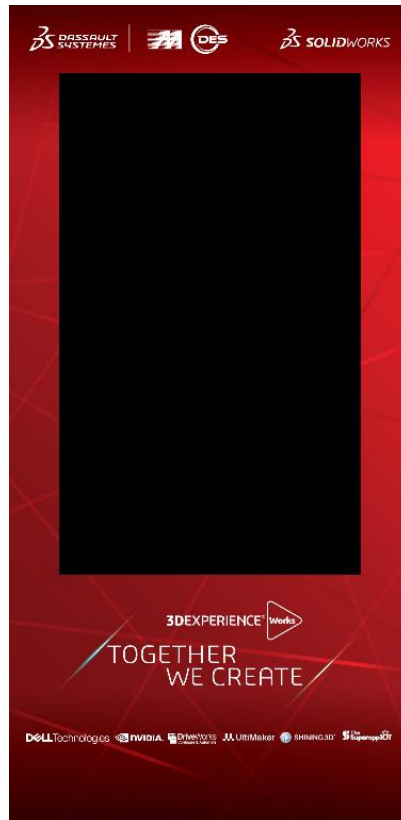
Figure 64: The interactive wall at the end of the event.

#### 4.11 AI photo booth

AI, or artificial intelligence, is one of the most widely spoken topics across the world in 2024. Many companies have already integrated AI into some of their products to assist their customers with easy and smooth experiences with their products. Dassault Systèmes is also interested in bringing AI into their products to help their customers design and test their products inside SOLIDWORKS much

more efficiently, which is one of the topics in this event in the seminar session. To show this, the company decided to put the AI photo booth at the center of the partners booth section in front of the conference room for the attendees to try out the next generation of technology.

The author got assigned to design the paint wrap that will go on all sides of the machine to match the theme and scheme of the event, as well as communicate with the outside company that is the owner of the AI photo booth machine about the design and help them with the design issues along the way, as though the author is not just the intern student but one of the team members of the organization.



**Figure 65:** The final design of the AI photo booth.

At the event, the AI photo booth is one of the most visited booths in the venue; almost every customer took a picture with this machine and received the printed version as a souvenir back as a reminder of the event and also a sense of belonging to the company. When taking the picture, customers can choose the style of the generated theme and whether they want a printed postcard or not, but all of the generated photos can be downloaded via the QR code provided by the machine.

From the statistics provided by any i, the company that Metro DES hired to set up the AI photo booth in the event, the total number of people who used the machine was 225 people from 200 attendees. This shows that some people even use the machine more than once, and it can be assumed that they really enjoyed it.



Figure 66 – 67: The AI photo booth and the customers interacting with it.



Figure 68 – 69: Metro DES employees testing the AI photo booth at the preparation day of the event.

#### 4.12 Promotion sheet

Since 3DEXPERIENCE Innovation Day is a yearly event, the company organized some special promotions to encourage the customers to purchase the product from them and will send it along with the invitation email to boost the engagement. The author got to design this promotion sheet to have the beautiful elements that attract the customers' mind and still contained the main point of the promotions.

There are promotional prices or special gifts starting on the day of the event and running onward for one month for SOLIDWORKS, DraftSight Pro, UltiMaker Factor 4, SHINING 3D FreeScan Combo, SHINING 3D FreeScan Combo+, SHINING 3D FreeScan Trio, and SHINING 3D FreeScan UE Pro 2 targeted for people who attend the event or are interested in the product that the company is the reseller.



Figure 70: The design of the promotion sheet.

#### 4.13 Satisfaction from the event attendees

For the satisfaction of the attendees, 139 out of 312 attendees answered the survey via Google Form from the marketing department. Please note that not all of the Google Form results are accessible by the author since they contained some sensitive information about the company and the clients. The publishable results are as follows:

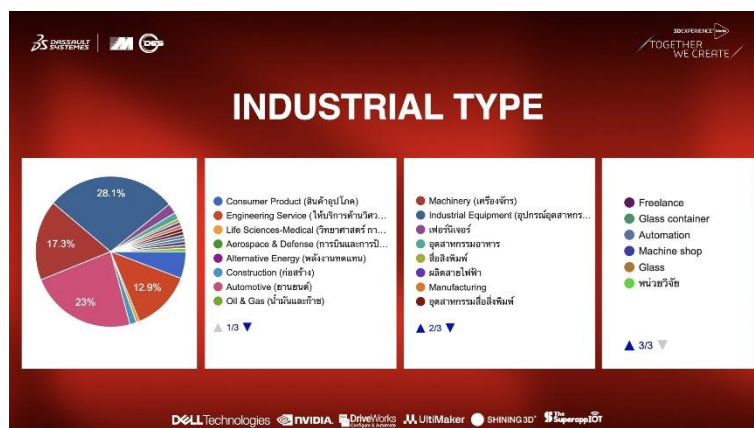
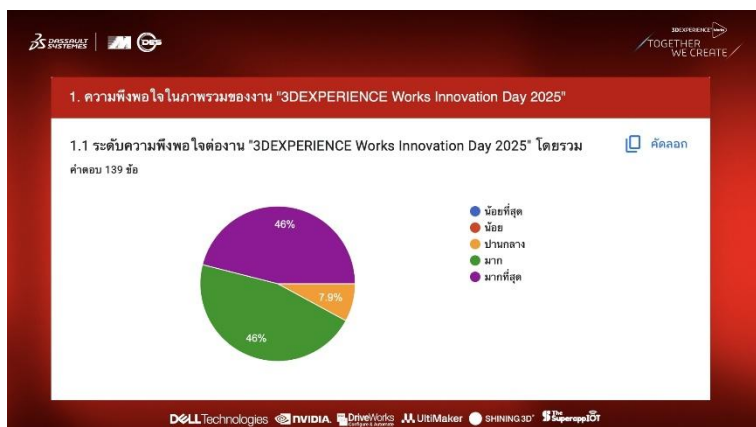


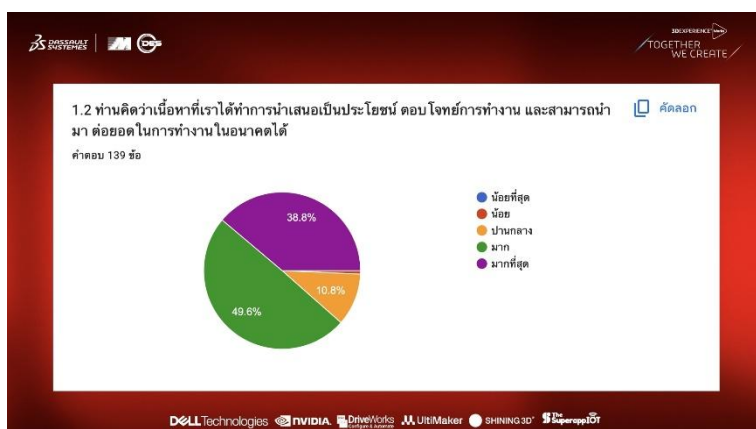
Figure 71: Pie chart showing the industrial type that the attendees are from.

Most of the event attendees are working in the consumer product industry at 28.1%, followed by automotive in the second place at 23% and engineering service in the third place at 17.3%.



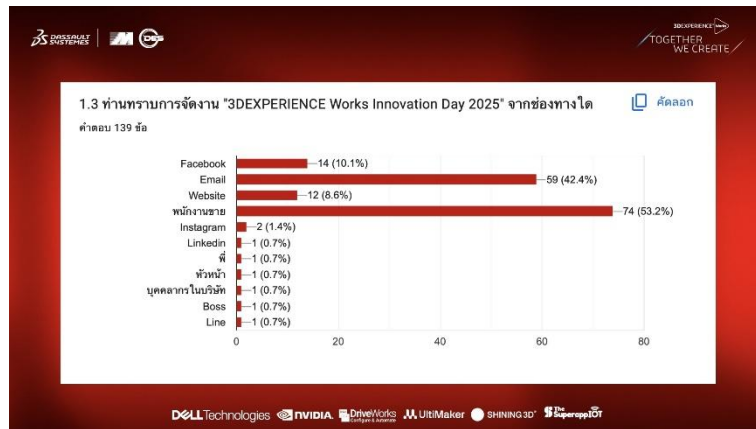
**Figure 72:** Pie chart showing the overall satisfaction of the attendees in the 3DEXPERIENCE Works Innovation Day 2025.

Most of the attendees gave a 5 out of 5 score in the overall satisfaction of the event, which is tied up with the 4 out of 5 score at the same 46%, and the minority gave 3 out of 5 at 7.9%.



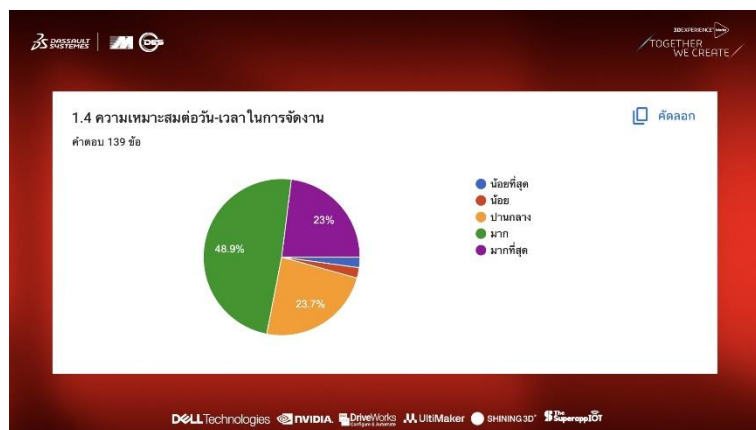
**Figure 73:** Pie chart showing how beneficial the topics in the seminar section of the event are to the attendees.

49.6% of the attendees gave a score of 4 out of 5 in how the topics in the seminar section are beneficial to them, while 38.8% gave a score of 5 out of 5, and 10.8% gave a score of 3 out of 5.



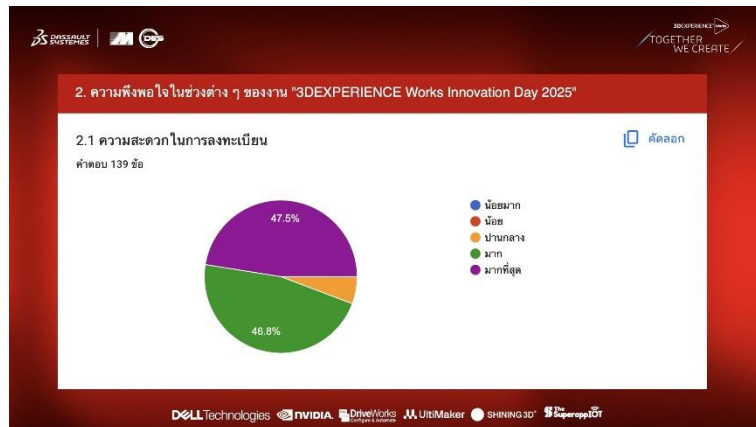
**Figure 74:** Bar chart showing how the attendees knew about the event.

The majority of the attendees said that they knew about the event from the sales team of the sales department of Metro DES at 53.2% and by the email from the sales team that contained the artworks by the writer at 42.4%, while the Metro SOLIDWORKS Facebook page, which also had the artworks made by the author, is the third channel that the attendees knew about the event at 10.1%.



**Figure 75:** Pie chart showing how appropriate the time and date of the event is for the attendees.

48.9% of the attendees give a score of 4 out of 5 in the appropriation of time and date of holding the event, and 23.7% of them give 3 out of 5, while 23% of the attendees are very satisfied with the time and date of the event.



**Figure 76:** Pie chart showing the satisfaction of the attendees about the registration process.

The majority of 47.5% said that it was very convenient to register, and 46.8% of them found that it was convenient to register, while 5.7% of the attendees said that it was somewhat convenient.

## **Chapter 5**

### **Conclusion**

During the preparation of the 3DEXPERIENCE Innovation Day 2025 event, the author was tasked with designing several types of artworks for the company to use in both online and offline formats, totaling 12 pieces. The design process involved the use of university knowledge as well as other necessary skills learned throughout the author's experience and development during the cooperative education internship period to create engaging and varying artworks that were published online or seen offline by hundreds of people. As the team's second graphic designer, the author also assists the marketing team in reducing stress during the event preparation phase and achieving their objectives by providing the physical work to arrange the venue with other Metro DES employees.

The company prepared all of the equipment in the morning of October 3, 2024, then transported it from SM Tower, where the Metro DES's office is located, to the Novotel Bangkok Suvarnabhumi Airport Hotel, the venue for the event. By noon, the Metro DES team help each other set up the venue and oversee other partners' booths and the contractor that the company hires to install the archway and the screen panels. When October 4, 2024, came, the event started smoothly without any problem and was like that consistently to the end in the afternoon. Then the company wraps up all of their equipment and ships it back to the company's office. All of this ran smoothly from the set-up to the event itself and to the wrap-up session, as everyone intended.

As a result, after the event is concluded, through the good collaboration of the sales team and the marketing team to attract the customers by phones, emails, and online artworks, the company can achieve its' goal. The 3DEXPERIENCE Innovation Day 2025 had a total number of attendees of 312 people, which achieved the goal set by the company at 300 people and had many more who could not come to the venue to watch the event online across the country. The event runs smoothly without any serious issues. The company was satisfied with the results of the event. All of the visual designs of the event that were assigned to the writer was successfully designed as the marketing team hoped for and got published both online and offline during the preparation of the event and inside the event itself.

## **Chapter 6**

### **Discussion**

#### **6.1 Problems**

##### **6.1.1 Heavy rain across Bangkok affected the guests' journey**

On the day of the event, there was heavy rain that resulted in flooding in many areas across the Bangkok metropolitan area, making some of the registered customers unable to attend the event onsite as they intended due to the obstacle made by the flood. This led to the number of attendees being less than the number of registered guests, but the company still achieved the goal of having more than 300 guests.

##### **6.1.1 The writer's software proficiency**

The main software that the company uses to design artworks is Adobe Illustrator, which the author has a proficiency of around upper-beginner to lower-intermediate. This makes the working process of the author slower than normal but still in the acceptable range, and the result is also accepted by the company. Still, Adobe Illustrator has a similar workflow and user interface to Adobe Photoshop, which is the preferred software by the writer. Thus, when the work experience has gone by for around a month, the writer can adapt and be able to use the software much more easily.

#### **6.2 Improvements**

##### **6.2.1 Email writing tips**

One of the topics the writer learns a lot about during the cooperative education period is email writing. One of the marketing team members advised the author that if the primary topic of the email is written in the first line, it will be visible on the preview line, making it easier for the recipient to understand the main idea fast and be able to find it later with less effort.

##### **6.2.2 How to design artworks correctly**

To progress in future artwork design, the author must incorporate additional details that make the artwork appear less plain. The author must remember that minimalism is not about reducing everything to just the core; it's also about including details that enhance the main idea. Working in the Design and Engineering Solutions Department of Metro Systems Corporation for 16 weeks taught the author that even minor elements can have a big impact on the artwork. It may be a minor feature that not everyone notices, but when it is placed next to other objects in the artwork, it can enhance them and give the image more depth.

## Chapter 7 References

- 3DEXPERIENCE SOLIDWORKS | *Powerful CAD, Cloud Deployment*. (2024, March 28).  
<https://www.solidworks.com/product/3dexperience-solidworks>
- About Dassault Systèmes. (2022, November 22). Dassault Systèmes. <https://www.3ds.com/about>
- Allen, J.L. & Kouppas, P. (2012). *Computer Aided Design: Past, Present, Future*. Retrieved November 15, 2024, from [https://www.academia.edu/15333461/Computer\\_Aided\\_Design\\_Past\\_Present\\_Future](https://www.academia.edu/15333461/Computer_Aided_Design_Past_Present_Future)
- Almashani, Y. M. A., Alamri, A. A., Al-Ghassani, M. M. F., & Kulkarni, M. V. (2023). STRESS ANALYSIS USING SOLIDWORKS SIMULATION. *EPRA International Journal of Multidisciplinary Research (IJMR)*, 9(9), Article 9. Retrieved November 15, 2024, from <https://eprajournals.com/IJMR/article/11304/abstract>
- Frick, N. (2007). The Motives for B2B Integration: An Empirical Study.  
[https://www.academia.edu/957958/The\\_Motives\\_for\\_B2B\\_Integration\\_An\\_Empirical\\_Study](https://www.academia.edu/957958/The_Motives_for_B2B_Integration_An_Empirical_Study)
- Hertzum, M., & Pejtersen, A. (2000). The information-seeking practices of engineers: Searching for documents as well as for people. *Information Processing & Management*, 36, 761–778.  
[https://doi.org/10.1016/S0306-4573\(00\)00011-X](https://doi.org/10.1016/S0306-4573(00)00011-X)
- Lee, L. (2011). Business-community partnerships: Understanding the nature of partnership. *Corporate Governance: The International Journal of Business in Society*, 11(1), 29–40.  
<https://doi.org/10.1108/14720701111108826>
- Pepple W. (2021, August 19). The Six Elements of Design: Context of use (Use cases). *Medium*.  
<https://medium.com/@williampepple/the-six-elements-of-design-context-of-use-use-cases-90b6d2b67fa0>
- Punturaumporn, B., & Hale, C. L. (2003). Business Negotiations in Thailand: Navigating the Challenges of Traditions vs. Change. *SSRN Electronic Journal*.  
<https://doi.org/10.2139/ssrn.400520>
- Rao, V. (2001). Celebrations as Social Investments: Festival Expenditures, Unit Price Variation and Social Status in Rural India. *Journal of Development Studies*, 38(1), 71–97. Scopus.  
<https://doi.org/10.1080/713601102>
- Rice, W. L., Shellhorn, J., Bloomgren, V., Booth, L., Duncan, S., Elias, J., Flowers, K., Gambini, I., Gans, A., Medina, A., Obadare, D., O'Neill, C., Rooney, Q., Scherck, G., Schmidt, K., Thomas, C., Thomas, E., Walhus, G., Whitney, P., & Winckler, C. (2023). The impact of graphic design on attention capture and behavior among outdoor recreationists: Results from an exploratory persuasive signage experiment. *Journal of Outdoor Recreation and Tourism*, 42, 100606.  
<https://doi.org/10.1016/j.jort.2023.100606>
- Terdpaopong, K., Visedson, N., & Hung, P. V. (2016). *Financial Characteristics of Thai Listed Companies—CG Ranking Base*. 3(2). Retrieved November 15, 2024, from <https://jcsh.rsu.ac.th/volume/3/number/2/article/60>
- Tomita, K. (2015). Principles and elements of visual design: A review of the literature on visual design of instructional materials. *Educational Studies (Institute for Educational Research and Service,*

International Christian University). [https://www.academia.edu/17374094/Principles\\_and\\_elements\\_of\\_visual\\_design\\_A\\_review\\_of\\_the\\_literature\\_on\\_visual\\_design\\_of\\_instructional\\_materials](https://www.academia.edu/17374094/Principles_and_elements_of_visual_design_A_review_of_the_literature_on_visual_design_of_instructional_materials)

Xie, H. (2023). Analysis of interaction function of modern graphic design based on technical-aided design. *Journal of King Saud University - Science*, 35(8), 102828.

<https://doi.org/10.1016/j.jksus.2023.102828>

Yu, Q., Yongfeng, M., Jiaheng, H., & Yunci, Y. (2024). Solar space thermal energy utilization and AI navigation based on light sensors in museum visual communication design. *Thermal Science and Engineering Progress*, 54, 102874. <https://doi.org/10.1016/j.tsep.2024.102874>

ชอลิตเวกส์. (2024). In วิกิพีเดีย. <https://th.wikipedia.org/w/index.php?title=%E0%B8%8B%E0%B8%AD%E0%B8%A5%E0%B8%B4%E0%B8%94%E0%B9%80%E0%B8%A7%E0%B8%B4%E0%B8%81%E0%B8%AA%E0%B9%8C&oldid=11911100>

เตรียมตัวให้พร้อมสำหรับงาน 3DEXPERIENCE Works... - Metro SOLIDWORKS | Facebook. (2024). Retrieved January 7, 2025, from <https://www.facebook.com/metrosolidworks/posts/pfbid0vqNSUgzmAzwEKLS5hnWQ875Lm88DMqc1skALay5MgJN6DVqbKoNgtSiixjmhgc8VI?rdid=oO1FmB6nk7N6oGii#>

อีกเพียง 13 วันเท่านั้น!... - Metro SOLIDWORKS | Facebook. (2024). Retrieved January 7, 2025, from <https://www.facebook.com/metrosolidworks/posts/pfbid02asCLNB8gNzCgswfDwzr3AXuJMQcgQ5Wnn2iReRmyd4wKrc9CF5QdAKRgPMdBwKH3I?rdid=VNu1ju6AWNft3phg#>

## Chapter 8

### Appendix

#### 8.1 Other responsibilities

##### 8.1.1 Cameraman

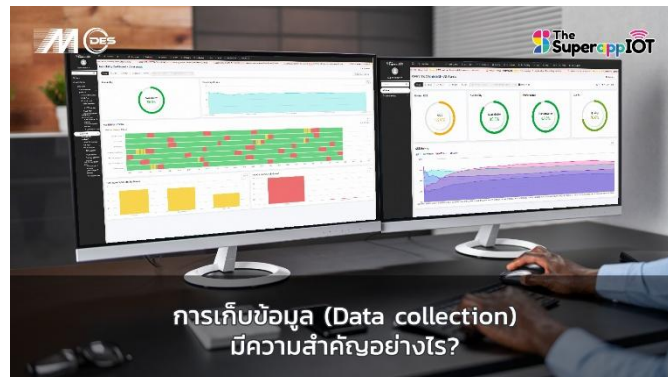
The author also works as a cameraman during the company's event, like during the Science Week at Assumption College Bangrak (AC Science & Technology Week 2024) where the company had a booth there to inspire children about the 3D scanning and 3D printing technology.



**Figure 77:** The author at the back (a person with grey shirt and blue jacket) working as a cameraman during AC Science & Technology Week 2024.)

#### 8.2 Other assigned works

##### 8.2.1 SuperappIoT – How important the data collection is?



**Figure 78:** How important the data collection is? artwork for The SuperappIoT website.

## 8.2.2 SuperappIoT – How can the SuperappIoT help plan the electricity usage?



Figure 79: How can the SuperappIoT help plan the electricity usage? artwork for Metro IIoT Facebook page.

## 8.2.3 Line Shopping – AESUB scanning sprays



Figure 80 – 82: Examples of AESUB scanning sprays artworks for Line Shopping.

### 8.2.4 Line Shopping – UltiMaker Print Core



Figure 83 – 85: Examples of UltiMaker Print Core artworks for Line Shopping.

### 8.2.5 Line Shopping – 9.9 Promotion



Figure 86 – 87: Examples of 9.9 promotion artworks for Line Shopping in the square and vertical aspect ratio.

### 8.2.6 Website header – Enhance your production with 3D printing & 3D scanning technology



Figure 88: Enhance your production with 3D printing & 3D scanning technology artwork for Metro DES website's header.

### 8.2.7 Sale promotion – FreeScan Combo (demo)



Figure 89: FreeScan Combo (demo) promotion artwork for Metro-3D Printer & 3D Scanner Facebook page.

### 8.2.8 SuperappIoT – How Line Notifications Important in the SuperappIoT?

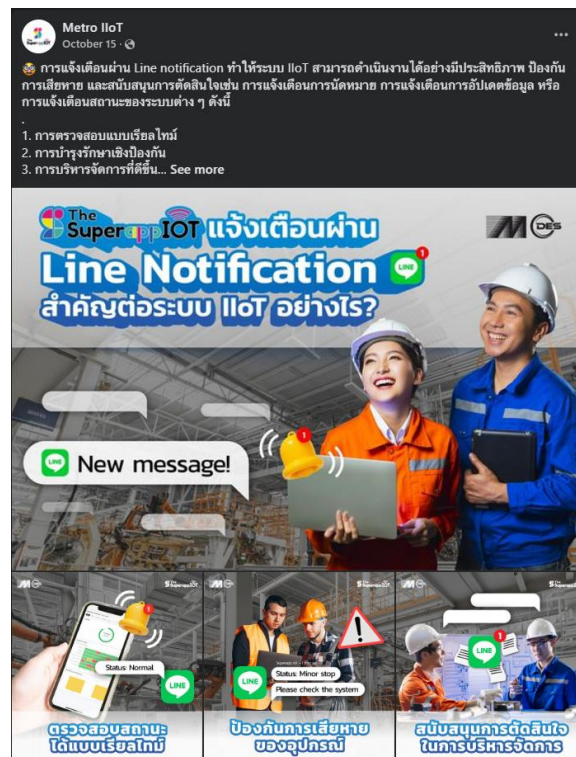


Figure 90: How Line notifications important in the SuperappIoT? artworks for Metro IoT Facebook page.

## 8.2.9 Promotion – SOLIDWORKS and DraftSight course



Figure 91 – 92: SOLIDWORKS and DraftSight course promotional artworks for Metro SOLIDWORKS Facebook page.

## 8.2.10 SHINING 3D – Special promotion



Figure 93: SHINING 3D Special promotion artworks for Metro-3D Printer & 3D Scanner Facebook page.

### 8.2.11 ARES Event – Smart Factory Summit: Innovating the Next Era of Manufacturing



Figure 94: Smart Factory Summit event header in the 16:9 aspect ratio.



Figure 95: Smart Factory Summit event agenda.

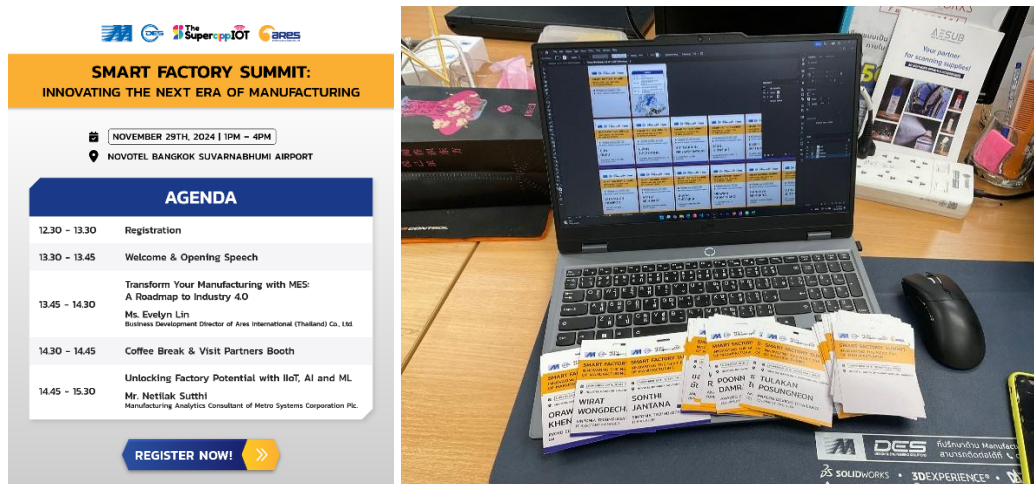


Figure 96 – 97: Smart Factory Summit event badge.



Figure 98: Smart Factory Summit event survey QR code.

## 8.2.12 CAD Insight logo



Figure 99 – 100: CAD Insight logo design.

### 8.2.13 Promotion – EinScan Libre



Figure 101 – 102: EinScan Libre artworks for Metro-3D Printer & 3D Scanner Facebook page and Instagram.