RISK MANAGEMENT OF UNIVERSITY DURING COVID-19 PANDEMIC: A LOOK AT ACADEMIC SUPPORT UNIT

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Abstract: In the time of the pandemic, universities are changing the way of doing business. The aim of this research is to study how the academic support unit of a university adjusting to the condition and manage the risks that comes with the adjustment. Data collected by in-depth interview with unit head and her subordinates. The jobs with the biggest risks are providing diploma and final transcript and conducting graduation ceremony. Providing diploma and final transcript inherently carry legal and reputation risks and providing the paper version of those documents increase the probability of those risks. The first scenario is to mitigate every risk that may come by doing the job with pandemic protocols. The second scenario is to develop e-diploma system that mitigate the risks associated with producing and producing paper diploma. Conducting physical graduation ceremony during the pandemic requires arduous health and safety measures. The alternative is having digital graduation ceremony on virtual reality platform to mitigate the risks of conducting physical graduation ceremony while still maintaining a sense of engagement. The result of the research shows how universities, especially in academic support, can embrace the change while managing the risks that come with the change.

Keywords: risk management, university, academic support unit, Covid-19, working at home

Abstrak: Di masa pandemi, universitas mengubah cara berbisnis. Tujuan dari penelitian ini adalah untuk mempelajari bagaimana unit penunjang akademik suatu universitas menyesuaikan diri dengan kondisi dan mengelola risiko yang menyertai penyesuaian tersebut. Pengumpulan data dilakukan dengan wawancara mendalam dengan kepala unit dan bawahannya. Pekerjaan dengan risiko terbesar adalah penyediaan ijazah dan transkrip nilai serta pelaksanaan wisuda. Memberikan ijazah dan transkrip akhir secara inheren membawa risiko hukum dan reputasi dan menyediakan versi kertas dari dokumen tersebut meningkatkan kemungkinan risiko tersebut. Skenario pertama adalah untuk mengurangi setiap risiko yang mungkin datang dengan melakukan pekerjaan dengan protokol pandemi. Skenario kedua adalah mengembangkan sistem e-diploma yang memitigasi risiko yang terkait dengan produksi dan produksi ijazah kertas. Melakukan upacara kelulusan fisik selama pandemi membutuhkan langkah-langkah kesehatan dan keselamatan yang sulit. Alternatifnya adalah mengadakan upacara wisuda digital pada platform virtual reality untuk mengurangi risiko pelaksanaan upacara wisuda secara fisik dengan tetap menjaga rasa keterlibatan. Hasil penelitian menunjukkan bagaimana perguruan tinggi, terutama dalam dukungan akademik, dapat menerima perubahan sambil mengelola risiko yang datang dengan perubahan.

Kata kunci: manajemen risiko, universitas, unit pendukung akademik, Covid-19, bekerja di rumah

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INTRODUCTION

Covid-19 outbreaks bring the whole world to its knee. By late June of 2020, the approximate number of cases worldwide is 9.24 million with 477 thousand deaths. One of the measures in respond to the outbreak is by closing places where people gather to reduce mixing, including in schools and workplaces. Basic infection and control measures such as isolation, quarantine, social distancing and community containment is important (Prem, 2020; Hopman, 2020). By March 2020, UNESCO estimated that 107 countries have implemented national school closure (UNESCCO, 2020). This measure is done to break the chain of transmission, but also to ensure adequate protection to the vulnerable students and staffs and their family (Kawano, 2015; OECD, 2020). Universities, as school and work place, are closed as well.

Due to rising concern about the Covid-19 pandemic, universities implement a number of measures to curve the spread of the virus. Universities have halted and/ or altered not only teaching activities, but also campus events such as workshops conferences, sport and other activities (Sahu, 2020). Nevertheless, universities are still in operation, moving classes into online classes to maintain academic continuity. This means support units are also operating, including academic administrative support.

Indonesia has high number of Covid-19 cases. From first confirmed case on March 2, 2020, Indonesia has 47896 cases by late June, 2020, which is the highest in South East Asia (Sari, 2020; Gutierrez, 2020). According to the Indonesian government guidelines, all higher education institutions must conduct academic activities online, except certain laboratory or vocational works (Kemendikbud, 2020).

IPB University, one of Indonesian ivy leaguers, has closed its campus and send home all of its students. IPB University is located at Bogor, one of Covid-19 hotbeds (Putri, 2020) and has students from all corners of the country. In order to curb the spread of the virus, it migrated to full online learning, starting March 14, 2020 (Alfons, 2020). Full online learning means that all academic activities are done online, not only classes but also seminars and theses defenses. Students are expected to graduate on time despite of the pandemic.

All this time –as a long run operational strategy-, IPB University has implemented the SADAR (Centralized administrative, decentralized academic and research) principles, where all administrative tasks is centralized on university level. In general, academic support unit provides all administrative needs of students from the time they enrolled to up to the time they are out of – either by graduation or expulsion- the university. At IPB university, academic support unit also responsible for conducting special events -either routine or not routine- such as graduation ceremonies, professorship conferment and general lectures. Detailed jobs of the academic support unit are shown in Table 1.

The academic support unit develops administrative system for student intake- from registration, selection and enrolment-; manages academic data during the time of the study- students bio, study progress, enrolled classes and scores-; and provides academic documents – semester transcript, final transcript and diploma. In order to do its jobs, academic support unit works closely with departments and schools to ensure the accuracy of data obtained. In special cases of legal dispute, such as student expulsion and scholarship contracts, it works closely with the university legal bureau.

Academic support unit is still working in the time of the pandemic, because all academic activities are still going on, although all will be done with some adjustment. These adjustments will bring risks to the table. The result of the research is expected to give readers a look at how a university manage their risks during the pandemic. The closer look at academic support unit will provide a blueprint to be replicated at other units. The purpose of this study is to learn how academic support unit manage risks during the pandemic. The research questions are: What adjustments that the academic support unit make due to the pandemic?; What are the risks of those adjustments?; How to manage the risks of those adjustments?.

METHODS

The method of the study is based on ISO 31000 Risk Management Process. The process is started with the definition of scope, context and criteria. This definition provides the boundaries of the assessment. The next step it to do risk assessment, that includes risk identification, risk analysis and risk evaluation. The result of the assessment is the basis choosing the risk

treatment. After the assessment, then we choose the right risk treatment. There are concurrent activities that support the sequential steps of process that includes communication and consultation, recording and reporting, and monitoring and review. Those activities are done in every step of the process, either in the step of definition of scope, context and criteria, the step of risk assessment and the step of risk treatment. The method can be portrayed in Figure 1.

This study is a case study of how support unit at a university manage its risk during the Covid-19 pandemic. Data collected from in-depth interview with

the academic support unit head and her subordinates and confirmed by her superior, the vice rector of education and students' affairs. The interviews are online interviews due to in-campus restriction based on government policy during the pandemic.

The interviews are started with the question about the jobs of each interviewee and their adjustment of doing their job in-line with guidelines of working during the pandemic. They are also asked about how their jobs are in-line with the objectives of their unit. The answers to these questions provide the scope, context and criteria of the risk management process.

Table 1. Jobs of academic support unit

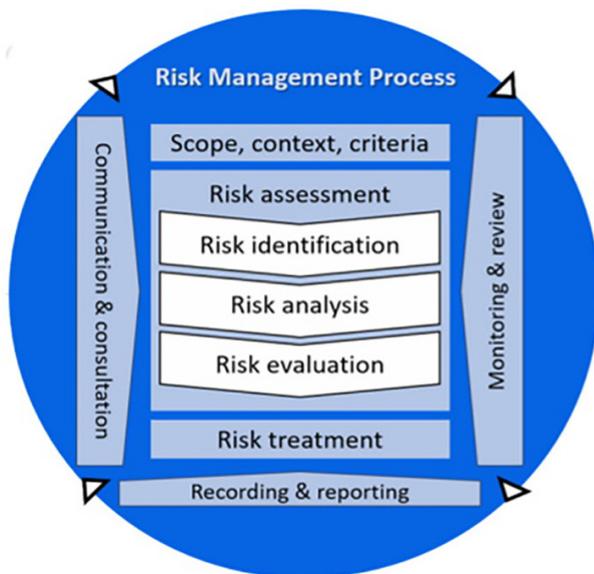| Jobs	Routine/Not Routine	Activities
Renewal of student data- including his/her bio, study progress and related complementary information	Day to day routine all year long	Student bio renewal
		Class enrollment and annulment
		Collect data of each students' credits earned and their scores from departments or schools
		Inform students' study status – active, on leave or resign/drop out – to related parties
		Report students' study progress to his/her tuition provider (parents, workplace, scholarship provider)
Reports students' study status to departments and/or schools	Routine (every semester and every schoolyear)	Printing and sending students' semester transcripts
Provide diploma and final transcripts for graduates	Routine (every graduation round)	Collect graduates' data and taking his/her photograph
Provide English version of final transcripts and diploma for graduates	Not routine (if asked)	Printing diplomas and final transcripts
Provide students' diploma and/ or final transcript replacement (for justifiable lost/damage)	Not routine (if asked)	Come to diploma signee officials and make sure they are signed
		Give the final transcript and diploma to graduates
Provide diploma legalization and verification service	Not routine (if asked)	Check diploma database, print copies, make sure the copies are verified by the right officials and give the legalized copy to graduate
Evaluate students' study status and provide related documents	Routine (every semester)	Prepare students' study status documents
		Verify it with study programs
		Inform university's law bureau for legal documents in case of resign/drop out status
Conduct events:		
Graduation ceremony	Eight times per year	Make rundown
Professorship conferment	If needed	Inform speakers
General lecture		Prepare room
University anniversary	If needed	Prepare food
Retirement ceremony	Every year	Prepare sound system
Doctor honoris causa conferment	If needed	Assign MC and ground workers

Figure 1. ISO 31000 Risk Management Process (ISO 31000 2018 Guidelines)

The unit head had risk management training, so it is easier for her to answer the questions about risk assessment process. Nevertheless, it is quite hard to grasp the concept of risk and risk management for the subordinates. Therefore, direct questions about risk assessment are hindered and indirect questions are placed. They are asked about what incidents that may happen that prevent them to achieve the unit objectives of providing academic support for students. Then they are asked about on their projection about how often that incident occurs and what are the effects of those incidents. The choice of activities on how they will handle those incidents is asked next.

For better understanding, we conducted in-depth interview of people at the receiving end of academic support unit, which are recent graduates and new professors. They are asked about their feeling about the adjustment of the service and their opinion about possible options and alternatives for academic support unit to provide satisfactory service for them.

The data are analyzed descriptively into narration. The results section of this study shows the elaboration of the collected data while the discussion section of this study discussed the theoretical points of this study relative to previous study.

RESULTS

All assigned jobs can be done during the pandemic with extra measures. Detailed activities of each job and their adjustments during the pandemic is shown at Table 2. All routine reports and data renewal can be done in electronic manner (without sending printed report), including renewal of students' data, report of study progress to tuition provider, provide semester transcripts and evaluate students' study status. The change to electronic paperless manner has started even before the pandemic as a part of university's initiative towards green campus.

Diploma and final transcript for graduates are still printed on paper. Before the pandemic, paper diploma and final transcript are given right after graduation ceremony. Because of campus closure, that cannot be done anymore. The proposed adjustment is by sending the paper final transcript and diploma to graduates. This change will bring risks.

All ceremonies are now halted. Recent graduates are asked whether they like to do physical graduation ceremonies after the pandemic is cleared or doing it online. Most students want to do physical ceremonies and willing to wait. Only a small number of students is fine with doing it online or not doing it at all. These two alternatives each will bring risks as well. Other ceremonies such as professorship conferment and general lectures will be done online.

Before the pandemic, students who finished their study come to the academic support unit' office, get their data and photo taken as one of the processes to produce their diploma and final transcript. The university has its own photo studio with proper equipment. All photo is done properly to be printed in the diploma and final transcript. Due to the pandemic, it is impossible to ask every student who finished to come to campus just to get their photo taken. Other data can be collected electronically, but asking students to provide proper photo themselves comes with so many risks. Most students do not have the right equipment at home to take a photo as good as the one taken at photo studio. Students do not have access to photo studio at their home town as well because of the pandemic. This is a huge risk with high probability of happening. Without a proper photo, the printed diploma and final transcript may carry less legitimacy. Mitigation effort for this risk is to announce to recent graduates to provide photo as

close as the proper photo, it might be the latest studio taken photo before the pandemic or photo taken with certain prerequisite.

It was quite a swift decision to shut the campus down due to growing concern of the pandemic, where people only had two working days to prepare working from home. Data input must be done remotely, where there is a possibility of lost/broken file. Printers used at the office are high resolution printers that are bulky and need lots of energy, not to mention the special papers made just for printing the diplomas and final transcripts. It is quite a hassle, where equipment and materials cannot be taken home for employees to work on. They are just not be fit at employees' home, due to lack of physical place or energy needed to run them. The solution to this problem is for employees to work at the office. This measure brings risk of spreading the virus due to lack of social distance and people using the same equipment. To mitigate the risk, employees work in shifts to keep social distancing and extra health measures are implemented: between shifts (cleaning and disinfecting equipment and fast check on employees before entering the office) and during shifts (wearing mask, washing hands and using hand sanitizer). As far

as precaution goes, sanitizing electronic equipment will bring residual risk of causing some harms to them and working in shifts means jobs cannot be done if workers are utilized at full capacity. Treatment for those residual risks is to accept them. Any equipment troubles cannot be solved as fast as it used to because the after sales supports for the equipment are not available, or at least not on full capacity, due the pandemic.

Diplomas are signed by the rector and the dean and final transcripts are signed by the dean. All signatures must be handwritten. Before the pandemic, the academic support unit' staff brought those documents to the office of the signee and checked regularly to make sure all documents are signed on time for collection. Due to the pandemic, the process of delivering unsigned documents, controlling and collecting the signed documents must be done out of campus, where employees must go to those officials' homes, which can be at the opposite parts of the town. The whole process takes more time, that can lead to bottleneck and lost/damaged documents. Those risks are mitigated by using digital reminder and making sure the documents are safe and sound during deliveries.

Table 2. Adjustment due to Covid-19 Pandemic

Jobs and activities	Adjustment	Risk
Provide final transcripts and diploma for graduates	Jobs still done as usual with alteration on the activities	
Collect graduates' data and taking his/her photograph	From done in campus by officials to done by graduates themselves	Inadequate photo
Printing final transcripts and diplomas	Done as usual at campus with social distancing protocols	Not at employee full capacity (done in shifts)
		Virus spreading person to person due to using the same equipment
		Files lost/damaged during transfer between computers at home and at the office
		Late response on equipment issues
Come to diploma signee officials and make sure they are signed	Deliver the unsigned diplomas to signees' office to deliver them to their home	Not done on time
Give the final transcript and diploma to graduates	From giving them to graduates at campus to sending them to graduates' home	Undelivered
		Lost at post
Conduct graduation ceremony	Halted	Number of graduates' buildup
	Video conference	Unsatisfactory feeling
Professorship conferment	Halted	Unsatisfactory feeling
Retirement ceremony		
General lecture	Done by life feed from campus studios	Virus spreading between people at the campus studio
Special celebration		
Doctor honoris causa conferment	No conferment	

In normal time, final transcript and diploma are given to the graduate after graduation ceremony. During the pandemic, those documents must be sent by post to graduates. It is also applied for diploma copies legalization asked by graduates (to ensure that the copies are not doctored in any way, mostly used for applying job or further study). Documents of such high importance like these must be delivered to the exact recipient. Not all graduates live in big city where their home address is quite clear and post are easily delivered to the exact address and recipient. Many graduates live in rural area, where home address is not commonly used for receiving post. People in rural area generally use their mayor office address as their postal address. The probability of lost/damage/misuse is high. It is possible to ask graduates to collect their final transcripts and diploma at the campus at certain time (partially open for certain period). This will transfer the risk to the graduates. Graduates then have to go back to the campus with limited, or even nonexistence, choices of transportation, risking their and their families' safety and health during the process. To hold on to those important documents at campus bring risk of lost/ damage, while on the other side, graduates need those documents to go on with their life. It is also possible to set up representatives at local government offices across the nation where graduates can collect their documents there, but it need agreements with each local government that cannot be done in short period of time.

Graduation ceremony is now halted. Most of recent graduates are willing to wait for physical graduation ceremony. Students keep graduating every day, so in time the number of graduates who will join graduation ceremony will pile up and there will be backlog. Before the pandemic, graduation ceremony is done eight times per year with approximately 800 graduates, 1600 guests and 50 officials gather in the main auditorium per ceremony. It is still unclear when the pandemic will pass and graduation ceremony can be done in the same manner. Doing physical graduation ceremony during the pandemic means it cannot be done at full capacity, that in consequences physical graduation ceremony must be done more times than before the pandemic. Doing a graduation ceremony is not an easy task, it needs lots of people working the ground. Meanwhile, graduates and their family must travel from all over the country and stay in nearby hotels to attend the ceremony, that maybe risky for their health and safety. After some time. In 2021, the graduation ceremony is done via video conference and life feed. Although this may be a sound alternative, there are still lingering feeling of unsatisfactory among graduates.

General lecture and other ceremonies can be accessed by general public via live streaming service. Addresses are shot at university's studio. To mitigate risk, only the university's speakers and small number of staffs allowed in the studio. It is done with much precaution such as wearing mask and distancing. The outside speakers give their addresses via video conference. The development of information technology plays an important factor of universities' daily operation in the future.

During the pandemic, staffs are alternatively working at home and at the office to prevent gathering at the office. Although, social distancing and working from home policy quantify meaningful reduction to the spread of the disease (Jones et al. 2020), there is still risks associated with it. When it is their time to work at the office, staffs have to work alone. Working alone at the office has risks for workers, such as there is no one that can help them in health episodes (Keith, 2011), while working at home needs information and communication technology (ICT) equipment. Not all workers have the necessary equipment and the equipment at the office is either too big or consume much energy for home setting. Nevertheless, the availability of ICT alone does not guarantee that workers can adopt working at home (de Graaff and Rietveld, 2015). Working at home needs high level of self-motivation at staffs' part. Working alternatively between home and office cause the hassle of remembering what to take back and forth between those two places (Mokhtarian and Salomon, 1996). Workers may like working at the office every day because going to the office brings them status and giving them transition between home and work (Redmond and Mokhtarian, 2001). The working hour flexibility and the lack of physical transition between work and home makes the workers feel that work never ends. It puts pressure on workers to work endlessly (Reshma et al. 2015).

The setting of physical distancing by working alone (either at office or home) produce co-workers and supervisor absentee in daily basis. Though it is possible to contact coworker and supervisor through ICT during working hours, it is still harder to do when they are not in sight. Technological limitation makes it harder to get real-time help from supervisor (Bloom et al.

2013). There are risks of having negative impacts of working alone. Coworker involvement and supervisory support can reduce stress, that positively affect job performance and increase job satisfaction (Babin and Boles, 1996). Coworker support positively influence job involvement, organizational commitment, less withdrawal, task performance, increase motivation and intent to stay (Chiaburu and Harrison, 2008; Basford and Offermann, 2012).

Due to the bulkiness and energy consumption of electronic equipment used for daily work, moving them to staffs' home for working at home is not a possible option. Therefore, staffs work at the office in shifts, alternating working at home. When staffs work at the office, they will use the same equipment, which exposing them to the virus via the surface of the equipment. Virus is transmitted via contact with aerosol infected surfaces (Fathizadeh et al. 2020). Most electronic equipment at the office has stainless steel, plastic and copper materials. There are significant numbers of cardboard boxes at the office to store printing materials. SARS-CoV-2 was detected up to 72 hours later on plastic, 48 hours later on stainless steel, 4 hours later on copper and 24 hours later on carboard (van Doremalen et al. 2020). the virus can be efficiently inactivated by surface disinfectant procedures with 62-71% ethanol, 0.5% hydrogen peroxide or 0.1% sodium hypochlorite within 1 minute (Kampf, 2020). This disinfecting procedure may be harmful for electronic equipment due to its flammability (Tautscher, 1991). Although pure ethanol may be good solvent, its denaturing agent that commonly used for creating disinfectant may cause recontamination on circuit board (Pecht et al.2003).

Graduates still prefer paper diploma. Paper diploma is seen more legitimate, printed in certain paper with certain layout and design (Gollin, 2009; Pittinsky, 2015). Legalization and verification of diploma copies are paper based as well. Nevertheless, producing and providing paper diploma in the pandemic bring numerous risks. The process of providing the diploma -collecting data, taking pictures, printing, signing and giving- is so arduous and brings so many risks. There is possibility to develop e-diploma system, that produce digital diploma validated by digital signature (Finandhita and Afrianto, 2018), with blockchain technology (Nikolskaia, 2019). It will relinquish the need for legalized printed copy because the e-diploma system will allow visitors (such as prospective employers) to check the authenticity of the diploma themselves. This proposed solution

will fully mitigate the risks associated with providing paper diploma and its subsequent legalization and verification. However, it will definitely bring new risks yet to be explored. With any form of new technology, possibility of risks associated with technical difficulties are expected (Parks, 2017).

Graduation ceremony is now halted. Students prefers physical graduation ceremony after the pandemic, although it is still unclear when it is possible to do. Graduation is the time when students feel honored and the time of jubilant for students and their families (Pinsker, 2019). Doing graduation ceremony during the pandemic is a daunting task, where protocols must be followed to mitigate the risk of spreading disease, such social distancing and done outdoor. Still, there will be other risks that may come because of this setting. It might be technical risks or the risk of bad weather. To fully mitigate those risks, university can opt for online graduation. Digital graduation on virtual reality platforms can increase graduates' engagement with the institution. On the other hand, it will require initial investment for building the platform (Thirunarayanan, 2017). Virtual world online graduation ceremony in Second Life allows graduates to immerse by using avatars (Mon, 2010). Building a virtual campus at Second Life will cost the university. The choice of digital graduation using virtual reality has technological failure risks from all parties involved.

While it seems as a hard adjustment, the academic operation has begun to shift into new direction. The pandemic just hurries the need to change. The notion of being green, supported with the advancement of information technology, has shifted the academic support unit services into paperless and no or limited direct face to face contact services. It may need some adjustment in the receiving end of the services, but this new way of services has started to be the norm rather than the exception. The result of the research shows how universities, especially in academic support, can embrace the change while managing the risks that come with the change.

Managerial Implication

It is wise for the university to invest on block chain technology that will allow the legitimate digital version of diplomas and transcripts available anytime and can be accessed by all stakeholders. Although it seems as big investment, it will pay off in the long run,

not to mention reducing paper use. Although on site full attendance (students, students' family member, university leadership and faculties) needs more resources than digital ceremony or on site non full attendance (student representatives and university leadership only, no family member nor faculty), it is still perceived as a rite of passage for many young people and their family. This type of graduation ceremony can continue after the pandemic is declared fully over. In the meantime, the university can opt for digital graduation on virtual reality platform.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The jobs of academic support unit with the biggest risks are providing diploma and final transcript and conducting graduation ceremony. Providing diploma and final transcript inherently carry legal and reputation risks, and providing the paper version of those documents increase the probability of those risks. The first scenario is to mitigate every risk that may come by doing the job, which basically the same jobs as before, with pandemic protocols. The second scenario is to develop e-diploma system that fully mitigate the risk associated with producing and sending paper diploma. Conducting physical graduation ceremony during the pandemic requires health and safety protocols to minimize the spread of the virus. And yet, it still carries numerous residual risks. The alternative is to do digital graduation ceremony on virtual reality platform. This option will fully mitigate the risks of conducting physical graduation ceremony while maintaining students' engagement.

Recommendations

Although global pandemic is considered rare, the possibility of local or national health emergency is always on the horizon. Therefore, university needs to prepare for the fundamental and operational risks of such events. The lesson learned from this case is the way of universities should prepare to conducts their daily operation even after the pandemic is declared as over in the future. Operations may not go back from the way it used be as before the pandemic. This research gives a glimpse into university operation in the future and how to manage the risks associated with that. This study gives a somewhat foundation for further

researches into the risks management of universities on the 4.0, or even 5.0 society

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