

Effectiveness of Risk Management Implementation at Universiti Selangor (UNISEL)

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Abstract: Risk can be defined as an obstacle or challenge that can obstruct the ability of effective services to an organisation, especially in relation to the achievement of a set vision and mission. Thus, risk management is an essential strategy for many organisations to improve their performance. Risk management is considered a management tool or strategy to create a better pathway in achieving the organisation's objectives by reducing the risk of ineffective processes, losses and damage. Universiti Selangor (UNISEL) has implemented risk management using its own risk management model based on contexts and issues which are derived from the SWOT analysis. All departments and faculties are required to apply this approach in their operations as well as quality objectives which support the university's strategic objectives. The achievements of the department's objective qualities are used as the performance indicator to measure the effectiveness of risk control. The model incorporates the risk management of all departments to control the risk of not achieving the university's strategic objectives. The likelihood of the risks is monitored and analysed. The effectiveness of the implemented risk management model based on the likelihood trend is presented in this paper. The model proves that the implemented risk management model can minimize the risks of not achieving the organisation's objectives. In general, it can be concluded that this study is useful and has contributed significant knowledge to a better understanding of the risk management implementation at UNISEL.

Keywords: Organisation Objectives, Risk Control Performance Indicator, Risk Management

1. Introduction

The impact of risks to the achievement of the organization's objectives can be a negative impact known as threats or positive effects known as opportunities [1]. One example of unexpected events is the Covid-19 pandemic, and it dramatically affects individuals, family institutions, organizations, politics, social and economic problems of the country. There were few risk management models **that** had been proposed. Farhan.M et al.[2] examined the impact of Enterprise Risk Management (ERM) on firm performance by examining whether firm performance is strengthened or weakened by the establishment of a board-level risk committee (BLRC). Another example of the risk management application for other fields had been discussed was in deep sea mining[3], Learning and Action Alliances (LAAs) methods for flood risk management[4], flooding and agricultural drought[5], risk governance in the offshore oil industry and in diverse cultural and geopolitical context [6] and the risk governance practices of financial institutions quantitatively cluster on the corporate governance characteristics of the corporation, particularly ownership structure and board independence [7].

One of the risk management models is Enterprise Risk Management (ERM). This model proposes that firms address all their risks comprehensively and coherently, instead of managing them individually [8]. Soltanizadeh et al. [9] presented the ERM implementation varies across different industries and that having an ERM framework in place is more common among firms in the infrastructure, hotel, and technology sectors. An example the

effect of implementing ERM, firms experience lower risk and higher profits, simultaneously [10] and that firms with advanced levels of ERM implementation present higher performance, both as financial performance and market evaluation [11].

University Good Governance Index (UGGI) introduced in 2011 requires Malaysian public universities to implement an organized risk management [12]. R.Md Sum and Z. Md Saad [12] studied the risks in university environment, the factors driving the emergence of risks and benefits gained if the risks are managed. It also explained risk management processes or frameworks for risk management in university setting. However, risk management is not limited to coordination of activities to mitigate losses, but also involves integrated coordination activities to cope with any possibilities that could interfere with the organisation's operations including development activities to enhance the professionals, organisational governance, infrastructure development and research. Z.Othman et al.[13] presented the core process owners at Polimas have completed the analysis documents on the issues given; they have successfully identified the risk of referring issues and relationships with the stakeholders. However, there is lack of studies related to the risk management process in education systems. This paper is novel as so similar study using the same approach has been reported before. Moreover, the new technique and data generated in this study could be used by other researchers for validation, comparison or reference purposes.

2. Methodology

In general, this study uses commercially available Microsoft Office 365 software, (Microsoft Excel macro-enabled worksheet,) to model the risk management system at UNISEL. Utilizing the available built-in micro enable functions, the risk assessment was analyzed and presented using a spider-web graph and standard bar graph. For better organization and clarity, the methodology adopted in this study is explained in three processes; identifying risk and opportunities, identifying the risk level, existing and new risk controllers as well as evaluating the effectiveness of the new risk controller.

Identifying Risk And Opportunities

These issues can be identified by creating a SWOT analysis of each strategic plan undertaken and the context between issues with the strategic plan is shown in Figure 2.1. Then risks and opportunities are determined as in Figure 2.2.

PUSAT TANGGUNGJAWAB (PTJ)-PADU									
Misi									
PADU (CFGS) komited untuk menyediakan pengalaman pembelajaran berkualiti tinggi dalam kesemua program asas, dan menawarkan kursus-kursus yang menarik dan cemerlang. "The centre is committed to provide a high quality learning experience in all of our foundation programmes, and to deliver enjoyable and excellent courses"									
Proses-proses Utama yang berkait dengan Matlamat Strategik									
KEUPAYAAN PUSAT	KECEMERLANGAN AKADEMIK	KELANGSUNGAN KEWANGAN	FASILITI & INFRASTRUKTUR	PENYELIDIKAN	PEMASARAN	KEBAJIKAN PELAJAR			
ISU DALAMAN (berkait dengan proses-proses)									
STAF KURANG BERMINAT DALAM PENYELIDIKAN	PENCAPAIAN BERGRADAT DALAM TEMPOH (GOT)	BLANGAN PENYARAH SEDIA ADA TIDAK MENCUKUPI	PENYELENGGARAAN INFRASTRUKTUR	PRODUKTIVITI PENYELIDIKAN YANG RENDAH (PROJEK & PENERBITAN)	KEMASUKAN PELAJAR BELUM OPTIMUM	PENCAPAIAN BERGRADUAT DALAM TEMPOH (GOT)			
	SEMAKAN KURKULUM	PENJANAAN KEWANGAN OLEH PUSAT	PERKONGSIAN MAKMAL SAINS & KOMPUTER			NILAI TAMBAH KEMAHIRAN INSANIAH KEPADA PELAJAR			
	TRANSFORMASI AKADEMIK KURSUS SERVIS (KEPADA FAKULTI/FAKULTI DI UNISEL)								

Figure 2.1: Identify the context between issue with strategic thrust

IDENTIFIKASI RISIKO UNISEL BERDASARKAN ISU ISU LUARAN & DALAMAN (A TO Z)											
KATEGORI	ISU ISU (POSITIF & NEGATIF) DIPERINGKAT ANTARABANGSA, REGIONAL, NASIONAL & TEMPATAN	RISIKO IF PELUANG SAMA PLEJ									
		MEMINGKATKAN KELAYAKAN ORGANISASI	KECEMERLANGAN AKADEMIK	KEMAMPUAN KEWANGAN	PENAMBAHARAN INFRASTRUKTUR & KEMUDAHAN	MEMINGKATKAN IME / S. PENJENJARAN	PEMALARAN	PENGAMBUKURAN PENMAGAN	JAMINAN KUALITI DAN PENMAGAN	PENYELIDIKAN DAN PENMAGAN	KEBAHAKAN PELAJAR
ISU ISU DALAMAN (A TO Z)											
Kompetensi dan Profesionalisme	STAF KURANG BERMINAT DALAM PENYELIDIKAN	RISIKO: KEMEROKOKAN KUALITI DAN KUALITI AKADEMIK DALAM PENYELIDIKAN									
program	PENCAPAIAN BERKUALITI DALAM TEMPORAL (GUT)		RISIKO: KEMEROKOKAN KUALITI DAN KUALITI AKADEMIK DALAM PENYELIDIKAN								
program	SEMUKAN KURIKULUM		RISIKO: KEMEROKOKAN KUALITI DAN KUALITI AKADEMIK DALAM PENYELIDIKAN								
keuangan	BILANGAN PENYARAH SEDIA ADA TIDAK MENCUCUPI		RISIKO: KEMEROKOKAN KUALITI DAN KUALITI AKADEMIK DALAM PENYELIDIKAN								
keuangan	PENDANAAN KEWANGAN OLH PUSAT		PELUANG: PELAKSANAAN BEMUK DAN KURSUS JANGKA PENDEK OLH MELALAI PEMADAPAN PUSAT								
Infrastruktur	PENYELIDIKAN DAN PENYELIDIKAN		RISIKO: KEMEROKOKAN KUALITI DAN KUALITI AKADEMIK DALAM PENYELIDIKAN								
Infrastruktur	PERKEMBANGAN MAKMAL SAINS & KOMPUTER		PELUANG: MELAKSANAAN BEMUK DAN KURSUS JANGKA PENDEK OLH MELALAI PEMADAPAN PUSAT								
Kompetensi dan Profesionalisme	PRODUKTIVITI PENYELIDIKAN YANG BERTAMBAH (PROJEK & PENERBITAN)								PENYELIDIKAN DAN PENYELIDIKAN OLH PUSAT YANG MELAKSANAAN BEMUK DAN KURSUS JANGKA PENDEK OLH MELALAI PEMADAPAN PUSAT		
keuangan					RISIKO: KEMEROKOKAN KUALITI DAN KUALITI AKADEMIK DALAM PENYELIDIKAN						
program											PELUANG: KEBAHAKAN PELAJAR MELALAI BEMUK DAN KURSUS JANGKA PENDEK OLH MELALAI PEMADAPAN PUSAT
program	TRANSFORMASI AKADEMIK KURSUS SAINS KEPADA FAKULTI FAKULTI UNISEL		PELUANG: PENAMBAHARAN KURSUS SAINS MELALAI BEMUK DAN KURSUS JANGKA PENDEK OLH MELALAI PEMADAPAN PUSAT								

Figure 2.2: Identify the risk and opportunity for each issues

Identifying The Risk Level

To Identify the risk level, the severity of risk and risk likelihood had been used. In this stage, each risk need to analysed due to the probability of risk dan the impact of risk to the attainment of strategic thrust. The Table 2.1 and Table 2.3 show the Severity or impact of risk level definition and risk likelihood definition respectively. The Figure 2.3 shows the example of risk level determined for each risk. The level of risk had been determined using Table 2.3.

Table 2.1: Risk Severity Assessment

Severity/Impact Schedule		
	Severity	Definition
5	Extreme	The impact that causes key visions and missions university severely affected
4	High	Impacts that cause vision and mission of primary symptoms are severely affected
3	Moderate	Impact that can be handled normally by the university's top management
2	Low	Impacts that can be handled at the department level
1	Very Low	Ignoreable impacts

Table 2.2: Risk Likelihood Assessment

Risk Likelihood		
Scale	Definition	
5	Very high	Certain to occur
4	High	Almost certain to occur
3	Moderate	May occur within the year
2	Low	Not likely to occur within the year
1	Very low	Not likely to occur within the next 10 years

Table 2.3: Risk Level Assessment

Risiko		Kemungkinan				
		1	2	3	4	5
Keterangan	1	1 (R)	2 (R)	3 (R)	4 (R)	5 (S)
	2	2 (R)	4 (R)	6 (S)	8 (S)	10 (S)
	3	3 (R)	6 (S)	9 (S)	12 (S)	15 (T)
	4	4 (R)	8 (S)	12 (S)	16 (T)	20 (T)
	5	5 (S)	10 (S)	15 (T)	20 (T)	25 (T)

• Jika jumlah matirk sama, keutamaan diberi kepada nilai keterangan

Proses / Prosedur / Lokasi:			Disiapkan oleh: Azila Hanun			Disemak oleh: En. Mohd Arif Mat Nor			Disahkan oleh: Puan Nurul Hanin Mohd Amin		
			Tarikh: 17 Julai 2020			Tarikh: 20 Julai 2020			Tarikh: 21 Julai 2020		
1.9 KENALPASTI ISU DAN RISIKO			Tarikh Semakan Semula:			2			3. Kawalan Risiko		
ISU	KATEGORI	KETERANGAN ISU	Risiko	Kesan	Kawalan Sedia Ada	Rujukan Dokumen-Kawalan Sedia Ada	Kebangkitan (1-5) / (Kemungkinan Bertakut)	Impak (5-1) / (Sangat Besar/ Sangat Rendah)	Jumlah Risiko- T/S/R/Y / (T (15-25) / S (5-14) / R (1-4))	Strategi Rawatan	PIC / (Tarikh Tindakan dilaksanakan/ Status)
DALAMAN	Kompetensi dan Profesionalisme	Penyimpanan Dokumen	Penyerahan dokumen yang tidak lengkap	Merjeaskan reputasi atau imej PTJ	ADA KELEMAHAN	SOP Penyimpanan Dokumen	3	3	6	Kurang	Ketua Unit Pentadbiran & Akademik
DALAMAN	keuangan	Pembayaran Yuran Pengajian	Kerugian berlaku kerana kegagalan pelajar melaksanakan bayaran yuran mengikut syarat-syarat yang ditetapkan oleh pihak Universiti	Implikasi kepada kewangan universiti	NEMLUJAKAN	Memo Peringatan	3	3	6	Kurang	Ketua Unit Kewangan
DALAMAN	Operasi	Status Pelajar Semasa	Pelajar berhenti, penangguhan atau memansuhkan pengajian yang menyebabkan kehilangan pendapatan	Merjeaskan pencapaian objektif PTJ	ADA KELEMAHAN	Konsultansi	3	3	6	Kurang	Ketua Unit Akademik
LUARAN	Persekitaran	Pesaling dari IPT/PTS di Malaysia	Pelajar tidak bergradasi pada masa yang telah dijadualkan	Merjeaskan pencapaian objektif PTJ	ADA KELEMAHAN	Mengilatkan aktiviti pemasaran melalui media sosial	3	3	6	Kurang	Ketua Unit Pemasaran
DALAMAN	Operasi	Graduasi	Pelajar tidak bergradasi pada masa yang telah dijadualkan	Merjeaskan pencapaian objektif PTJ	NEMLUJAKAN	Penyediaan Study plan dan proses konsultansi	3	3	6	Kurang	Ketua Unit Akademik

Figure 2.3: Example of Risk Register

Risk Controller

Most of strategic to control the risk used in avoid, mitigate, receive, transfer, share, and receive as well as mitigation. The Table 2.3 shows the description of each strategic of risk controller had been used to reduce the risk level of each risk in UNISEL. The example of risk controller was development of policies, standard operation procedure, staff training, schedule of maintenance, periodic inspection, and commitment from top management of UNISEL.

Table 2.3: The description of strategic of risk controller

Strategy	Description	Risk Level
Avoid*	Additional Action/Control/Improvement aims to eliminate the risks faced	High
Mitigate	Additional Action/Control/ Improvement aimed at reducing net risk levels/risk impact/risk probability	High and moderate
Receive	The risks are received and the current controls are continuously monitored	Low
Transfer*	Additional Actions/Controls intended to transfer risks faced to third parties, within or outside Unisel	High and moderate
Share	Additional actions/controls aimed at addressing the risks faced jointly with other PTj	High and moderate
Receive and mitigate	Receive risks while performing current control improvements that can reduce risk levels/impacts/probabilities	Low and moderate

3. Results and Discussion

The distribution number of a risk register for each core process at UNISEL is analyzed and compared as shown in Figure 3.1. The core processes are the management of teaching and learning (PT01), research (PT02), human resources (PT03), infrastructure and properties (PT04), financial (PT05), commercialisation (PT06), student affairs (PT07), library (PT08), residential college (PT09), services (PT10), marketing and admission (PT11) and quality assurance (PT12). It can be observed that the highest number of a risk register for the core process is in teaching and learning management (PT01), and the lowest in the management of research (PT02). This is because PT01 involves the highest number of the responsible centres (PTj) and teaching and learning process is the core business for UNISEL. The effectiveness of new risk controller implementation were also analysed. The sample of the results analysis for one PTj is shown in Figure 3.2. In general, it could be observed that risk level had been reduced from high to moderate and moderate to low. It is achieved by reducing the probability of risk using the new controller that had been applied. Figure 3.3 shows the total risk for each strategic thrust of UNISEL. Each risk identity had set the

performance indicator. The purpose of the performance indicator is to measure the ability of risk controller to reduce the risk level. From Figure 3.4, it observed that the risk controller had been applied was able to reduce the risk level to achieve the performance indicator for each strategic thrust except the financial sustainability. The attainment of risk controller for financial sustainability was 17.39 %. It means the proposed risk controller was not fully applied or good enough to control the risk for financial sustainability in UNISEL. Thus, it needs to be reviewed.

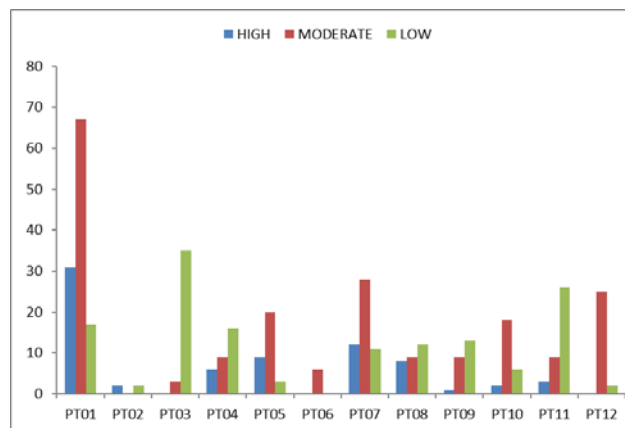


Figure 3.1 Risk level distribution for each core process at UNISEL

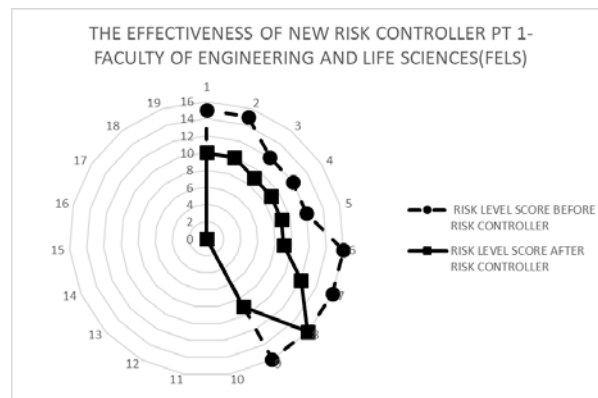


Figure 3.2 The effectiveness of risk assessment controller

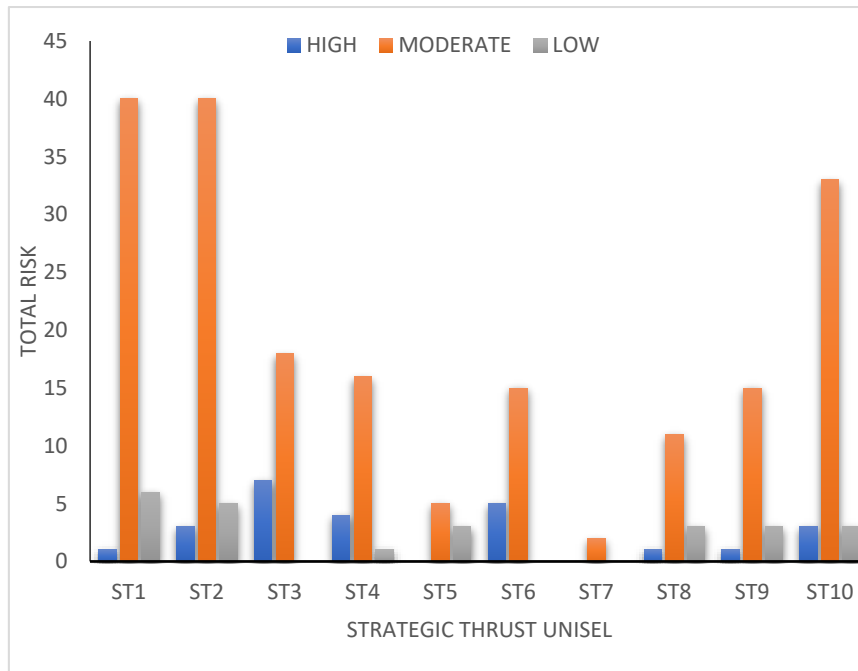


Figure 3.3:

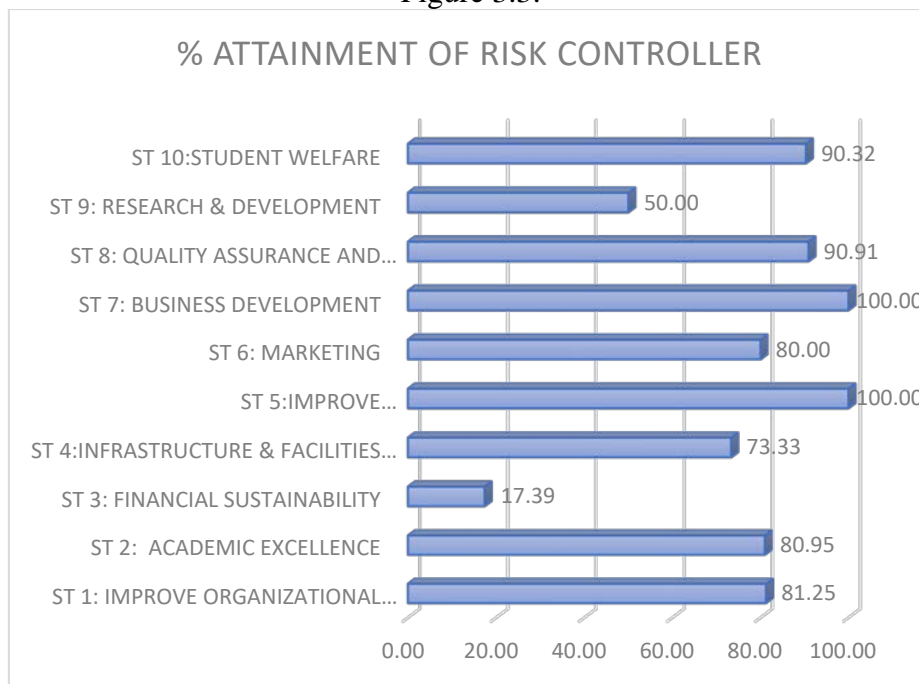


Figure 3.4: The attainment of effective of implementation of risk controller

4. Conclusion

This paper presents the implementation of the risk management system at UNISEL. Based on the results, most of the risks were able to be controlled by reducing the probability of risk compared with the impact of risk. The implementation of risk assessment had been applied at PTJ level as well as at university level. The effectiveness of risk controller had been determined and analysed. From the obtained results, it is observed that most the risk controllers that had been applied were able to reduce the risk level to achieve the

performance indicator for each strategic thrust. The lowest achievement is on financial sustainability. The risk controller for this part should be reviewed and improved. From these findings, it can be concluded that this study is useful and has contributed knowledge about understanding the implementation of the risk management system at UNISEL for each core process.

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