

TEACHING NOTES

“APPLICATION OF THE DECISION THEORY FOR UNIVERSITY INDUSTRY LINK”

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Case Synopsis

The case was conducted to describe the application of decision theory in determining the best option in selecting source of research grant. The case starts with the overview of University Industrial link scenario. The dean of STML, Associate Prof Z (AP Z) raised interest to have university industrial link (UIL) since the collaboration has been accepted as important means for the academia to remain competitive and relevant for the industrial needs. The collaboration has been supported by the Malaysian government, particularly in enhancing the R&D. There is still huge potential of research commercialization in this country given the fact that Malaysia has only 3.5 per cent of commercializing research results as compared with an average of 10 percent internationally. Due to a large allocation need to be provided for the research development and aligned with the government's decision, four (4) universities have been selected as the research universities. As stated in the 9MP, these four research universities will lead the research activities. University selection criteria are based on the benchmark with international research university and audited by an Audit Committee. The research universities are the University of Malaya, Universiti Putra Malaysia, Universiti Kebangsaan Malaysia and Universiti Sains Malaysia. Research universities were established in order to stimulate the activities of research and development in HEIs. In the near time, two research universities will be added if they fulfill the criteria. One of the potential candidates will be Universiti Utara Malaysia (UUM).

UUM has targeted to be as “Research University”. To achieve the goal, it needs full commitment from all the colleges and schools of UUM. Hence, AP Z was motivated to go for UIL whereby this helps to expand the STML research opportunities particularly to the external parties either public or private sectors. AP Z wants to continue the collaboration with one of the prominent manufacturer in the Kulim Hi-Tech, Silterra Malaysia Sdn Bhd. The collaboration seems to be quite simple since STML has already had the experience of joint project with Silterra. Silterra, on the other hand, welcomed the initiatives for joint collaboration with the higher education institute as this will able to help the company to succeed in the knowledge economy and gain the competitive advantage. Even though the outcome seems to be positive, AP Z and the members of STML concerns on the strategic way to go about with the collaboration project. In order for them to pursue the collaboration, STML needs to produce a convincing research proposal for the approval of Research Institute Management Center (RIMC). It is hope that the research source of fund able to provide them sufficient budget for the collaborative work. Hence, the decision payoff

table will be important tool for STML to decide on the best source of the research grant they need to acquire.

In January 2012, Associate Prof. (AP) Z voice out in the academic meeting. “The top management urge us to keep up our KPIs. One of the ways is to collaborate with the industry. But having the limited resources, we need to focus on the most strategic way on the collaboration. Right now, I am not sure what will be the best way.” looking seriously on each faces in the meeting expecting a “light bulb”. The university has set up 2013 as the target year to achieve the “Research University”. There is not much time left.

EDUCATIONAL OBJECTIVES

At the end of the case study, students should be able to:

1. Learn how to describe a problem situation in terms of decisions to be made, the state of nature and their payoff.
2. Be able to analyze a simple decision making using payoff table
3. Be able to make a decision based on uncertainty approaches

TARGET GROUP

- a) Undergraduate students
- b) BJQP2023 – Management Science

DISCUSSION OUTLINE/QUESTION SET

Following are key concepts/issue to encourage discussion about this case.

- Problem formulation

The problem formulation is the first step in the decision analysis process. There are several components to be identified along the process, namely the decision alternatives, the actual events that may occur in the future, also known as states of nature and the outcome or *payoff*.

- Decision alternatives

Decision alternatives are potential solutions that should be considered. These multiple alternatives would be adequately described to make everyone involved in the decision making process understandable in selecting the best option. However it is important not to have too many options because it might complicate and slowing down the decision process.

- state of nature

The possible outcomes for an uncertain future situation that affect the outcome or payoff that associated with a decision alternative.

- Payoff

A measure of the consequence of a decision in terms of monetary value such as profit and cost or non-monetary value such as time and distance. Each payoff is associated with a decision alternative and a state of nature. The payoffs for a decision problem can be represented by a tabular illustrated as the following payoff table :

An example of a simple payoff table

Decision	State of nature	
	a	b
1	Payoff 1a	Payoff 1b
2	Payoff 2a	Payoff 2b

- Decision making without probabilities

In many decision making situations, there are possibilities to obtain the probability for each state of nature. However, if we do not have the knowledge of the probabilities or has a little information, we still can make the decision without probabilities

- Optimist approach

This approach evaluates each decision alternative in terms of the *best* payoff either the largest profit for maximization problem or the smallest payoff for cases involving minimization issue.

- Pessimist approach

This approach evaluates each decision alternative in terms of the *worst* payoff either the minimum possible profit for maximization problem or the maximum payoff for cases involving minimization issue.

- Decision Making Criteria

After the decision problem has been identified and tabulated into payoff table, the decision will be make based on several criteria. The criteria discussed include maximax, maximin, minimax regret, Hurwicz, and equal likelihood.

- The maximax criterion – the decision maker selects the decision that maximum of the maximum payoff.

- ii. The maximin criterion – the decision maker selects the decision that maximum the minimum payoff.
- iii. The minimax regret criterion - the decision maker selects the decision that minimizes the maximum regret. In other word, to use the minimax regret criterion, a decision maker firstly selects the maximum payoff under each state of nature. Secondly, subtracted the maximum payoff under each state of nature with all other payoffs under the same state of nature. The subtraction values indicated the regret that the decision maker would experience if a selected decision shown less than maximum payoff. The third step , choose the maximum regret for each decision alternative. Finally, select the minimum from the corresponding third step decision.
- iv. The hurwicz criterion – is a subjective decision-making criterion, a compromise between the maximax and maximin criteria. The decision maker is neither totally optimistic nor pessimistic but rather used a coefficient of optimism, α , (i.e., $0 \leq \alpha \leq 1$) in assisting the selection of the best payoff. Firstly, for each decision alternatives the maximum payoff be multiplied by α and the minimum payoff be multiplied by $1 - \alpha$. The best selected result is the maximum weighted value.
- v. The equal likelihood criterion – this criterion weights each state of nature equally, thus assuming that the states of nature are equally likely to occur. If there are only two state of nature, we assumed a 50% chance that each state of nature will occur. This equal weight will be multiplied to each payoff for each decision alternative and the select the highest weighted value as the best payoff.

- Reaching a final decision

Before a calculation based on payoff table being carried out, the student should identify the main variables from the case.

There are three (3) components identified in the payoff table which are:

- 1) The decisions alternatives
- 2) The state of nature
- 3) The value for each payoff

Question set

- a) Identify the components of decision making for STML in selects the best source of research grantt

Answer

- 1) The decisions alternatives
 - It consists of three (3) source of research grant; external, MOHE and UUM
- 2) The state of nature
 - Is the level of research coverage either high or low value
- 3) The value for each payoff
 - Is the minimum and maximum value from each source of research grant, where the minimum value indicate the low research coverage whereas the maximum value showing the high research coverage.

- b) Set up a payoff table that describes the decision situation for STML based on THREE (3) alternatives source in getting research grantt.

Answer

Decision Alternatives (Source of research grantt)	State Of Nature	
	Low research coverage (RM)	High research coverage (RM)
External	5000	800000
Ministry of Higher Education (MOHE)	12900	83360
UUM	5000	12000

c) Determine the best decision by using the following decision criteria

- i) Maximax
- ii) Maximin
- iii) Minimax regret
- iv) Hurwicz ($\alpha = 0.3$)
- v) Equal likelihood

Answer

Determine decisions without probabilities

- i) Maximax:

Step 1 – choose the maximum payoff for each decision alternative

Decision Alternatives (Source of research grantt)	State Of Nature	
	Low research coverage	High research coverage
External	5000	800000
Ministry of Higher Education (MOHE)	12900	83360
UUM	5000	12000

Step 2 – choose the maximum among the maximum payoff for each decision alternative

External	800000	← maximum
MOHE	83360	
UUM	12000	

Decision: select research grantt from external

ii) Maximin:

Step 1 – choose the minimum payoff for each decision alternative

Decision Alternatives (Source of research grantt)	State Of Nature	
	Low research coverage	High research coverage
External	5000	800000
Ministry of Higher Education (MOHE)	12900	83360
UUM	5000	12000

Step 2 – choose the maximum among the minimum payoff for each decision alternative

External	5000	
MOHE	12900	← maximum
UUM	5000	

Decision: select research grantt from MOHE

iii) Minimax regret:

Step 1 – choose the maximum payoff under each state of nature

Decision Alternatives (Source of research grantt)	State Of Nature	
	Low research coverage	High research coverage
External	5000	800000
Ministry of Higher Education (MOHE)	12900	83360
UUM	5000	12000

Step 2 – subtract each payoff under each state of nature from the selected payoff in Step 1

Decision Alternatives (Source of research grantt)	State Of Nature	
	Low research coverage	High research coverage
External	$12900 - 5000 = 7900$	$800000 - 800000 = 0$
Ministry of Higher Education (MOHE)	$12900 - 12900 = 0$	$800000 - 83360 = 716640$
UUM	$12900 - 5000 = 7900$	$800000 - 12000 = 778000$

Step 3 – choose the maximum regret for each decision alternatives

Decision Alternatives (Source of research grantt)	State Of Nature	
	Low research coverage	High research coverage
External	$12900 - 5000 = 7900$	$800000 - 800000 = 0$
Ministry of Higher Education (MOHE)	$12900 - 12900 = 0$	$800000 - 83360 = 716640$
UUM	$12900 - 5000 = 7900$	$800000 - 12000 = 778000$

Step 4– select the minimum regret for each decision alternatives

External	7900 ← minimum
MOHE	716640
UUM	778000

Decision: select research grantt from external

iv) Hurwicz criterion ($\alpha = 0.3$, $1 - \alpha = 0.7$)

Step 1 – for each decision alternative, the maximum payoff be multiplied by α and the minimum payoff be multiplied by $1 - \alpha$.

Decision Alternatives	Values
External	$5000(0.7) + 800000(0.3) = 3500 + 240000$ $= \text{RM}243500$
Ministry of Higher Education (MOHE)	$12900(0.7) + 83360(0.3) = 9030 + 25008$ $= \text{RM}34038$
UUM	$5000(0.7) + 12000(0.3) = 3500 + 3600$ $= \text{RM}7100$

Step 2 – choose the maximum weighted value for each decision alternative

External	243500	← maximum
MOHE	34038	
UUM	7100	

Decision: select research grantt from external

v) Equal Likelihood criterion

Step 1 – Because there are only two state of nature, we assign a weight of 0.5 to each one. Next we multiply these weights by each payoff for each decision.

Decision Alternatives	Values
External	$5000(0.5) + 800000(0.5) = 2500 + 400000$ $= \text{RM}402500$
Ministry of Higher Education (MOHE)	$12900(0.5) + 83360(0.5) = 6450 + 41860$ $= \text{RM}48130$
UUM	$5000(0.5) + 12000(0.5) = 2500 + 6000$ $= \text{RM}8500$

Step 2 – choose the maximum weighted value for each decision alternative

External	402500	← maximum
MOHE	48130	
UUM	8500	

Decision: select research grantt from external

d) What is your suggestion to AP Z regarding to collaborate or not with Silterra on the research issue. Please justify your opinion.

Answer

We can suggest to AP Z to collaborate with Silterra on the issue of research. Based on the decision analysis, even though the decision situation is without probabilities due to lack of prior knowledge, we still can used many decision making criteria in assisting either to urgently collaborating in terms of research or not. Using five decision making criteria, we found out four from five criterions suggesting that the best option in getting a research grant is from external. In this case, Silterra is an industry that fall under “external” category. It’s implied that STML should take the opportunity to collaborate with Silterra in terms of research issue.

TIPS FOR RESOLVING THE CASE PROBLEM

- Understand the concept of decision making without probabilities
- Identify the decisions alternatives
- Identify the states of nature
- Identify the payoff for each decision that associated with different state of nature
- Set up the payoff table
- Determine the best option/alternatives by using decision making criterion

APPENDICES

APPENDIX 1

RESEARCH GRANTT – EXTERNAL FOR YEAR 2010 - 2012

No.	Title	Value (Rm)	Status
1	Kajian Kefahaman Modul Program Latihan Pengendali Makanan (Lpm) Ke Atas Pengendali Makanan Di Negeri Kedah	5000.00	Completed
2	Kajian Kecenderungan Masyarakat Menikmati Makanan Di Tempat Terbuka: Kajian Kes Di Alor Setar, Kedah	5000.00	Completed
3	Assessment On Management Effectiveness Of Pulau Payar Marine Park	15000.00	Completed
4	Investigating The Total Economic Value Of Eco-Tourism In Pulau Payar Marine Park	15000.00	Completed
5	Kajian Transformasi Kepimpinan Masyarakat Selangor (Kajian Kes Parlimen Pandan)	16000.00	Completed
6	Kaji Selidik Budaya Kerja Bernas 2010	20000.00	Completed
7	Kajian Strategik Analisis Model Di Gopeng [University Ambassador Programme (Uap)]	21400.00	Completed
8	"Kajian Persepsi Kerjaya Dalam Perkhidmatan Awam Di Kalangan Belia Bukan Melayu Di Semenanjung Malaysia"	23315.00	Completed
9	Pembelajaran Sepanjang Hayat Di Kalangan Sektor Swasta	25000.00	Completed
10	Kajian "Understanding Socialization Process Of An Organization"	30000.00	Completed
11	Penyediaan Buku Problem Based Learning Scenarios In Social Science	30000.00	Completed
12	Kajian "Implementation Framework For Consortium-Based University-Industry Collaboration By Kluster"	38500.00	Completed
13	Kajian Keberkesanan Kursus Ejen Kastam (Kek) Siri 3/2010	39000.00	Completed
14	Hybrid Fuzzy Technique For Criteria Subjective Evaluation	40000.00	Completed
15	Bengkel Rangka Kerja Program Kerjasama Konsortium Kluster Universiti - Industri	44000.00	Completed
16	Program Keselamatan Dan Kesihatan Pekerjaan Bagi Tahun 2010 (Analisis Kajian Kemalangan Jalanraya Pekerja Semasa Berulang Alik Ke/Dari Tempat Kerja : Kajian Kes Di Industri - Industri Yang Mengenalpas	45000.00	Completed
17	Kepelbagaian Sosial Dalam Komuniti : Kes Kaum India Di Malaysia	49000.00	Completed
18	Kajian Sikap Pengundi Kedah	50000.00	Completed
19	Kajian Standard Bagi Program Muamalat Dan Kewangan Islam (Mki)/Muamalat Dan Islamic Financial (Mif)	50000.00	Completed
20	Projek Khidmat Penawaran Program Diploma Kewangan Islam	50000.00	Completed
21	Kajian'persepsi Pelbagai Etnik Di Semenanjung Malaysia Serta Sabah Dan Sarawak Terhadap Kolej Komuniti	60000.00	Completed
22	Sistem Analisis Profil Usahawan Siswazah (Ipage) Menggunakan Pendekatan Operasi Storan Data (Ods) Dalam Aplikasi Kepintaran Perniagaan	64000.00	Completed
23	Kajian Penilaian Outcome Dan Impak Program Kolej Komuniti Malaysia	100000.00	Completed
24	Determination Of The Etent Of Dependency Pf Foreign Human Resource In The Construction Industry	125000.00	Completed
25	Kajian Sosio Politik Malaysia Fasa 1	200000.00	Completed
26	Kajian Keperluan (Supply And Demand) Modal Insan Pengajian Tinggi Dan Tenaga Kerja (Labour Force) Dalam Sub - Sektor Perkhidmatan, 2010 - 2020	200000.00	Completed
27	Kajian Impak Sosial Dan Program Penjualan Perumahan Program Perumahan Rakyat (Ppr) Mten Dan Perumahan Awam Dewan Bandaraya Kuala Lumpur(Dbkl)	283197.57	Completed

RESEARCH GRANTT – EXTERNAL FOR YEAR 2010 - 2012

No.	Title	Value (Rm)	Status
1	The Determinants Of Audit Report Production Timeliness: A Study On The Effects Of Auditor Industry Specialism And Risk-Based Audit.	8000.00	On Going
2	Kajian Risk Management Development Among Public Universities/Public Higher Education Providers (Heps) In Malaysia	10000.00	On Going
3	Kajian Pengesanan Bekas Peserta Program "Sukarelawan Mendekati Remaja (Smr)"	10000.00	On Going
4	"Intervention Of Social Economic Activities In Total Economic Value Of Pulau Redang Marine Park (Prmp) Terengganu"	10000.00	On Going
5	"How Close Are Ifac Member Bodies To less? : An In-Depth Analysis"	14000.00	On Going
6	Assessment Of The Management Effectiveness: The Case Sungei Enam Base Camp	14150.00	On Going
7	Assessment Of The Management Effectiveness: The Case Of Belum Rainforest Resort	14150.00	On Going
8	Assessment Of Service Satisfaction Level Among Customers: The Case Of Belum Rainforest Resort	14150.00	On Going
9	Assessment Of Service Satisfaction Level Among Customers: The Case Sungei Enam Base Camp	14150.00	On Going
10	Investigating The Total Economic Value Of Eco-Tourism In Pulau Redang Marine Park (Prmp) Terengganu"	20000.00	On Going
11	"Assessment Of The Management Effectiveness: The Case Of Pulau Redang Marine Park (Prmp), Terengganu"	20000.00	On Going
12	Transformational Leadership And Safety Performance: Role Of Attitude	27000.00	On Going
13	Issues Of Taqdir And Ta'addi, Guarantee And Managing Moral Hazard In Mudharabah And Musharakah Products	35000.00	On Going
14	Conceptualizing And Theorizing Jihad Among Southeast Asia's Radical Salafi Movements: Case Study On Jemaah Islamiyah, Hisbut Tahrir And Jamaah Asharut Tawhid	50000.00	On Going
15	Konflik Dan Kesepaduan Dalam Hubungan Malaysia - Indonesia (Conflict And Cohesion In Malaysia -Indonesia Relations)	70000.00	On Going
16	Challenges And Constraints In The Application Of The Mudharabah Dan Musyarakah Concepts In Malaysia	70000.00	On Going
17	Kajian Hala Tuju Muamalat Dan Kewangan Islam	74000.00	On Going
18	Computer-Aided-Customized Compression Garment Design For Athlete	100000.00	On Going
19	Social Media As Persuasive Technology For Business: Trends And Perceived Impact In Malaysia	102735.00	On Going
20	Kajian Penilaian Pengajaran Dan Pembelajaran Sistem Pendidikan Negara	120000.00	On Going
21	1malaysia (My Dream, Impianku	134000.00	On Going
22	Pengaruh Kompetensi Emosi Terhadap Efikasi Kendiri Pensyarah-Pensyarah Di Kolej Komuniti Di Malaysia	160000.00	On Going
23	Pembinaan Modul Training Of Trainers (Tot) Dalam Modular Approach	170000.00	On Going
24	Learner's Diversity	170000.00	On Going
25	Learning Motivation And Engagement	170000.00	On Going
26	Kajian Pengesanan Usahawan Puskom Kolej Komuniti	290000.00	On Going
27	Program Diploma In International Business (Dib) Kolej Profesional Mara	349000.00	On Going
28	Cadangan Kajian Pembinaan Instrument Functional Graduate Index (Fgi)	580000.00	On Going
29	Kursus Instruksional Dan Pembangunan Andragogi (Kipa)	800000.00	On Going

RESEARCH GRANTT – MOHE (FRGS) FOR YEAR 2010 - 2012

No.	Title	Value (Rm)	Status
1	Identifying Factors That Impact Organization Integration On New Product Development Performance: Study The Moderating Effect Of Virtuality.	17000.00	Completed
2	New Method Malay Speech Recognition Based On Consonant - Vowel Combinations	22500.00	Completed
3	Customizable Rubrics Model For Formative Evaluation Of Problem - Based Learning In A System Analysis And Design Course	24000.00	Completed
4	Kajian Pembelajaran Alternatif Kursus Pengurusan Pelabuhan Melalui Board Game	28813.00	Completed
5	Pembangunan Masyarakat Berilmu Melalui Institusi Masjid : Ke Arah Pembinaan Modul Program Tafiqquh Bersifat Semasa	30000.00	Completed
6	The Politics Of Traditional Media Vis - A - New Media In The Public Sphere: A Study On The Model Of Malaysian Media From The Perspective Of Habermassian Theory	30000.00	Completed
7	A New Dynamic Fec To Support Video Streaming Over Wireless Network	30680.00	Completed
8	Development Of A Generalized Choquet Integral - Based Aggregation Operator	34000.00	Completed
9	Modelling Workplace Spirituality And Teaching Effectiveness For Higher Education In Malaysia	38400.00	Completed
10	Rehabilitation Of Abandoned Housing Projects Of Wound Up Housing Developer Companies In Peninsular Malaysia: A Study Toward Improving The Insolvency Laws	39375.00	Completed
11	Multi - Level Model In Small And Medium Enterprises : The Work Context	40000.00	Completed
12	Renewing Malaysia's Managers To Meet The Challenges Of The Asia Pacific Century: A Model Of International Managerial Competitiveness	40000.00	Completed
13	Pembinaan Model Penyampaian Maklumat Wakaf Dan Zakat Berdasarkan Pendekatan Linguistik	40000.00	Completed
14	Domestic Tourism: Testing The Buyer Behavior Model On Domestic Tourists To Island Destinations In West Malaysia	40000.00	Completed
15	Pembangunan Kerangka Modul Usahawan Wanita Melayu	40000.00	Completed
16	Dealer-Supplier Relationship Satisfaction Framework In Malaysian Automobile Distribution Sector	40000.00	Completed
17	Multilevel Optimization For Dense Motion Estimation	45600.00	Completed
18	Developing Models For Communicative Learning Spaces	48000.00	Completed
19	Merempit Dan Penyalahgunaan Dadah Di Universiti, Politeknik Dan Kolej Komuniti	48000.00	Completed
20	A New Ant Based Rule Extraction Algorithm For Web Classification	52880.00	Completed
21	Shopping Orientation And Purchase Behaviour Of Malaysian Consumers Towards Green Products	60000.00	Completed

RESEARCH GRANT – MOHE (FRGS) FOR YEAR 2010 - 2014

No.	Title	Value (Rm)	Status
1	Multiple Comparison Procedures (Mpcs) For Adaptive Trimmed Means And Modified One-Step M-Estimator	12900.00	On Going
2	Manpower Planning In Engineering Technology Using Bees Algorithm	24000.00	On Going
3	Guidelines For Usable Teaching Materials Based On Multiple Intelligence Theory	24000.00	On Going
4	Determinants Of Firm Performance Following Bond Issuances	30000.00	On Going
5	Keusahawanan Sosial Dalam Kalangan Pekerja Sosial Pertubuhan Bukan Kerajaan (Ngo) Islam Di Malaysia	30000.00	On Going
6	Risk Management And Value Creation: A Reality Test In Public Listed Companies Of An Emerging Capital Market	30000.00	On Going
7	Validating Work Safety Scale (Wss) And Its Influence On Workplace Safety Sustainability In The Healthcare Sector	30000.00	On Going
8	Developing An Attractive Model Of Government Incentive - Based Of Private Finance Initiative (Gib - Pfi) To Promote Private Sector Involvement In Providing Infrastructure For The Local Authorities In	30000.00	On Going
9	Measuring Financial Literacy Among Felda Settlers: Application Of Household Finance Approach	30000.00	On Going
10	Constructing Transformational Creativity And Developing Transformational Creativity Variables Scale (Tcvs)	30000.00	On Going
11	Peranan Faktor Hubungan Dan Sokongan Sosial Dalam Menangani Budaya Sinisisme Di Institusi Pengajian Tinggi Awam Di Malaysia	30000.00	On Going
12	The New Measurement/Construct Of Islamic Retail Store Attributes Influence On Muslim Consumer Patronage Behavior In Malaysia	30000.00	On Going
13	Modeling The Social Embeddedness And Entrepreneurial Orientation Of Malaysian Indian Ethnic Entrepreneurs In Malaysia	30000.00	On Going
14	Development Of A Model Of Business Intelligence And Decision Making On Internationalisation Of Global Market Of Successful Women Entrepreneurs	30000.00	On Going
15	Integrating Religiosity For Measuring Servant Leadership In Public Organization In Malaysia	30000.00	On Going
16	Promoting Service Innovation In Hotel Industry Through Human Resource Management Practices And Knowledge Sharing	30000.00	On Going
17	Kewujudan Hypermarket Di Malaysia: Impaknya Ke Atas Peruncit Skala Kecil Dan Sederhana	30000.00	On Going
18	Effects Of Green Marketing On Consumer Consumption: A Study With Specific Reference To The Tourism Sector In Malaysia	30000.00	On Going
19	Career Development, Knowledge Management, Organizational Leadership And Their Relationships With Succession Planning Effectiveness In Higher Education Institut	30000.00	On Going
20	Hubungan Keadilan Penilaian Prestasi Dengan Psiko Sosial Guru Sekolah Menengah	30000.00	On Going
21	The Importance Of Person-Job Fit And Person-Organization (Po) Fit In Employee Selection And Hiring Among Malaysian Graduates: Evidence From Malaysian Private Organizations	30000.00	On Going
22	Impacts Of The Open Market Concepts In Haulage Industry	30000.00	On Going
23	Innovation In Malaysia Heavy Construction Sector	30000.00	On Going
24	Developing A New Model For Tax Administration Performance Management By Using An Integrated And Open System Approach	30000.00	On Going
25	Conceptualizing A Multi-Perspectives Model For Examining Social Networking Site Adoption As S-Commerce Platform	30000.00	On Going
26	A Fuzzy Multi Criteria Approach In Evaluating Suppliers' Quality	30000.00	On Going
27	Formulating And Testing Government Entrepreneurial Initiatives Indicators And It's Influence On Rural Entrepreneur Business Performance In Malaysia	30000.00	On Going
28	Is Interfirm Network A Silverbullet To Smes Success?	30000.00	On Going
29	Managing Solid Waste: A Case Study Of Freshair	30000.00	On Going
30	The Information Content And Spillover Effect Of Terrorist Attacks On Stock Price And Its Impact On Tourism Sectors In South East Asia	30000.00	On Going
31	Battle Against Obesity Using System Dynamics Model For Behaviour Change	34900.00	On Going
32	Exploring Career Success Among Women Engineers: Development Of An Integrative Model	35000.00	On Going
33	Border Region Study: Entrepreneurial Self-Efficacy And Performance Of Malaysian And Thailand Small-Scale Individual Entrepreneurs	35000.00	On Going
34	A Secure Electronic Tendering Model Using Rational Unified Process (Rup) Approach	36000.00	On Going
35	Balancing Work And Family: Does Cultural Value Matter?	37000.00	On Going
36	Proactive And Responsive Export Market Orientation Dimensions: An Investigation Of The Antecedents And Performance Consequences In An Economic Recession Environment	40000.00	On Going
37	A Dynamic Learning Model For Rural Preschool Teachers To Facilitate Children's Learning	40000.00	On Going
38	Developing And Indicator Of Poverty Liableness Through An Analysis Of Household Risk Management Strategies: A Case Towards The Development Of A Formal Social Protection Scheme In Malaysia	40000.00	On Going
39	Critical Success Factors Of Society Marketing	40000.00	On Going

40	Performance Measurement And Management System In Small Medium Enterprises (Smes) : A Practical Modified Framework	40000.00	On Going
41	Developing Workplace Injury Index (Wii) As A Measure Of Safety And Health Performance In The Construction Industry In Malaysia	40000.00	On Going
42	Understanding Premarital Pregnancy Experiences Of Young Mothers In Women Shelters: Developing A Model For Intervention	40000.00	On Going
43	Bidang Keberhasilan Utama Negara (Nkra) Dan Petunjuk Prestasi Utama (Kpi) : Model Tadbir Urus Malaysia Ke Arah	40000.00	On Going
44	Constructing Social Accounting Matrix (Sam) Framework For Malaysia To Analyse The Impacts Of Foreign Direct Investment On Income Distribution	40000.00	On Going
45	Modeling Corporate Failures Among Malaysian Small And Medium - Sized Enterprises	40000.00	On Going
46	Drop Dead Hansome And Prince Charming: Chick Lit And The Construction Of Gender Identity	40000.00	On Going
47	Minimum Wage Policy Effects On Economic Efficiency And Poverty	40000.00	On Going
48	New Media Influence Assessment Model (Nemia)	40000.00	On Going
49	Developing A Social Media Model For A Group At Risk	40000.00	On Going
50	In Search Of A Unifying Paradigm For Designing Pre-Retirement Planning Programs In The Public Sector	40000.00	On Going
51	The Role Of Job Demands And Job Resources In Predicting Job Performance Among Malaysian Nurses	40000.00	On Going
52	Validating The Safe Culture Model In Sme Manufacturing Companies In Malaysia	40000.00	On Going
53	Mengurus Kos Dan Faedah Kelestarian Bangunan Hijau (Teknologi Hijau): Perbandingan Antara Bangunan Di Bandar Berteknologi Dan Bangunan Bandar Terancang Di Malaysia	40000.00	On Going
54	Developing An Algorithm For Generating Ball Surface From The Boundary Curves Using Partial Differentiation Equation (Pde)	40000.00	On Going
55	Towards A Holistic Model Of Communication Management To Manage Foreign Workers In Malaysian Manufacturing Companies	40000.00	On Going
56	Government Transformational Programme : Developing Corruption Model - Fight Against Corruption	40000.00	On Going
57	Structural Modeling Of Ethnocentric Consumer Purchasing Behavior In Malaysia	41600.00	On Going
58	The Evaluation Of Technology Park Performance	44000.00	On Going
59	Unified Software Certification Model Based On Software Development Process Quality Approach	44464.00	On Going
60	Modelling The Effectiveness Of Multiples Directorships For Shareholders' Benefits	45000.00	On Going
61	Health Communication: Examining Islamic-Based Health Promotion Model	45200.00	On Going
62	Enhanced Nurse Rostering Model Based On Intelligent Evolutionary Algorithm With Improved Crossover	45580.00	On Going
63	Examining Empirical Model Of Servant Leadership, Collectivist, Power Distance, Budi And Team Effectiveness: Materializing Malay Contextual Culture In Organization	46750.00	On Going
64	Asymmetric Winsorized Means As New Central Tendency Measures For Comparing Groups.	47000.00	On Going
65	An Integrated Framework Of Automatic Reading Tutor For Dyslexic Children Reading In Bahasa Melayu Using Automatic Speech Recognition (Asr) And Interaction Design (Ixd)	48000.00	On Going
66	Modelling Acculturation Of Soulful Competence To Shape Accountants Integrity	50000.00	On Going
67	Pembangunan Model Pengukuran Kredibiliti Maklumat Dari Perspektif Islam Berasaskan Permodalan Persamaan Struktur (Sem)	50000.00	On Going
68	Pembentukan Satu Model Ekonomi Sempadan: Aktiviti Penyeludupan Di Sungai Golok Dan Hubungannya Dengan Perniagaan Barangan Di Bandar Rantau Panjang	50000.00	On Going
69	Indeks Konservasi Bangunan Bersejarah Dan Tajuk Warisan Kebudayaan : Pendokumentasi Dan Pengkategorian Untuk Industri Pelancngan Warisan Heritage Tourism) Di Negeri - Negeri Utara Semenanjung Malaysia	50000.00	On Going
70	Peningkatan Taraf Kehidupan Golongan Miskin Di Luar Bandar Ncer: Pembentukan Model Kehidupan Lestari	50000.00	On Going
71	Ideologi Dan Kepemimpinan Pengarah Dalam Penerbitan Filem Tempatan Di Malaysia	50000.00	On Going
72	Developing Tourism And Hospitality Index Of Graduate Abilities And Skills (Igas) To Fulfill The Industry Needs: The Case Of Malaysian Public Higher Educational Institutions	50000.00	On Going
73	The Political Of Oil And South - South Cooperation	50000.00	On Going
74	Penilaian Kefahaman Konsep 1malaysia Di Kalangan Pelajar Institut Pengajian Tinggi (Ipt)	50000.00	On Going
75	Program Transformasi Ekonomi Pekan Sempadan Di Persempadanan Malaysia-Indonesia/Thailand/Brunei/Ke Arah Pembangunan Ekonomi Lestari Dan Berpendapatan Tinggi	50000.00	On Going
76	Technical And Scale Efficiency Of Public Hospitals In Northern Region Of Malaysia : A Data Envelopment Analysis (Dea)	50000.00	On Going
77	Dokumen Negara Islam Pas: Bantahan Dap	50000.00	On Going
78	Pembentukan Model Pembasmian Kemiskinan: Analisis Hubungan Endapatan Bukan Pertanian, Kemiskinan Dan Ketaksamarataan Pendapatan Di Luar Bandar	50000.00	On Going
79	Establishing A Production Efficiency Model For Cocoa Plantation In Malaysia	50000.00	On Going
80	Modelling The Strategic Trade Policy: The Rivalry Between Malaysia And Singapore In Developing International Maritime Hub	50000.00	On Going
81	Profiling The Malaysian Consumers' Consumption Behaviour Towards Dietary Supplements Products	50000.00	On Going

82	Savings And Investment Behaviour Of The Consumer Of Financial Services And Their Service Expectations From Banks	50000.00	On Going
83	The Middle-Class Trap: Measuring The Size And Spending Pattern Of The Middle Class In Malaysia	50000.00	On Going
84	Framing A Model For The Success Of Rural Malay Businesswomen In Northern Corridor Economic Region (Ncer)	50000.00	On Going
85	Measuring Social Economic Mobility In Malaysia: An Analysis Of Intergenerational Transmission Of Disadvantage And Inheritance Of Poverty	50000.00	On Going
86	Pembentukan Indikator Modal Sosial Komuniti: Ke Arah Penjanaaan Instrumen Pengukuran Modal Sosial Bersepadu Di Malaysia	50000.00	On Going
87	The Instructional Strategy Of Inclusive Education Through Cluster Model Development In Inclusive Schools	50000.00	On Going
88	A Transformative Kemahiran Insaniah Competency Framework For Educators (Transkicofe): Realizing 21st Century Skills In Professional And Social Competence Using Phenomenological Approach	50000.00	On Going
89	Developing Secondary Schools' Novice Teachers Induction Model (Ssntinm): Facilitating And Enhancing Professional Teacher Development To Meet Nkra On Quality Education	50000.00	On Going
90	Intervention Framework To Increase Community Demand For Cervical Cancer Screening Program Among Malaysian Women	50000.00	On Going
91	A Conceptual Model Of Interactive Persuasive Learning Among Elderly	50000.00	On Going
92	Effective Succession Planning: Ensuring Leadership Continuity And Building Talent Within The Public Sector	50000.00	On Going
93	New Estimation Method In Stochastic Volatility Perturbed By Long Memory Processes	52400.00	On Going
94	The Effects Of Consumer Boycotts On The Marketing Performance Consequences Of Foreign Direct Investment Organizations In Malaysia	53264.00	On Going
95	Ant Colony Optimization Algorithm For Dynamic Scheduling Of Jobs In Computational Grid	55280.00	On Going
96	A New Method For Effective Commercial-Off-The Shelf (Cots) Software Evaluation And Selection Using Gap Analysis And Multi Criteria Decision Making Technique	58800.00	On Going
97	High-Tech Venture Key Performance Indicator For Young Technical Graduate	60000.00	On Going
98	Designing 1school Model: Towards Realizing The 1malaysia Concept And Multicultural Education In The 21st Century	64000.00	On Going
99	A Comprehensive Performance Measurement Model For Higher Learning Institutions	65000.00	On Going
100	Child Development Laboratory Preschool: An Institutional Ethnography Practice In Infusing The Process Of Societal And Organizational Change In Line With Kurikulum Standard Prasekolah Kebangsaan And Pr	77600.00	On Going
101	Hybrid Acomv And Svm Based Technique For Pattern Classification	80820.00	On Going
102	A Novel Vpq Scheduler For Voip Over Wlans For Telecommunication In Alor Setar, Kedah, Malaysia	83360.00	On Going
*103	(Lrgs) Flood Management: Impact Reduction And Relief	5053600.00	On Going

*not taken into account as an outcome during applying the decision making due to different grant scheme

RESEARCH GRANTT – MOHE (ERGS) FOR YEAR 2011 - 2015

No.	Title	Value (Rm)	Status
18	Computer Aided Pressure Garment Design For Burn Injury	39000.00	On Going
20	Knowledge Sharing Behaviour Theory: An Exploratory Study On Profit-Oriented Webloggers	40000.00	On Going
1	Exploring Governance Framework For Optimum Performance Of Government Transformation Program (Gtp) In Malaysia	50000.00	On Going
2	Exploring The Halal-Based Service Operations Practices For Hotel	50000.00	On Going
3	Mengukur Tahap Kesedaran Di Kalangan Pelancong Dan Operator Pelancongan Terhadap Pemeliharaan Dan Pemuliharaan Gugusan Taman Laut Di Kedah: Tumpuan Kepada Pemeliharaan Dan Pemuliharaan Biodiversiti Ma	50000.00	On Going
4	Investigating And Modelling The Total Economic Value Of Pulau Payar Marine Park	50000.00	On Going
5	Discovering Malaysian Concept Of Human Dignity In Public/Political Speech	50000.00	On Going
6	Profil Dan Sosioekonomi Dalam Kalangan Orang Yang Hidup Dengan Hiv/Aids (Ohdha)	50000.00	On Going
7	Investors Perspective On Legal Framework Of Civil Remedies And Investors Compensation Scheme In The Malaysian Capital Markets And Services.	50000.00	On Going
8	Transformasi Nilai Dalam Budaya Politik Melayu	50000.00	On Going
11	Kaedah-Kaedah Hafazan Yang Berkesan Di Malaysia	50000.00	On Going
13	An Exploratory Legal Study To The Concept Of Right To Employment Of Persons With Disabilities In Malaysia	50000.00	On Going
17	Discovering The Theory And Practice Of Religious Expression In Malaysia	50000.00	On Going
19	Menerokai Paradigma Pemikiran Keusahawanan Pelajar Di Institusi Pengajian Tinggi Awam Di Malaysia: Ke Arah Pembangunan Usahawan Siswazah Yang Terancang	50000.00	On Going
21	Automatic Transcription And Phonetic Labeling For Dyslexic Children's Read Speech	54900.00	On Going
22	Exploring Communication Accommodation Theory In Tcp Congestion Control Over Wireless Ad Hoc Network	59993.00	On Going
9	Kajian Konsep Dan Pembentukan Standard Sistem Pengurusan Kualiti Berlandaskan Islam Dalam Industri Perkhidmatan Bagi Perlaksanaan Di Negara Pertubuhan Persidangan Islam Atau Oic (The Organization Of T	70000.00	On Going
10	Business Intelligence Requirement Model For Malaysian Rural Healthcare Centers	70000.00	On Going
12	Membangunkan Model Rantaian Bekalan Lestari: Kajian Kes Terhadap Industri Sarang Burung Walit	70000.00	On Going
15	Artificial Bee Colony For Price Prediction Of Nonrenewable Resource Commodity	70000.00	On Going
14	Discovering And Modelling Islamic Corporate Brand Identity	75000.00	On Going
16	Sustainability And Social Accountability Relations In The Internationla Not -For-Profit Organisations: The Evidence Of Roundtable On Sustainable Palm Oil (Rspo) And Humanitarian Accountability Practic	75000.00	On Going
23	Malaysia's Strategic And Defense Interests On Big Powers' Initiatives In The Straits Of Malacca	97000.00	On Going

RESEARCH GRANTT – UUM (LEADS) FOR YEAR 2011 - 2012

No.	Title	Value (Rm)	Status
1	Kajian Terhadap Isu Pertikaian Penyenggaraan Dan Pengurusan Bangunan Hartanah Perniagaan Bertingkat: Kajian Kes Bangunan Perniagaan Bertingkat Di Kawasan Majlis Daerah Kubang Pasu (Mdkp), Jitra Kedah	5400.00	Completed
2	Impak Aktiviti Gunatanah Terhadap Pencemaran Air Di Daerah Kubang Pasu Kedah	5400.00	Completed
3	Environmental Issues Of Land Use Planning And Property Development In Kubang Pasu District, Kedah	5400.00	Completed
4	Study Of Adaptive Malay Vowel Feature Extration Method Based On Gender	5666.00	Completed
5	Comparative Analysis Of Content Based Image Retrieval Techniques	5666.00	Completed
6	Kajian Kemahiran Belajar Dalam Kalangan Pelajar Bidang Pendidikan Universiti Utara Malaysia	5666.00	Completed
7	A Rough Based Algorithm For Extracting Stock Prices Influencing Factors	5666.00	Completed
8	Tinjauan Terhadap Gaya Pengajaran Pensyarah Dan Sikap Pelajar Terhadap Gaya Pengajaran Pensyarah Universiti Utara Malaysia	5666.00	Completed
9	Investigating Teacher's Integrity Through Association Rule Mining	5666.00	Completed
10	Ict Integration Framework In History Subject	5666.00	Completed
11	A Study Of Perception Of Malaysia Cars Versus Imported Cars Among International Students In Universiti Utara Malaysia	5666.00	Completed
12	Comparative Study On The Performance Of Tfrc Over Aodv And Dsdv Routing Protocols	5940.00	Completed
13	Ownership Structure And Firm Efficiency Across Industries: The Case Of Public Listed Firms In Malaysia	5986.00	Completed
14	Development Of Novel High-Speed Holographic Mode-Selective Receiver For Multimode Fibre Networks	6000.00	Completed
15	Modeling Postgraduate Students Flow	6000.00	Completed
16	Designing A Mechanism To Solve Link Failure Connectivity In Dsr Manet	6000.00	Completed
17	Information Technology Skills Of New Intake Undergraduates Students: A Case Of Uum-Cob Accounting Programme	6000.00	Completed
18	The Effects Of Customer Orientation Behaviour On Hotel Frontliners' Job Outcomes	6000.00	Completed
19	Stock Market Reaction On The Extent Of Compliance With Ifrs 1 Standard Among Malaysian Ace Market Companies	6000.00	Completed
20	Dealer-Supplier Relationship Satisfaction: Antecedent Factors And Its Impact On Trust And Commitment	6000.00	Completed
21	A Test For Estimating Software Development Effort Using Object Metrix	6000.00	Completed
22	Persepsi Pelajar Terhadap Penggunaan Teknologi Laman Web Pencarian Pekerjaan Di Malaysia Dan Kepuasan Antaramuka Pengguna	6000.00	Completed
23	A Model For Tcp Over Mobile Ad Hoc Network	6010.00	Completed
24	Institusi Dan Mekanisme Jaringan Keselamatan Sosial (Social Safety Nets) Di Malaysia	6130.00	Completed
25	Kajian Pengesanan Graduan Program Ijazah Sarjana Muda Keusahawanan Universiti Utara Malaysia	6250.00	Completed
26	Dept And Firm Value In Malaysia: A Panel Threshold Regression Analysis	6978.00	Completed
27	A Microeconomic Analysis Of Health Care Utilisation In Kedah, Malaysia	7930.00	Completed
28	Willingness Towards Whistle Blowing Reporting Among Internal Auditors: Evidence From Malaysia	8650.00	Completed
29	The Effectiveness Of Continuing Profesional Development (Cpd) Programme Run By Professional Bodies In Malaysia	11994.00	Completed
30	An Investigation Of Knowledge Creation Process In The Learning Zone Learning Management System For The Promotion Of Soft Skills Among Postgraduate Students	12000.00	Completed
31	Pengetahuan Seksualiti Dalam Kalangan Pelajar	12000.00	Completed
32	Rangkaian Pemasaran Industri Perikanan Dan Peningkatan Taraf Hidup Nelayan	12000.00	Completed
33	A Reliable Routing Protocol For Wireless Communication	12000.00	Completed
34	Tax Planning And Directors' Remuneration	12000.00	Completed
35	Examining Long Run Relationship Between Gold Price, Inflation And Exchange Rate For Malaysia: Vecm Approach	12000.00	Completed
36	Profil Sosio-Ekonomi Dan Kualiti Hidup Ibu Tunggal Di Negeri Perlis Dan Kedah	12000.00	Completed
37	A Model Of Partipatory/Deliberative Democracy In Malaysia: A Study In Temerloh Parliamentary Consultative Council (Tpcc)	12000.00	Completed
38	Shareholders Reaction Towards Ceo Succession: Evidence Of Malaysian Public Listed Companies	12000.00	Completed
39	Analisis Kemiskinan Dengan Menggunakan Pendekatan Kemiskinan Pelbagai Dimensi: Kajian Kes Di Baling, Kedah	12000.00	Completed
40	Family Business, Accounting Conservatism And Earnings Informativeness	12000.00	Completed

RESEARCH GRANTT – UUM (LEADS) FOR YEAR 2011 - 2013

No.	Title	Value (Rm)	Status
1	A Comparative Study Of Heuristic Methods To Solve Traveling Salesman Problem (Tsp)	5000.00	On Going
2	Permasalahan Dalam Pelaksanaan Program Local Agenda 21 Oleh Pihak Berkuasa Tempatan Di Malaysia: Kajian Kes Di Majlis Daerah Kubang Pasu, Jitra Kedah	5400.00	On Going
3	Konflik Rukun Tetangga Sebagai Agen Mobilisasi Interaksi Sosial: Kajian Di Daerah Kubang Pasu, Kedah	5400.00	On Going
4	A Face Recognition Model Using Backpropagation Learning Algorithm	5666.00	On Going
5	Forecast Model Combination Based On Mallows Criterion: An Application To Malaysia Time Series	5666.00	On Going
6	The Effect Of E-Learning On Uum Student Academic Performance	5666.00	On Going
7	Tourism In The Thai-Malaysian Border Area: A Case Study Of Bukit Kayu Hitam	5666.00	On Going
8	A Supply Chain Model For The Executive Development Centre, Universiti Utara Malaysia	6000.00	On Going
9	Corporate Governance And The Extent Of Directors' Remuneration Disclosure	6000.00	On Going
10	Measuring Thailand - Malaysia's Cross Border Economy: A Case Study Of Sg. Kolok - Rantau Panjang	6000.00	On Going
11	Tekanan Kerja Dan Komitmen Organisasi: Perbandingan Antara Jabatan Belia Dan Sukan Daerah Luar Bandar Dan Bandar	6000.00	On Going
12	Sikap Dan Penerimaan Warga Tua Terhadap Tempat Tinggal Alternatif Berteraskan Pondok	6000.00	On Going
13	Cultural Intelligence Effect On International Supply Chain Issues	6000.00	On Going
14	The Relationship Between Key Internal Factors And Change Sense Of Urgency: A Study On Competitiveness Of University Utara Malaysia	6000.00	On Going
15	Technical And Scale Efficiency Of Public Hospitals In Kedah: A Data Envelopment Analysis (Dea)	6000.00	On Going
16	Amalan Pengurusan Operasi Cemerlang (Apoc) Di Sektor Pergudangan: Kajian Ke Atas Gudang Berlesen Awam (Gba) Di Semenanjung Malaysia	6000.00	On Going
17	Investigating Emerging Technologies Using Constructive Technology Assessment (Cta): A Case Study Of Nano Biosensor Industry In Malaysia	6000.00	On Going
18	Towards Halal - Based Service Operations Practices: A Case Study Of Edc-Uum	6000.00	On Going
19	Cultural Intelligence And Sociocultural Adjustment: Acclimatising To The Host Country's Environment Through The Lens Of International Students In Malaysia	6000.00	On Going
20	Kajian Mengenai Hubungan Antara Amalan Pengurusan Dan Budaya Organisasi Dengan Prestasi Pergudangan Dan Pengaruh Integrasi Strategi Sebagai Pembolehubah Pengantara Dalam Hubungan Tersebut	6000.00	On Going
21	Guaranteeing Pairwise Comparison Consistency In Analytical Hierarchy Process	6000.00	On Going
22	Investigating The Effects Of Digital Persuader In Reducing Dental Anxiety Among Rural Children	6000.00	On Going
23	Designing Story Card In Extreme Programming Using Machine Learning Technique	6000.00	On Going
24	Knowledge Sharing Culture In Malaysian Public Department: The Case Of Jabatan Perkhidmatan Komputer Negeri Sabah	6000.00	On Going
25	Constructing A Customer Satisfaction Model For A Utility Service Industry Using Partial Least Squares Approach	6000.00	On Going
26	The Best Practices For Effective Problem Based Learning Towards High Quality Information Technology Graduates	6000.00	On Going
27	Functional Model Of Mbook Builder: A Means To Fostering Creativity	6000.00	On Going
28	Pembentukan Sistem Kutipan Dan Pengurusan Wakaf Tunai Bagi Mengukuhkan Pemilikan Ekuiti Bumiputera Dalam Sektor Hartanah Di Negeri Kedah	6000.00	On Going
29	Web Application Penetration Test For Universiti Utara Malaysia's Main Website	6000.00	On Going
30	Security And Privacy Of Single-Sign-On (Sso) In Mobile Environment: Students' Experiences And Perceptions	6000.00	On Going
31	Comparative Analysis Of Similarity Measurement For Textual Data	6000.00	On Going
32	Modelling And Stimulation Of Retrospective And Prospective Activity In The Brain	6000.00	On Going
33	Fear Of Fear Itself: Computational Dynamics For A Cognitive Functioning Process Of Persons With Generalised Anxiety Disorder	6000.00	On Going
34	Modified Wilcoxon Procedure For Dependent Group	6000.00	On Going
35	A Novel Discrete Filled Function Algorithm In Solving Discrete Optimization Problems	6000.00	On Going
36	New Rational Methods For The Numerical Solution Of First Order Initial Value Problem	6000.00	On Going
37	Leader's Role In The Mentoring Process With Direct Sellers In Direct Selling Communication	6000.00	On Going
38	A Neural Networks Model For Rice Grading	6000.00	On Going
39	Meneroka Model Komunikasi Pembangunan Berpenglibatan: Kajian Kes Komuniti 1 Malaysia	6000.00	On Going
40	Expatriate Adjustment : Validating Multicultural Personality Trait Among Self-Initiated Academic Expatriates	6000.00	On Going
41	The Evaluation Of Steganalysis Method On The Text Steganography System	6000.00	On Going
42	Kepopularan Novel Diadaptasi Ke Filem Menjadi Box Office : Ada Apa Dalam Novel Dan Filem Melayu?	6000.00	On Going
43	Titik Panas Etno-Agama: Kajian Lokasi Terpilih Di Negeri Kedah	6000.00	On Going
44	What We Are And What We Feel? A Contemporary Dilemma: An Investigation Of The Lgbt Issue	6000.00	On Going
45	The Relationship Between Travel Behaviour And Expenditure Pattern Among Malaysian Young Travellers	6000.00	On Going
46	Kesediaan Komuniti Dalam Pelaksanaan 'Local Agenda 21': Tahap Kesedaran Ketua Komuniti Tentang Alam	6000.00	On Going

	Sekitar Dan Pembangunan Mampan Di Kedah		
47	Potensi Terusan Wan Muhammad Saman Sebagai Produk Pelancongan Warisan : Perspektif Pihak Berkepentingan (Stakeholders)	6000.00	On Going
48	The Public Service Delivery System In Malaysia	6000.00	On Going
49	Kesedaran Pengguna Terhadap Penjimatan Tenaga Elektrik Dan Pengurusannya Di Kampus Universiti Utara Malaysia	6000.00	On Going
50	The Determinants Of Student Nonreturn: A Meta-Analysis On A Subtler Form Of Brain Drain	6000.00	On Going
51	Combine Effect Of Entrepreneurial Orientation, Entrepreneurial Management And Knowledge Management On Job Performance Of Public Sectors In Malaysia	6000.00	On Going
52	Understanding The Effect Of Organizational Resources And Environmental Turbulence On Organizational Improvisation	6000.00	On Going
53	Investigation Of Uum Learners' Perception Of English Language Classroom Activities	6000.00	On Going
54	Application Of Combined Global Test Method In Analysis Of Bivariate Survival Data In Malaysia	6000.00	On Going
55	New Initiative Of Commercial Activities: A Comparison Study On Passengers Preferences Towards The Availability Of Provision Commercial Facilities At Main Terminal Building (Mtb) And Low Cost Terminal	6024.00	On Going
56	The Influence Of Government Officers' Personalities And Personalities And Personal Attributes On Organizational Politics	6028.00	On Going
57	Executive Remuneration And Real Earnings Management	7000.00	On Going
58	A Case Study Of Knowledge Transfer Across Countries And Cultures: An International Theory Building	11210.46	On Going
59	Kajian Pengesanan Semula (Tracer Study) Pelatih-Pelatih Program Latihan Khidmat Negara (Plkn): Satu Analisis Terhadap Implikasi Modul Dan Latihan Dalam Kalangan Bekas Pelatih Plkn Di Uum	11810.00	On Going
60	An Oral History Research Of Most Accomplished Individuals In Malaysia	12000.00	On Going
61	An Exploratory Study Of The Effectiveness Of My Access!!@ In Improving Teachers' Writing Skills	12000.00	On Going
62	Testing The Buyer Behaviour Model On Domestic Torists To Island Destinatio: The Case Of Langkawi	12000.00	On Going
63	Penilaian Outcome Dan Impak Program-Program Peningkatan Prestasi Sekolah Di Sekolah-Sekolah Berprestasi Tinggi Di Negeri Kedah Dan Terengganu	12000.00	On Going
64	Usage Behaviour Of Mobile Telecommunications; Customer Segmentation & Customer Porfiling	12000.00	On Going
65	Mcs And Change Management In A Cooperative Organisation	12000.00	On Going
66	Sikap Dan Jangkaan Masyarakat Terhadap Pencapaian Nkra	12000.00	On Going
67	Ke Arah Pengurusan Perkhidmatan Awam Malaysia Yang Berkualiti: Kajian Kes Majlis Perbandaran Kangar	12000.00	On Going
68	Trust Model For Malaysian E-Commerce Blog: Woman Consumer Perception	12000.00	On Going
69	Assessment Of Customer Preferences And Lifestyle Changes Towards Islamic Financial Products And Services	12000.00	On Going
70	Pandangan Guru-Guru Di Malaysia Berhubung Dengan Hak Dan Perlindungan Undang-Undang Terhadap Mereka	12000.00	On Going
71	Implementation Of Corporate Social Responsibility Among Selected Companies In Penang And Kedah: Analysing Regulatory Demand Of Csr Initiatives	12000.00	On Going
72	A Profile Of Successful Malay Business Leaders	12000.00	On Going
73	Benchmarks For Success In Learning Information System Uptake	12000.00	On Going
74	Life Insurance And Family Takaful Ownership Among Income Earners In Malaysia	12000.00	On Going
75	Exchange Rate Misalignment And Economic Performance In Malaysia: The Role Of Financial Development	12000.00	On Going
76	Short-Term Crime Forecasting In Kedah	12000.00	On Going
77	Lessons Learnt From Malaysia Ministry Of Works Teleworking Pilot Project	12000.00	On Going
78	Etika Kerja Islam: Kajian Di Hpa Industri	12000.00	On Going
79	The Direct And Indirect Effect Of Internal Marketing Orientation And Brand Identity On Brand Performance: Study On Uum Cob	12000.00	On Going
80	Komersialisasi Dan Prospek Sumbangan Sosial Produk Penyelidikan Dan Pembangunan (P & P) Institusi Pengajian Tinggi Awam (Ipta) Malaysia: Persepsi Awam Dan Industri	12000.00	On Going
81	Investigating The Academic Reading Experiences Of First Year Undergraduates Of Uum	12000.00	On Going
82	Perlindungan Pengguna Dalam Konteks Industri Makanan Halal	12000.00	On Going
83	Online Market Place Uncertainty: A Literature Analysis	12000.00	On Going
84	A Conceptual Model Of Tacit Knowledge Transfer For Problem Based Learning Teaching Method In System Analysis And Design Course	12000.00	On Going
85	Data Warehouse Design For Mobile Environment	12000.00	On Going
86	An Enhanced Metric Based Evaluation Of Mobile Application: Mobile Goal Question Metric (Mgqm)	12000.00	On Going
87	Interestingness And Quality Of Association Rules Derived From Relational Data	12000.00	On Going
88	Optimal Fuzzy Approach For Forecasting Electricity Load Demand In Malaysia	12000.00	On Going
89	A Framework For Simulation Type Selection In Healthcare Problems	12000.00	On Going
90	System Dynamics Approach In Measuring Perfomance Of Academic Staff	12000.00	On Going
91	Designing Interactive Courseware For Learning Multivariable Calculus Using Matlab Graphical User Interface (Gui)	12000.00	On Going
92	Langkawi Tour Packages Using Optimization And Heuristic Techniques	12000.00	On Going
93	Resiliency And Social Identity Of The Muslims In The Philippines	12000.00	On Going
94	Kesan Aplikasi Kaunseling Individu Kepada Klien Oku Pekak Dan Bisu	12000.00	On Going
95	Evaluating Persuasion Knowledge Toolkit As Knowledge Tranfer Tool Within Commercial Sector	12000.00	On Going

96	Analisis Trend Penyelidikan Media 2002-2012 : Konteks, Teori Dan Metode	12000.00	On Going
97	Pembinaan Model Etika Kerja Guru: Ke Arah Peningkatan Profesionalisme Keguruan Di Malaysia	12000.00	On Going
98	Planning Lessons For Student Centered Learning : A Moderation Analysis	12000.00	On Going
99	Education For Sustainable Development : Melestari Kecerdasan Interpersonal Dan Intrapersonal Anak-Anak Yatim Perempuan Di Rumah Anak-Anak Yatim Mak Teh, Perlis	12000.00	On Going
100	Pengurusan Kewangan Sekolah: Kepatuhan Dan Ketidakpatuhan	12000.00	On Going
101	A Study Of Social Networking Sites (Sns) Experience Among Universiti Utara Malaysia Students	12000.00	On Going
102	Technology Acceptance Model And Facebook Group	12000.00	On Going
103	Air, Darah Dan Minyak: Pemahaman Kognitif Dalam Peribahasa Dari Perspektif Linguistik Korpus	12000.00	On Going
104	Perubahan Gunatanah Dan Implikasinya Terhadap Pembangunan Fizikal Kawasan Kota Star, Kedah Darul Aman	12000.00	On Going
105	Pengaruh Dasar Perancangan Setempat Terhadap Pola Perubahan Nilai Pasaran Hartanah Kediaman: Kajian Kes Changlun Dan Sintok	12000.00	On Going
106	The Migration Of Asean's Worker To Japan	12000.00	On Going
107	Intention To Reinvest Among Rural Community-Based Tourism Operators	12000.00	On Going
108	Career Path Of Uum Hospitality Management Graduates	12000.00	On Going
109	The Role Of Holiday - Taking To A Person's Life	12000.00	On Going
110	Future Earnings Growth Dividend Payout: A Study On Malaysian Firms	12000.00	On Going
111	Factors And Impact Of Delisting In Malaysia	12000.00	On Going
112	Relationships Between Gold Price, Oil Price, Consumer Price Index, Stock Market Index And Exchange Rates: An Empirical Analysis From Malaysia	12000.00	On Going
113	The Impact Of Asian Financial Crisis (Afc) And Global Financial Crisis (Gfc) On Price Of Commercial Properties In Malaysia	12000.00	On Going
114	Computer Self-Efficacy And Attitude Toward The Internet Among Villagers Participating In The Community Broadband Center Program	12000.00	On Going
115	Strategic Is Planning Practices Among Small And Medium Enterprises In Malaysia	12000.00	On Going
116	Kajian Pengesanan Graduan Program Ijazah Sarjana Muda Keusahawanan Universiti Utara Malaysia 2011.	12000.00	On Going
117	An Application Of A Career Self-Management Model In Malaysian Public Universities	12000.00	On Going
118	Keusahawanan Sebagai Kerjaya Pilihan: Satu Kajian Penerokaan Dalam Kalangan Pelajar Kolej Komuniti Di Utara Semenanjung Malaysia	12000.00	On Going
119	Kajian Persepsi Pengurusan Dana Masjid	12000.00	On Going
120	Islamic Home Financing Facilities And Access Housing For The Low Income Earners	12000.00	On Going
121	Re-Modelling R&D In Malaysia: Implications For Follow-Up Research And After Decision Evaluation	12000.00	On Going
122	Investigating On Risk Assessment On Technology Implementation In Waste Management: A Case Study Of Material Recovery Facility Of Malaysia	12000.00	On Going
123	Profil Pelajar Sukan Olahraga Dan Doping Di Sekolah-Sekolah Utara Malaysia	12000.00	On Going

RESEARCH GRANTT – UUM (CASE STUDY) FOR YEAR 2010 - 2012

No.	Title	Value (Rm)	Status
1	Case Study Of Sme's Family Business: Issues Of Succession And Conflict	10000.00	Completed
2	Lcl Corporation	10000.00	Completed
3	Tadika Bonda: Mothers' Great Helpers	10000.00	Completed
4	Kusatex Finest Textile Solution: The Success Established	10000.00	Completed
5	Strategic Change And Transformation: A Case Study At Malayan Banking Berhad (Maybank)	10000.00	Completed
6	Spce And Revenue Issues: Provision Of Terminal Facilities For The Design Of Low Cost Terminals (Lcts) At Kuala Lumpur International Airport (Klia) Malaysia	10000.00	Completed

RESEARCH GRANTT – UUM (CASE STUDY) FOR YEAR 2010 - 2013

No.	Title	Value (Rm)	Status
1	Performance Measurement System At Era Edar Marketing Sdn Bhd	10000.00	On Going
2	Management Accounting And Control Techniques: A Case Study At Noraini Cookies Worldwide Sdn. Bhd.	10000.00	On Going
3	Creative & Innovative Solution Through Value Management In Malaysian Construction Industry: Case Study On Kuala Lumpur International Airport (Klia) & Low Cost Carrier Terminal (Lcct) Projects	10000.00	On Going
4	Analisis Pelaburan Emas Fizikal Dan Pembelian Syer Bank Rakyat Dari Perspektif Muamalat Islam	10000.00	On Going
5	Investigating The Total Economic Value Of Eco-Tourism In Pulau Payar Marine Park	10000.00	On Going
6	Decision Making Approaches In Project Management: A Study In The Malaysian Construction Industry	10000.00	On Going
7	Mimos Berhad: A Case Study On Innovation And Commercialization	10000.00	On Going
8	Assessment On Management Effectiveness Of Pulau Payar Marine Park	10000.00	On Going
9	The Importance Of Project Management: A Case Study At Klia Premier Holdings Berhad	10000.00	On Going
10	Evaluating Insurance Claim Of Stolen Generator Set	10000.00	On Going
11	The Shaking Of A Giant Conglomerate	10000.00	On Going
12	A Case Study Of Mara Entrepreneurs Program	10000.00	On Going
13	Development Of Partnership Quality On University-Industrial Link (Uil) Success. A Case Study Between Stml And Siltera	10000.00	On Going
14	Departmental Web Content Management System For Stml Information Sharing	10000.00	On Going
15	A Case Study On The Effectiveness Of Entrepreneurship Training Programs (Etp) For Young Malaysian: A Comparative Analysis Between Perlis Youth Department And Universiti Utara Malaysia	10000.00	On Going
16	Development Of Partnership On University-Industrial Link (Uil) Success: A Case Study Between Stml & Buffullo Park, Langkawi	10000.00	On Going
17	Preferences Of Pedestrian Facilities By Business And Leisure Users: Case Study Of Commercial Areas In Malaysia	10000.00	On Going
18	Nuatica Group Cafe: Costing Practices Insights	10000.00	On Going
19	Development Of Seamless Freight Movements At Malaysia And Thailand Cross Border Checkpoints	10000.00	On Going
20	Baron Group Of Companies: A Case Study In Strategic Decision Making In Hotel Industry	10000.00	On Going
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22	Issues And Challenges Of Haulage Industry After Liberalization	10000.00	On Going
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