UNIVERSITI SAINS MALAYSIA

The APEX UNIVERSITY

SECOND PHASE 2014-2025

PLANNING AND IMPLEMENTATION PLAN

Future Relevance
Sustainability
Uniqueness
Humanity
Universality
Change
Sacrifice
7
Thrusts

Quality • Equity • Availability • Accessibility • Affordability • Appropriateness
Transforming Higher Education for a Sustainable Tomorrow
UNIVERSITI SAINS MALAYSIA
The future • Uniqueness • Sustainability • Humanity • Universality • Change • Sacrifice
USM
UNIVERSITI SAINS MALAYSIA
Mission
USM is a pioneering, transdisciplinary research intensive university that empowers future talent and enables the *bottom billion* to transform their socio-economic well-being

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KAMI MEMIMPIN

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PEK 8239

Affirming The APEX Manifestation – The Next Phase

USM ideated and submitted the Accelerated Programme for Excellence (APEX) proposal in April 2008 and was accorded the prestigious status in September 2008 by the Ministry of Higher Education.

Articulated within the **"Black Book"** entitled **"Transforming Higher Education for a Sustainable Tomorrow",** it provided a compelling and sound framework of USM's approach via a transformational canvas premised upon Blue Ocean Strategy, and outlined definitive steps based on the Four Actions Framework consisting of **'eliminate', 'reduce', 'raise'** and **'create'** in the quest to then embed a culture of excellence that transcends USM's comprehensive operational processes by strategically thinking along the theme of sustainable development as a vehicle for the promotion of 'wellness and well-being of the human ecosystem'.

Between 2008 and up to 2012, the manifestation of the original APEX agenda was subjected to the requisite adjustments and adaptations, necessitated by the need to infuse newer ideas, contemporaneous issues as well as current focuses on humanity, and importantly, to address how an institution of higher learning can play a distinctive role towards the well-being of mankind in the future.

USM is intent on realising the embedded culture of excellence through a comprehensive and holistic higher education process, within the context of a **'connected'** ecosphere, through exceptional organisational development, instituting mechanisms which attach a premium on the growth and enhancement of human capital, with the consequential positive impact to society, the nation and ultimately the world.

Higher Education ecology cannot now be viewed as splintered and fractured, the preserve of select **'silos'** but must be seen as a synergistic force amalgamating the power of knowledge and the dynamics of human capital to produce leading-edge value-driven outcomes to serve humanity and make the planet a better place – qualities congruent with USM's motto of **"We Lead"** and further affirmed as key principles ensconced within the original APEX submission through its vision, mission, thrusts and values statements.

The time is now opportune for USM to migrate from the thinking and idealism drawn from the original APEX submission to actualisation through aggressive but realistic action, and to operationalise the mandates into tangible outcomes. Forging ahead with clarity of purpose and passionate conviction by all responsible would require determined focus - of strategies into implementable action plans, of ideas into measurable outputs, of archaic bureaucracy into efficient work processes, and of curriculum inertia into knowledge-based humanistic world-view.

This is consistent with the current menu of enablers predicated on technology, creativity and innovation as agents of change to mobilise the entire institutional entity to fulfil the needs of contemporary planning framework and existing focus, allowing USM to push the excellence agenda in a holistic manner – transforming the livelihoods of those peripheral to society at large, the much-neglected bottom billions, to levels equitable with outstanding achievements and universally-accepted standards of dignity and humanity, and pursuing endeavours relevant to people and planet whilst being conscious of the need to seek and be hopeful of the blessings of the Divine.

The next crucial phases of the APEX agenda, encompassing the two decades between 2013 to 2022 and 2023 to 2032 will accentuate creative and innovative efforts to pioneer new opportunities developed along the tenets of smart collaborations and partnerships, a more cost-effective working model consistent with empowerment and continuous learning, a clear and realistic **'positioning'** configuration emphatic of the university's strengths, displaying efforts built upon the spirit of cooperation, volunteerism and entrepreneurship, an international mutually-beneficial disposition of the **'win-win'** scenario, the vigorous nurturing of potential talent, and the optimisation of spaces and facilities, all of which augmented in a **'connected'** ecosphere in the noble pursuit and advancement of the academics, the students, the supporting staff as well as the all-important research elements, in a seamless and integrative manner.

USM's next APEX phase will parallel, to an extent, the enormous contributions akin to the discovery of the internet and the evolution of the World Wide Web – not merely in terms of interconnectivity and virtuality, but in impactful contributions beyond knowledge discovery and enhancement, in the nurturing and fostering of humanity in a holistic fashion, transcending the physical and the mind, and able to mould ethical citizens towards the transformation and strengthening of civilization.

The APEX future, of the next two decades, will undoubtedly be a consistent **'work-in-progress'** to attain desired targets, but it will be mindful as well of the need to sacrifice, where necessary, the obsession on **'numbers'** in the over-arching interest of real change, and the evolution of research and teaching paradigms to produce **'unique'** global citizenry.

Concomitantly, the next APEX phases will be engaging, balanced and relevant in fulfilling the aspirations of the nation and society, ensuring the delivery of a talent repository equipped with a global mindset, replete with the necessary values and ethical stance, yet imbued with understanding of the requisites of fundamental knowledge as well as the demands and responsibilities expected of being in a **'university'.** USM acknowledges the huge expectations of the nation and its people, the trust provided by the Ministry, the demands of global and local competition and has crafted the necessary strategies and articulated decisive statements – as **"We Lead",** so too will we deliver, insyaAllah.

Professor Dato' Dr Omar Osman
Vice-Chancellor USM

The Context of APEX

Universiti Sains Malaysia (USM) was selected to implement the Accelerated Programme for Excellence (APEX) in 2008 (Figure 1). APEX is a fast track development programme to enable institutions of higher education to be recognised as world class entities. The programme aims to facilitate the university selected to be on an international level and also to motivate and help raise the level of excellence in higher education. The APEX programme was identified as one of the most critical initiatives to help transform Malaysian Higher Education. As a result of this initiative, the Ministry of Higher Education requested all local public and private institutions to submit their proposals for consideration to be selected as an APEX University, with the prestigious APEX status being awarded to the successful one.

USM's mission in implementing the APEX program is to become a pioneering university, trans-disciplinary and research-intensive in nature that empowers future talents and enables the bottom billions to transform their socioeconomic well-being.

"We aspire to lead and innovate in achieving excellence at the international level through advancing and disseminating knowledge and truth, instilling qualities that stress academic excellence and professionalism, developing holistic individuals and providing a strong commitment towards society's aspiration, the country's vision and universal aspirations".

USM also incorporated the concept of sustainability to achieve its vision as an APEX university, which is:
"Transforming Higher Education for a Sustainable Tomorrow"

This statement of the university's vision is based on its initial efforts to develop alternatives for the future. Sustainability is one of the five scenarios that encouraged Universiti Sains Malaysia to adopt the concept of university in the garden. Universiti Sains Malaysia is described as a large tree. This tree is symbolic of knowledge while the tree roots are nurtured with care by professionals who are committed and dedicated. The branches in turn, symbolise the holistic development of mind without losing sight of a sustainable relationship with nature.

There are several reasons why USM was selected to implement the APEX Programme

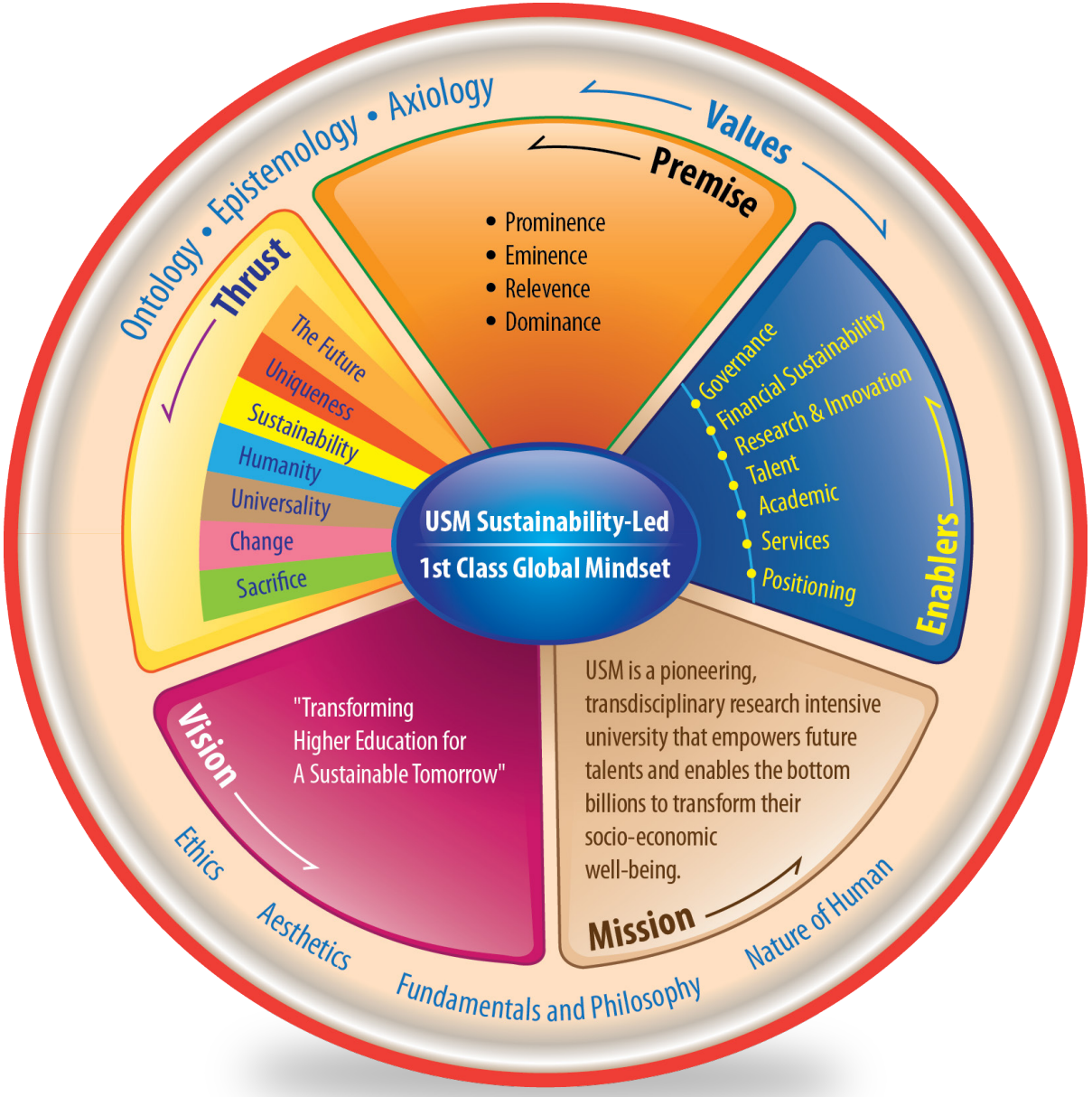
1. Outstanding achievements in teaching and learning programs as well as research and innovation justify awarding Universiti Sains Malaysia the status.
2. UniversitiSains Malaysia is in the best position to achieve world-class university status. UniversitiSains Malaysia has also developed basic infrastructure to compete globally and to attract quality employees as well as local and international students.
3. UniversitiSains Malaysia is the only university to receive five-star recognition by the Malaysian Qualifications Agency (MQA) and this makes UniversitiSains Malaysia the best university in terms of research and contributions to the community.
4. UniversitiSains Malaysia's sustainability programme was acknowledged by the United Nations University's Regional Centre of Expertise (UNU-RCE) in 2005.
5. UniversitiSains Malaysia has created a structured and systematic research programme in line with the integration between science and arts.
6. Since 2004, UniversitiSains Malaysia has rolled out institutional plans for the future up to 2025. This plan outlines a number of global reach features and also programs with sustainability–led concept.
7. In 2007, UniversitiSains Malaysia was selected by the Ministry of Higher Education as one of four research universities in Malaysia.

These outstanding achievements prove that USM is able to continue to move forward to become a world-class university.

As the first Apex University, Universiti Sains Malaysia adopts a two-stage approach. First, the university intends to be world-renowned for its sustainability concepts. Second, it aims to be a leader in the sustainability process.

In this effort, Universiti Sains Malaysia has embarked on several initiatives to take on social responsibility in development by protecting the ecology, conserving natural resources and promoting human development in the framework for campus sustainability. To achieve this mission, Universiti Sains Malaysia will initialise steps to reconstruct the learning program, research and other activities without compromising environmental sustainability.

In enhancing this program, Universiti Sains Malaysia continues to move forward towards sustainability by making changes in the teaching and learning process, research and innovation activities and services to produce outstanding graduates. However, the main goal of this program is to support efforts to improve human well-being, especially the world's bottom billion. In the second phase of APEX, USM will endeavor to produce outcomes as shown in Figure 2

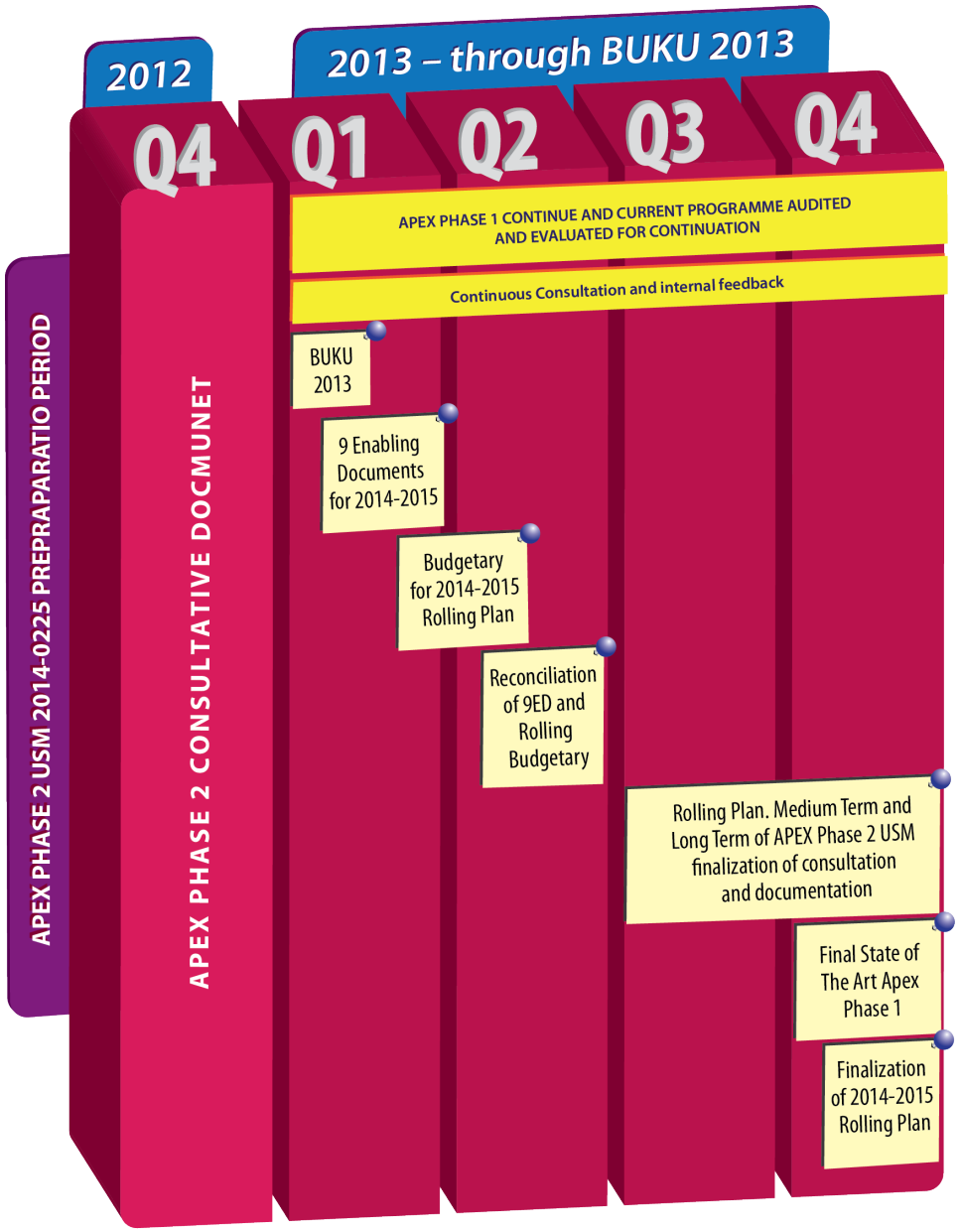


Ecosphere of APEX Second Phase

Figure 2

The Pathways to APEX 2 2014-2025

During Quarter 4 of 2012, drafting of the Apex Phase 2 Consultative Document was initiated (Figure 3). At the same time, APEX Phase 1 continues on its course while its current programme undergoes auditing and evaluation for continuation. Early in Quarter 1 of 2013, BUKU 2013 which determines the direction for the year is poised to be launched. Closely following this, nine enabling documents for 2014 to 2015 will be prepared. Midway between Quarter 1 and 2, budgetary calculations for 2014 to 2015 Rolling plan will begin. While work on the Rolling Plan continues, Medium Term and Long Term USM APEX Phase 2 Consultation and finalization of documentation will take place in Quarter 3. During Quarter 4, the final State of the Art APEX Phase 1 document will be released and finalization of 2014 to 2015 rolling plan will be completed.



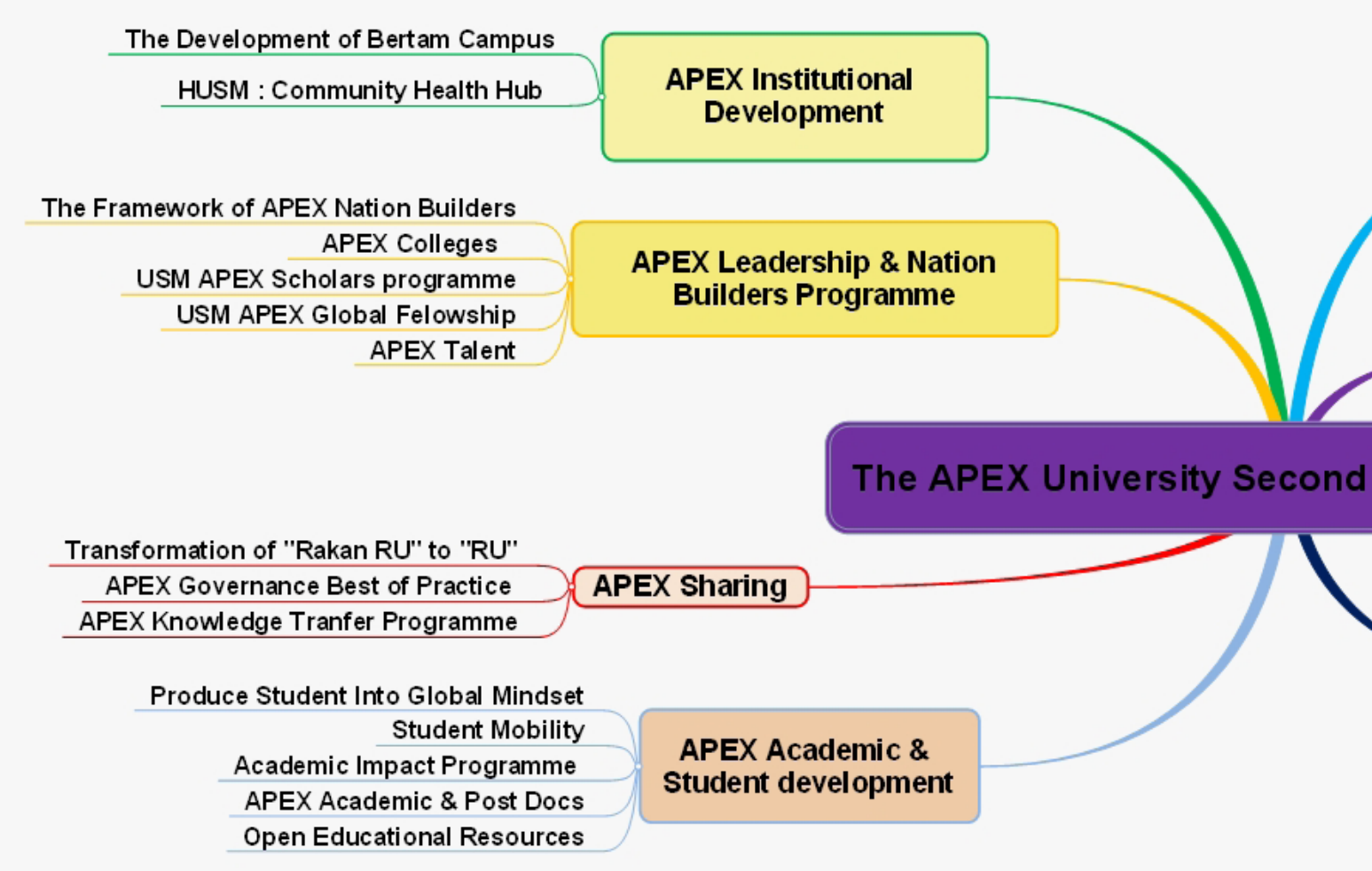
The Pathways To APEX Phase 2 – 2014-2025

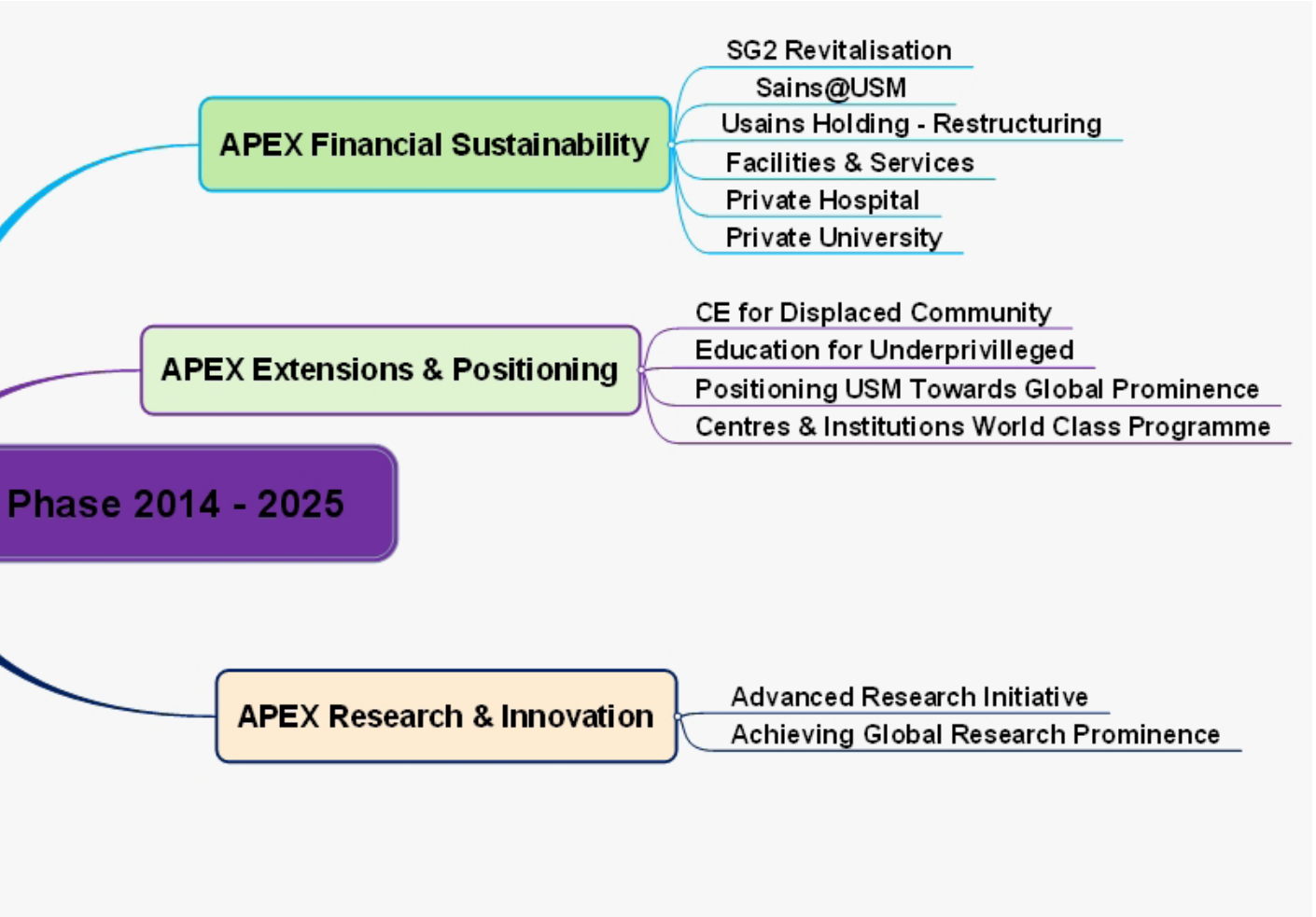
Figure 3

Conclusion

In conclusion, under the APEX aegis, USM intends to position itself as a world renowned university for sustainability, nurturing, learning, conducting research and providing services relevant to the future. The transformaation as leading sustainability-led university will enable the orientation towards a growth and development model that focuses on safeguarding environmental and natural resources, food security, energy production as well as socio-cultural diversity and lifestyle within an engaging trans-diciplinary mode. In pursuing the path of sustainability as the way forward, we hope to embrace the protection of the multiple ecosystems, the conservation and restoration of resources, as well as heightening human and intellectual capital. USM will further position itself to facilitate the convergence of existing and future global and universal aspirations as outlined in the mission statement, with the ultimate quest of improving the livehood of billions at the base of the world's socio-economic pyramid.

OVERVIEW


The Development of Bertam Campus
HUSM : Community Health Hub
APEX Institutional Development
The Framework of APEX Nation Builders
APEX Colleges
USM APEX Scholars programme
USM APEX Global Felowship
APEX Talent
APEX Leadership & Nation Builders Programme
The APEX University Second
Transformation of "Rakan RU" to "RU"
APEX Governance Best of Practice
APEX Knowledge Tranfer Programme
APEX Sharing
Produce Student Into Global Mindset
Student Mobility
Academic Impact Programme
APEX Academic & Post Docs
Open Educational Resources
APEX Academic & Student development


Phase 2014 - 2025
APEX Financial Sustainability
SG2 Revitalisation
Sains@USM
Usains Holding - Restructuring
Facilities & Services
Private Hospital
Private University
APEX Extensions & Positioning
CE for Displaced Community
Education for Underprivilleged
Positioning USM Towards Global Prominence
Centres & Institutions World Class Programme
APEX Research & Innovation
Advanced Research Initiative
Achieving Global Research Prominence

Note

This document shall be read together with the APEX University Second Phase 2014-2025 document which spell out the overall framework of APEX in the 2nd Phase. This document spells out planning and implementation programs and programs to realize the plan. The costs and overall budget plan are over and above other financial supports from the Federal government to USM such at the Research University Grants, the OPEX as well as the HUSM funding. The budgets, however, have taken into considerations most of the capital expenditure, temporary human resource requirements, replacements of aging equipment as well as their maintenances.

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1

APEX INSTITUTIONAL DEVELOPMENT

1.1 THE DEVELOPMENT OF BERTAM CAMPUS

This proposed development will take place on the existing Bertam Campus site at Lot 12675, Mukim 6, North Seberang Perai District, Pulau Pinang with an area of 45.65 hectares (113 acres). At present, the Advanced Medical and Dental Institute (IPPT) is located here and this second phase of development is aimed at facilitating Bertam to become the fourth USM Campus based on the theme of Healthy Lifestyle (in line with the Cabinet Ministers decision on 2002).

This development project will involve the shifting of academic, research and service centres from the Main Campus, namely the School of Pharmacy, Centre for Drug Research, Doping Control Centre, National Poison Centre as well as the Centre for Advanced Analytical Toxicology Services. This move is expected to increase the capacity of this campus as well as reduce congestion within the main campus and to allow for the establishment of a new additional academic programme at the undergraduate level.

The creation of this new academic school, the School of Lifestyle and Sustainability Sciences will facilitate the combination of the existing skills as well as to complement the function and role of IPPT. In addition to this, a Post Graduate Studies Institute will also be established to generate medical, dentistry and science specialists who are competent, holistic and contemporary.

This second phase development will enable IPPT to become the tertiary reference centre in the field of clinical services as well as other related fields such as oncology/radiotherapy and translational medicine which includes Cancer Treatment, Nuclear Medicine, Regenerative (stem cell), Transfusion Medicine, Integrative Treatment and Craniofacial.

This development will also involve the extension of a specialist hospital with the addition of 200 units of beds. With the presence of these new academic, research and service centres, research and academic activities especially within the field of health sciences will be increased in line with the initial objective of establishing the Bertam Campus. This will also allow for the creation of financial generation, particularly in the Medical and Health Tourism sector.

Cost for Physical Development and the Purchase of New Equipment at Bertam Campus

Direct Expenditure (DE) Method

No	Component	Proposed Area (m^2)	Cost (RM)	Campus
1	Satellite Campus University Services Building	6350.00	22,225,000.00	IPPT Bertam
2	Academic and Post Grad Complex	4265.00	14,927,500.00	IPPT Bertam
3	School of Pharmacy	33000.00	115,500,000.00	IPPT Bertam
4	Centre for Drug Research	8780.00	30,730,000.00	IPPT Bertam
5	Doping Control Centre	3660.00	12,810,000.00	IPPT Bertam
6	National Poison Centre	4075.00	14,262,500.00	IPPT Bertam
7	CAATS	5915.00	20,702,500.00	IPPT Bertam
8	Equipment and Machinery Shifting Costs		15,000,000.00	IPPT Bertam
9	Advanced Centralized Research Lab	14000.00	70,000,000.00	IPPT Bertam
10	Dental & Craniofacial Referral Centre	4500.00	18,000,000.00	IPPT Bertam
11	Islamic Centre & Hospice	6000.00	10,000,000.00	IPPT Bertam
12	Students Accomodation	38250.00	100,000,000.00	IPPT Bertam
13	Redevelopment of Existing J Block at Main Campus		65,000,000.00	Main Campus
14	Main Infrastructure Costs		44,842,500.00	IPPT Bertam
15	Consultant Fees		56,000,000.00	IPPT Bertam
16	New Equipment and Machinery Costs		90,000,000.00	IPPT Bertam
Total			**700,000,000.00**	

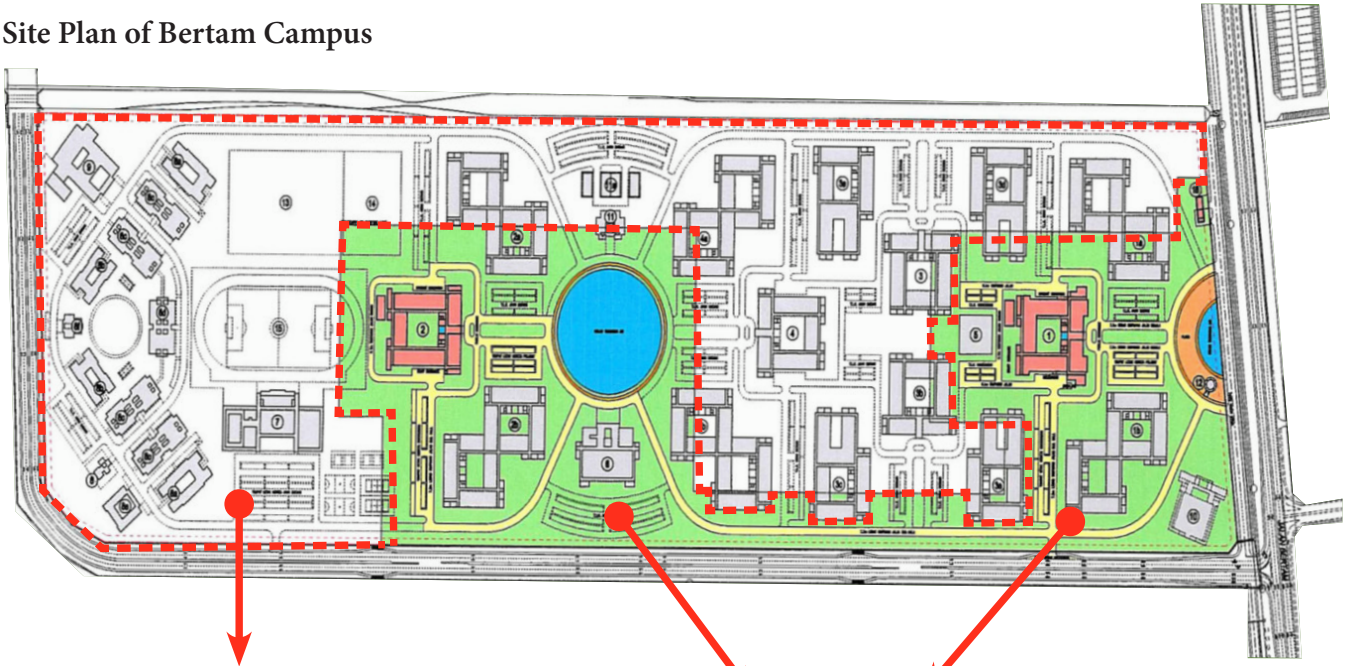
Public Private Partnership (PPP) Method

No	Component	Proposed Area (m^2)	Cost (RM)
1	***200 Beds Teaching and Research Hospital - Oncology and Translational Medicine, Stem Cell and Transplant (with Equiqments) - (1 Bed= RM1 Mil.)***	30000.00	200,000,000.00
	Consultant Fees and Reimbursables (15% from total cost)		30,000,000.00
	Infrastructure Cost (Road, Drainage, Sewerage, Fire Hydrant, Street Lighting, Contribution to Authorities, Substation, 11kV and Others) (20% from total cost)		40,000,000.00
	Total Cost		**270,000,000.00**

Summary

No	Breakdown of Components	Total Cost (RM)
1	Direct Expenditure (DE) Cost	700,000,000.00
2	Public Private Partnership (PPP) cost - 200 Beds Teaching and Research Hospital	270,000,000.00
Total		**970,000,000.00**

Site Plan of Bertam Campus



1.2 HUSM: COMMUNITY HEALTH HUB

This endeavour is geared to formulate a specific strategy in enabling HUSM at the USM Health Campus to become a 'Community Health Hub'. At present, the USM Health Campus already provides several healthcare and educational service for the benefit of both the local community in Kelantan as well as the community at large of the entire nation. Using this existing leverage, this campus will be strengthened in terms of capacity and capability, by integrating new development projects at the campus, including a private specialist hospital and medical college.

This undertaking will basically be a two pronged approach where the development concept will entail both the introduction of new physical development projects as well as the enhancement of existing services and facilities currently available at HUSM. The key new physical development components are:

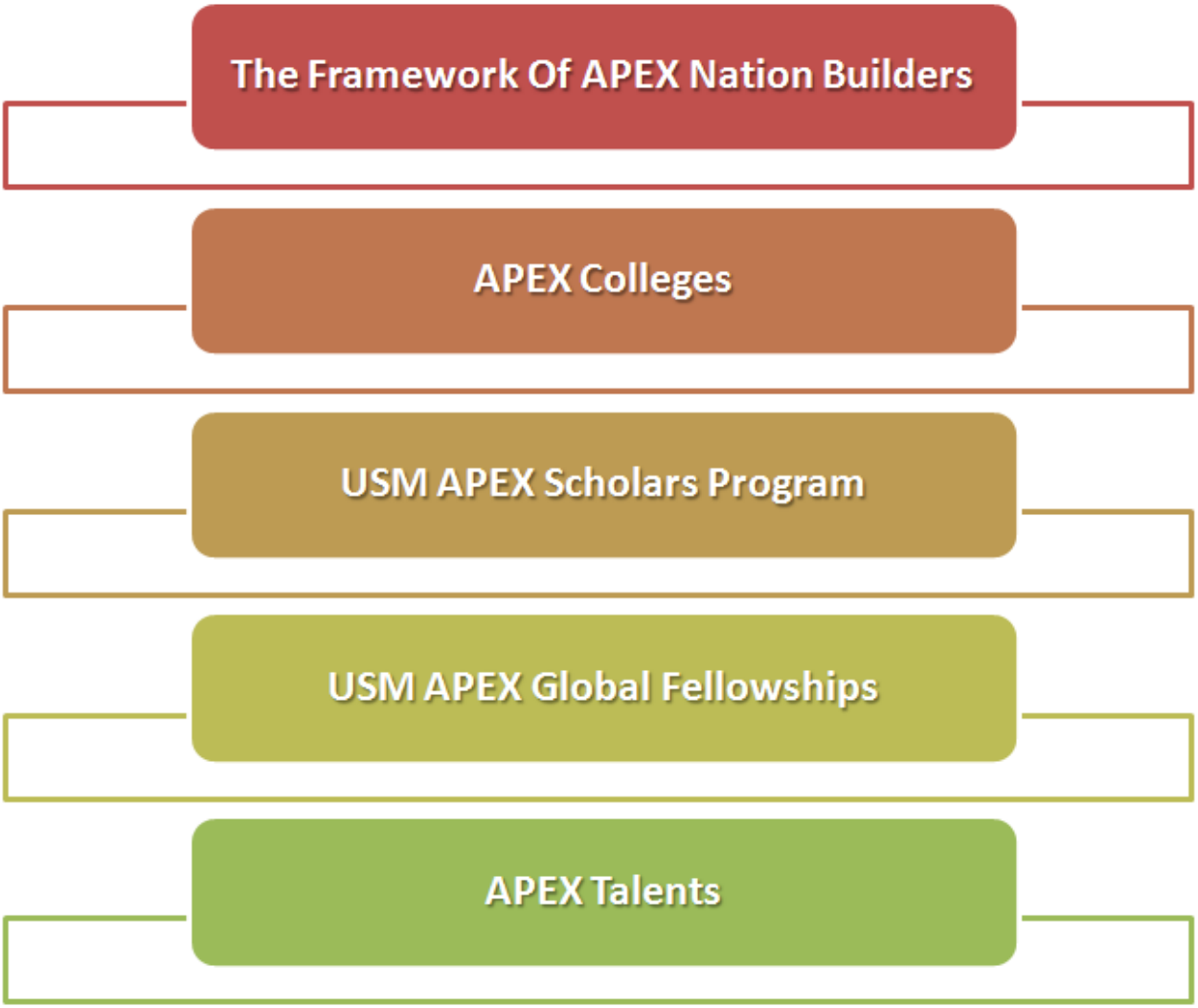
- The development of a new 100 bed private specialist hospital;
- The development of a new private medical college to cater for 500 – 1,000 students in specialist medical fields;
- The development of a new visitors accommodation block;
- The development of a new convention centre (750 pax)

Since its inception in 1983, HUSM has yet to increase its number of beds from the original 769 units. To cater for the increasing demand in healthcare treatment as well as the increase in medical specialist students, a new Clinical Block is proposed with the aim of creating 580 additional beds to meet this pressing need and further propel HUSM and the USM Health Campus as an integrated hub for community healthcare.

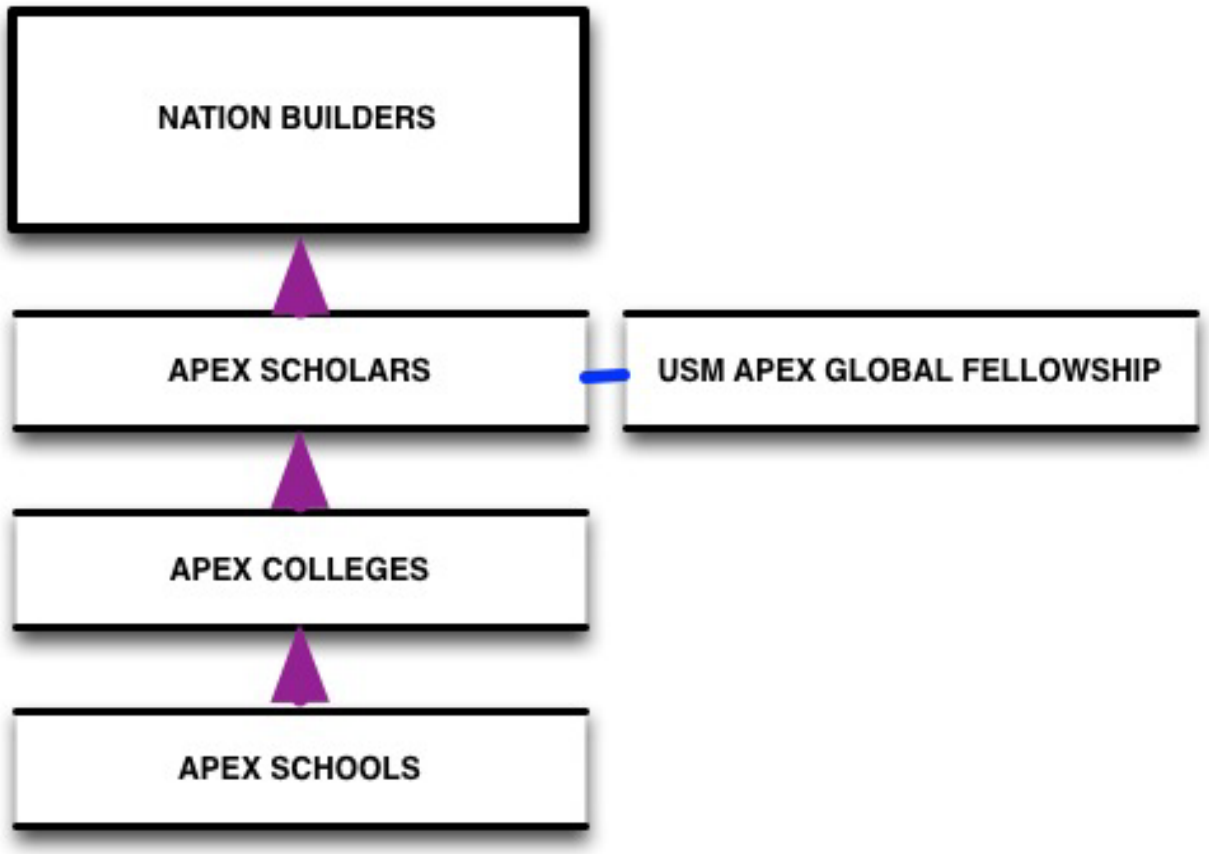
Total Estimated Cost

RM416,000,000.00

2 APEX LEADERSHIP AND NATION BUILDERS PROGRAM


The Framework Of APEX Nation Builders
APEX Colleges
USM APEX Scholars Program
USM APEX Global Fellowships
APEX Talents

2.1 THE FRAMEWORK OF APEX NATION BUILDERS PROGRAM



2.2 APEX COLLEGES

Introduction :

In today's globalized economy and as the world is getting more borderless, the job market is becoming increasingly global. Globalized business require talent to compete at the global level. In fact, government agencies too are becoming global in nature. A global graduate is not simply a highly educated young adult who can speak foreign language. Employers want talented graduates who can work with people from different backgrounds and embrace different perspectives. Competition is becoming increasingly stiff where employers will seek after graduates who are well equipped for the global market.

APEX University envisioned to nurture, groom and produce nation builders and future leaders of various fields with global mindset.

Project Name

APEX College

Objective And Strategy

This is a preparatory college to groom, prepare and produce students for USM undergraduates programmes.
The college will offer pre-U programmes using specially designed curricullums, benchmarked and modelled after International Baccalaurette (IB) World School.

Implementation Plan

USM will collaborate with MARA and other private institutions which offer pre-U and matriculation programmes.

Output

Each year USM will produce about 500 students for various fields namely Medical and Health Sciences, Pharmaceutical Sciences, Liberals Arts, Accounting and Finance, Economics, etc

Budget

No.	Programme	2014-2017 (RM)	2018-2021 (RM)	2022-2025 (RM)	Total (RM)
i.	APEX College Operational Budget: i.To develop Curriculum based on USM requirement suit to USM APEX and review every 3 years ii.To monitoring the programme (based on the number of college Involved according to regional/zone) (6 times per year) Zone 1 : Northern Zone 2 : East Coast Zone 3: West Coast Zone 4:Central (KL.Wilayah) Zone 5: Southern Zone 6: Sabah & Sarawak (Borneo)	500,000.00 1,000,000.00 per year x 4 years 4,000,000.00	500,000.00 1,200,000.00 per year x 4 years 4,800,000.00	500,000.00 1,500,000.00 per year x 4 years 6,000,000.00	1,500,000.00 14,800,000.00
				Grand Total	**16,300,000.00**

Milestones And Dates:

2014-2017	2018-2021	2022-2025
500 students x 4 years	500 students x 4 years	500 students x 4 years

Conclusion

This program is planned as special admission programme as a feeder for APEX University. This is part of long term strategy to produce student with global mindset started with special programme for PRE-University namely as APEX College

2.3 APEX SCHOLARS

- A multidisciplinary, partially residential, academic programme for USM undergraduates.
- Offer the freedom to explore across disciplines, a wide range of extracurricular and overseas opportunities, and a close community of exceptionally motivated and talented students.
- The aim is to produce graduates with the intellectual rigour, initiative, and innovative spirit to make significant contributions to society.
- Provide an environment for exploration, collaboration, and creative discovery.
- Unique modules are designed to develop interdisciplinary thinking. Learning extends beyond the classroom through a wide range of research, internship, community involvement, and study abroad opportunities.
- Students learn from each other by working and discussing together in a host of different settings.
- 30% of their academic work, and 70% in their home school.
- An honours programme, graduate with an honours degree from their school, and a certificate that recognises them as University Scholars.

Estimated cost
RM10,000,000

2.4 USM APEX GLOBAL FELLOWSHIP

This is a specific undertaking to attract exceptional undergraduate talent from the world over to Malaysia to pursue their post graduate studies in USM. This project is expected to increase nation building and community synergy through the participation of global talents.

Estimated Cost
RM21,000,000

- Long term

2.5 APEX TALENT

Introduction

- Enhance USM talent with skills, tools, information, and above all, the authority and responsibility for their work.
- Empowerment is giving input with integrity and accountability (i.e. employees involvement), and management seriously considering the input.
- The University needs to focus more on is 'talent enablers' - tools that support talent management and enable individuals to take control of their own talent development by empowering them with roles and responsibilities and also at the same time continuously improving the enablers in order to also empower future talents in their current situation and needs.

The 5 main strategies are as follows:

i. Workforce Composition
ii. Lean Workforce
iii. Leadership & Talent Development
iv. Strategic Workforce Planning
v. Top Management & Staffs Engagement

Estimated Cost

RM50,000,000

2.5.1 Workforce Composition

Strategy
Staff Mapping and Human Resource Auditing.

Action Plan
i. Data Collecting.
ii. Data Analyzing.

Milestone

Phase	Target
2014-2017	▪ Ratio Academic Staff to Non Academic Staff is 1:2 ▪ Audit on staffing
2018-2021	▪ Ratio Academic Staff to Non Academic Staff is 1:2 ▪ Comprehensive data compilation on staff
2022-2025	▪ Ratio Academic Staff to Non Academic Staff is 1:2 ▪ A more inclusive staff composition and ratio

KPI
To achieve the Ratio of Academic Staff to Non Academic is 1:2.

Expected Outcome
1. Enhanced Work Culture.
2. Enhanced Delivery Services.
3. Better Staff Performance.

Estimated Cost
RM 100,000.00

2.5.2 Lean Workforce

Strategy

i. Rightsizing
ii. Optimization of Workforce
iii. Mobile Workforce

Action Plan

i. Lean Approach Laboratory
ii. Optimization Laboratory
iii. Identify needs and costing, acquisition and feasibility of location for mobile workforce

Milestone

Phase	Target
2014-2017	▪ Ratio Academic Staff to Non Academic Staff is 1:2 ▪ Workload analysis – elimination of wastage ▪ Implementation of Mobile Workforce Phase 1
2018-2021	▪ Ratio Academic Staff to Non Academic Staff is 1:2 ▪ Integration of lean changes - department restructuring ▪ New Technology update (Phase 2)
2022-2025	▪ Ratio Academic Staff to Non Academic Staff is 1:2 ▪ A better Staff ratio for the organization ▪ New Technology update (Phase 3)

KPI

i. Ratio Academic Staff to Non Academic Staff 1:2
ii. Multitasking Skill
iii. One Tablet Every Officer

Expected Outcome

1. Enhanced Work Culture.
2. Enhanced Delivery Services.
3. Better Staff Performance.
4. Pool Of Leaders Identified For Succession.

Estimated Cost

RM 4.2 Millions

2.5.3 Leadership And Talent Development

Strategy

i. Professional Administrator Development Initiative (PADI).
ii. Professional Administrator Development Initiative for Non Academic Staffs

Action Plan

i. Networking with external parties.
ii. Establish a proper succession planning.
iii. Selection of talent.
iv. Competency needs assessment.

Milestone

Phase	Target
2014-2017	20 participants every year abroad / 200 locally
2018-2021	20 participants every year abroad / 200 locally
2022-2025	20 participants every year abroad / 200 locally

KPI

i. 20 participants oversea programmes.
ii. 200 participants local programmes.

Expected Outcome

i. Enhanced Work Culture.
ii. Knowledge Enhamcement.
iii. Staff Profiling.
iv. Pool Of Leaders Identified For Succession

Estimated Cost

RM1.2 Millions

Strategy
Nurturing and grooming best talent.

Action Plan
i. Networking with external parties.
ii. Establish a proper succession planning system.
iii. Selection of talent.
iv. Competency needs assessment.

Milestone

Phase	Target
2014-2017	▪ 10 programs (500 participants) per year ▪ Assessment of Talents
2018-2021	▪ 10 programs (500 participants) per year ▪ A pool of competent staff
2022-2025	▪ 10 programs (500 participants) per year ▪ Pool of Leaders identified for Succession

KPI
10 programmes (500 participants per year).

Expected Outcome
i. Enhanced delivery services.
ii. Better staff performance.
iii. Pool of leaders identified for succession.
iv. Knowledge enhancement and staff profiling.

Estimated Cost Per Year
- RM 1.8 Millions.
- RM 1.2 Millions

Strategy

Getting the best talent through Visiting Professor Program

Action Plan

i. Announcement/promotion to PTJ's.
ii. Advertise on USM Website.
iii. Identify the best University or Research Organization

Milestone

Phase	Target
2014-2017	15 appointment per year (Short Term)
2018-2021	15 appointment per year (Mid Term)
2022-2025	15 appointment per year (Long Term)

KPI

i. 15 Staff per year
ii. Short term/mid term/long term.

Expected Outcome

i. Knowledge enhancement.
ii. Academic staff profiling.

Estimated Cost Per Year

RM 1.5 Millions.

Strategy
Getting the best talent through Post-Doctoral Program

Action Plan
i. Announcement/promotion to PTJ's.
ii. Advertise on USM Website.
iii. Identify the best University and Research Organizations

Milestone

Phase	Target
2014-2017	38 appointments per year
2018-2021	38 appointments per year
2022-2025	38 appointments per year

KPI
i. 38 appointments per year.
ii. Universiti is able to identify talents for its future Academic Staffs.

Expected Outcome
i. Knowledge enhancement.
ii. Academic staff profiling.

Estimated Cost Per Year
RM 3 Millions.

Strategy
Getting the best talent through Academic Attachment Initiative.

Action Plan
i. Announcement/promotion to PTJ's.
ii. Advertise on USM Website.
iii. Identify best University and Research Organizations

Milestone

Phase	Target
2014-2017	6 staff abroad and 12 locally
2018-2021	6 staff abroad and 12 locally
2022-2025	6 staff abroad and 12 locally

Expected Outcome
i. Knowledge enhancement.
ii. Academic staff profiling.

Estimated Cost Per Year
RM 1 Millions.

2.5.4 Strategic Worforce Planning

Strategy
Human resourse strategic plan.

Action Plan
Strategic planning laboratory.

Milestone

Phase	Target
2014-2017	Development of HR Strategy Canvas and Phase 1 Implementation
2018-2021	Revisit Phase 1, Phase 2 Implementation
2022-2025	Revisit Phase 2, Phase 3 Implementation

KPI
i. Good delivery system.
ii. Guiding roadmap for HRD/HRM.

Expected Outcome
i. Enhanced work culture.
ii. Enhanced delivery services.
iii. Better staff performance.

Estimated Cost Per Year
RM 300,000.00

2.5.5 Top Management And Staff Engagement

Strategy
Good governance with transparency and accountability.

Action Plan
Develop SOP of USM Staff community engagement.

Milestone

Phase	Target
2014-2017	Develop SOP of USM Staff Community Engagement and Phase 1 Implementation
2018-2021	Revisit Phase 1, Phase 2 Implementation
2022-2025	Revisit Phase 2, Phase 3 Implementation

KPI
Good delivery system.

Expected Outcome
i. Enhanced work culture.
ii. Enhanced delivery services.
iii. Better staff performance.

Estimated Cost Per Year
RM 300,000.00

Conclusion

This proposal document is the brainchild of talent development of the University for APEX Phase 2. Having the thought 'A plan is a plan until it is implemented' in mind, the Registrar Department is committed into fulfilling the details of strategy, action and implementation plan. As a matter of course, this agenda or better said a journey of adventure can only be successful with the commitment and support from the leaders of the University as well as the readiness for transformation in each and every individual in the University, Academic or Administration.

3 APEX SHARING

3.1 TRANSFORMATION OF "RAKAN RU" TO RU

Strategy

Transforming a "Rakan RU" (non-RU) University into a full-fledged Research University.

Action Plan

To become the mentor and provide non-monetary support to an identified "Rakan RU" University to enable it to achieve Research University status.

Milestone

Phase	Target
2014-2017	Rakan RU achieving 65% MyRA score for RU status
2018-2021	Rakan RU achieving 80% MyRA score for RU status
2022-2025	Rakan RU achieving 100% MyRA score for RU status

KPI

APEX University contributes actively to the creation of one additional full-fledged RU status university.

Expected Outcome

Increase the number of RUs in Malaysia in-tandem with the developed nation status that Malaysia will achieve by 2020.

Estimated Cost

RM 45 Million.

3.2 APEX GOVERNANCE BEST OF PRACTICES

▸ Universiti Sains Malaysia has always embedded the characteristics of good governance as the transformation catalyst for USM-APEX way forward. The main characteristics of internal good governance in Universiti Sains Malaysia is to establish and build a good internal system that would necessitate les intervention from the Government, hence build up the autonomy status of the University.

▸ The transformation of Universiti Sains Malaysia governance commences in 3 key activities, namely: services, administration and financial;

- nurturing and learning; and
- research and innovations

Introduction

Governance has been identified as one of the pillars in transforming Universiti Sains Malaysia to greater heights and status. It is considered as one of the routes and "a must have criteria" towards achieving greater autonomy as well as to ensure greater integrity and transparency.

Universiti Sains Malaysia has always embedded the characteristics of good governance as the transformation catalyst for the USM-APEX way forward. The main objective of internal good governance in Universiti Sains Malaysia is to establish and build a good internal system that would necessitate less intervention from the Government, hence enhancing the autonomous status of the University.

The transformation of Universiti Sains Malaysia's governance has commenced with 3 key activities, namely:

a) Services, administration and financial;
b) Nurturing and learning; and
c) Research and innovations.

To start with, via the gazzetting of USM APEX Constitution, the University has, achieved semi-autonomy and powers of discretion for the following:

a) Liberty to implement income generating measures;
b) Student Parliament;
c) Appointment of Professors to the Senate, and comprehensive TOR on the selection (elected members are equal in numbers with the appointed members)
d) Two independent representatives of Senate to be in elected to the LGU;
e) Appointment of Heads of PTJs through Nomination and Consultation. We have developed a comprehensive procedure for the consultative process.
f) Unlocked a number of important matter related to financial bureaucracy;
g) Liberty has been granted to USM to create additional posts;
h) Anyone can attend LGU meetings upon invitation by the Chairman (eg. KKA, PKAP, students' leaders etc.);
i) The Posts of Internal Auditors, Legal Advisor and Ombudsman have been created to ensure that checks and balances, accountability, transparency and transformation are achieved;
j) Whistleblower Protection;
k) Student admissions;
l) Separation of powers on Students's Discipline.

	List of Projects
a	University's APEX Constitution
b	APEX University's Constitution and Statutes
c	Repositioning Schools, Academic Centres, Academic Centres of Excellences, Research Centres of Excellence, Non-Academic Centres, Community Centres in accordance with the University's Constitution.
d	Human Governance (*Governan Insani*)
e	University's Full Autonomy
f	Students' Discipline Rules with freedom to be involved in politics outside the campus
g	Good Governance Structure with complete Documentation for all Schools/Centres/Institutes and Departments.
h	Empowerment
i	Management Operation Committee (*Jawatankuasa Pengurusan Operasi*)
j	Sustainability Council (*Majlis Kelestarian Universiti*)
k	Research Council (*Majlis Penyelidikan Universiti*)
l	Governance Committee

Objectives and Strategy

a) APEX University Act

USM's APEX Act will take into account all the terms, the mechanism and the best elements of governance and autonomy required by a world class university. The APEX Act may transcend existing rules so long as it does not contravene the country's existing laws, acts and provisions.

The APEX Act will strengthen USM's autonomy by adding the dimension of accountability. Thus, the mission to have the APEX Act must be a priority to ensure future excellence.

b) USM APEX Constitution and Statutes

The USM APEX Constitution is an initial platform towards achieving autonomy in line with the resolutions of the Ministry of Education. The APEX Constitution and Statutes will provide the necessary assistance so that USM can be transformed into a distinguished university under the APEX program. The APEX university status is an important agenda for the government to uphold its national higher education plan.

c) Repositioning Schools, , Academic Centres of Excellence, Research Centres of Excellence, Non-Academic Centres, Community Centres in accordance with the University's Constitution

The University shall ensure that the vision and mission of the University are achieved and the University's governance, at the same time, remains the most accurate and of the highest standard. Its impact will boost the University's position as one of the world's best universities and enhance the ability of the country to attract experts or the best workforce in the world.

d) Human Governance (Governan Insani)

Human Governance will help the University to make decisions that will benefit the stakeholders and society at large. Upholding values in the decision-making process and ensuring autonomy with accountability will help to build a culture of self governance and trust based upon principles of human governance. This will foster personal fulfillment on an individual level and mutual respect in the community, leading to success for the University.

e) University's Full Autonomy

In order to achieve full autonomy, the University must show that it is ready to implement good governance and integrity which are the important pillars in the management of any entity. The University ensures that it has the financial, management and administrative policies and procedures for declaration of interests in any situation where decisions may give rise to conflict of interest, unfairness, manipulation, misrepresentation, undue influence and abuse.

f) Student Discipline Rules with freedom to be involved in politics outside campus

One of the APEX projects is the reorganisation and drafting of disciplinary rules and regulations for University students, with special provisions to allow them political freedom outside the campus.

g) Good Governance Structure with complete Documentation for all Schools/ Centres/ Institutes and Department.

All schools/ centres/institutes/departments will have the best governance structure with full documentation to ensure the smooth process of governance. For example each PTJ will have documents that detail the establishment of the Schools/ centres/institutes/departments and what are the terms of reference for the Schools/ centres/ institutes/departments. With complete documentation, there would be no more doubts about the validity of legislation in terms of the establishment of the Schools/ centres/institutes/departments and the parameters of their jurisdiction and function.

h) Empowerment

USM is serious on ensuring the empowerment of all PTJs whereby the Deans, heads and directors of the Schools/ centres/institutes/departments will be given empowerment with accountability to carry out their tasks and responsibilities. Such empowerment along with the attending checks and balances requires accountability and the impact of this project will be to speed up the processes of operation and implementation of tasks by the University.

i) Management Operation Committee

The Management Operations Committee is a committee that is chaired by the Registrar to oversee and ensure that all operational processes in all campuses of Universiti Sains Malaysia are implemented in an efficient and orderly manner. The Management Operations Committee is responsible for reporting on matters involving the University to the Management Committee of the University.

j) Sustainability Council (Majlis Kelestarian Universiti)

The University has established the University's Sustainability Council to ensure that the mission and vision as a sustainable University will be achieved by 2020.

k) Research Council (Majlis Penyelidikan Universiti)

The Cabinet had proposed the setting up of a University Research Council in each research University. The University Research Council has its own precise terms of reference and consists of two members from the Board of Governors of the University and two from the industry outside of Universiti Sains Malaysia. The Vice Chancellor chairs the University Research Council.

l) Governance Committee

i. Jawatankuasa Gangguan Seksual
ii. Jawatankuasa Penilaian Kerja Luar
iii. Jawatankuasa Penilaian Tindakan RLKA/RPTKA

These committees will help to ensure the proper governance of the University and to ensure that the interests of the University are always protected.

Implementation Plan and Output

It cannot be denied that many reputable universities in the world are built on a culture of good governance and autonomy. These world class universities acknowledge that through supportive governance, an autonomous university with strong accountability and transparency will enhance quality teaching, research and effective management and administration.

As such, it is timely and essential to for USM to act now to establish clear governing principles which include administrative representations, students' representation and representation by external entities.

A classic case law precedent can be seen in Mckinney v. University of Guelph [1990] 3 S.C.R. 229:

The Lordship in the case held that "The universities are legally autonomous. They are not organs of government even though their scope of action is limited either by regulation or because of their dependence on government funds."

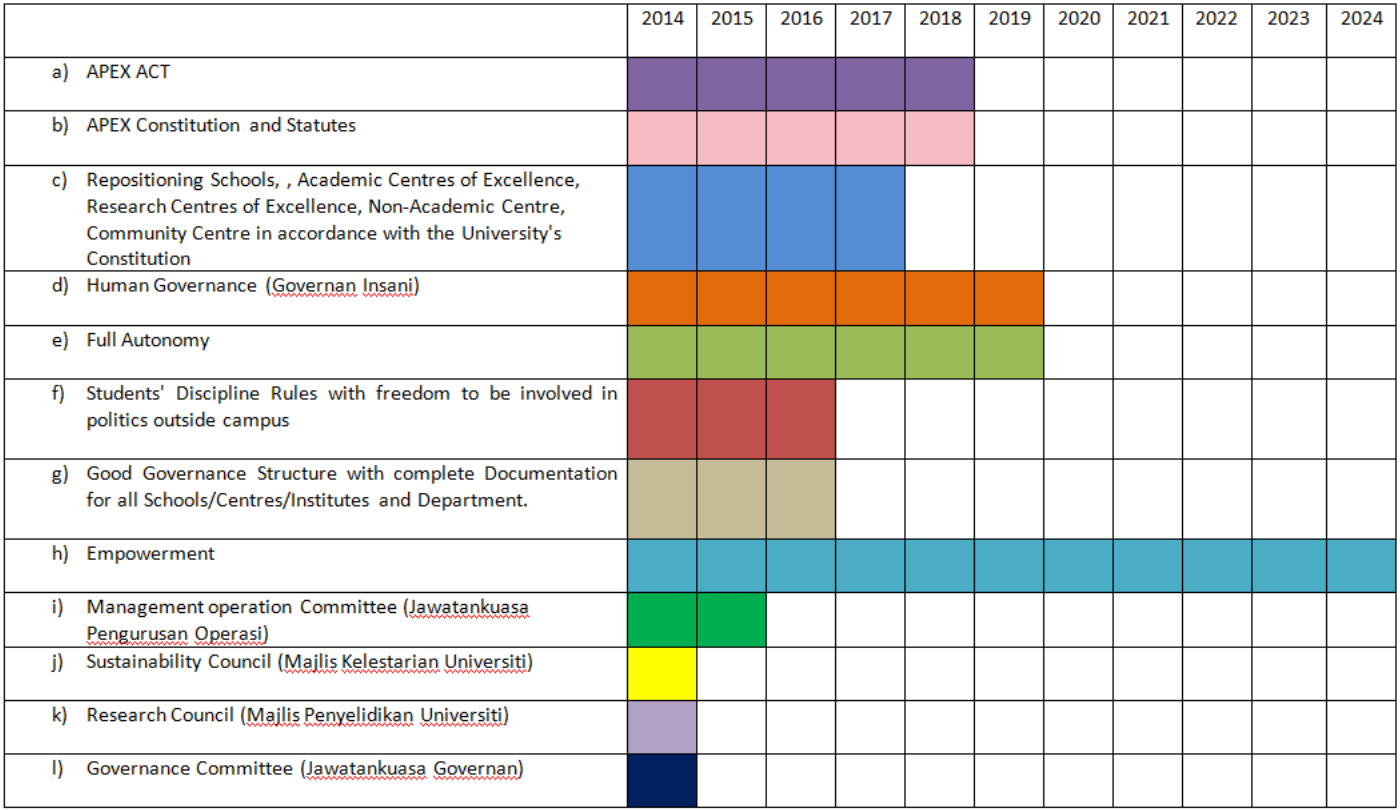
The Lordship further elaborated that "Each has its own governing body, manages its own affairs, allocates its funds and pursues its own goals within the legislated limitations of its incorporation. The government has no legal power to control them. Their legal autonomy is fully buttressed by their traditional position in society. Any attempt by government to influence university decisions, especially decisions regarding appointment, tenure and dismissal of academic staff, would be strenuously resisted by the universities on the basis that this could lead to breaches of academic freedom."

In short, the primary purpose of governance is to create an environment that ensures the University can operate without much intervention from any agency outside the University eco-system, the respective leaders within the University management system can work without much interference from the University's higher authorities, while ensuring proper checks and balances, integrity and transparency to encourage responsible, accountable and ethical behaviour among the warga University.

Budget

The costs involved for organizing discussions and workshops with various stakeholders to refine the APEX Phase 2 plan is at least RM 5,000,000.00 plus the costs of human resources (for a period of ten years).

Milestones and Dates



Conclusion

The University's roadmap for good governance is on a firm footing and various mechanisms are in place to provide checks and balances to mitigate potential risk and deliver quality services to its stakeholders. However, to enhance the effectiveness of good governance and integrity in the University, some improvements and initiatives are imperative such as:

i. Draw up clear criteria and attributes for all the committees in the University;

ii. Documentation needs to clearly set out the selection process for the appointment of the Board and senior management officers of the University to ensure greater transparency and fairness in paving the way for a high performing Board.

3.3 APEX KNOWLEDGE TRANSFER PROGRAM

- Knowledge Transfer Programme (KTP) is a programme that supports collaborations between Universities, Industries and Communities (government agencies/non-governmental organisations (NGOs)/public sector). Exchange of tangible and intangible intellectual property, expertise, learning and skills between academia, industry and the community are the platform provided by KTP. The forms of interactions may include joint research, consultancy, education, training, graduate development, conferences, sharing of physical facilities and student placements.

- To partner all government institutions and agencies with related community segments

Estimated Cost

RM5 million x 10 year = RM50 million

M P P
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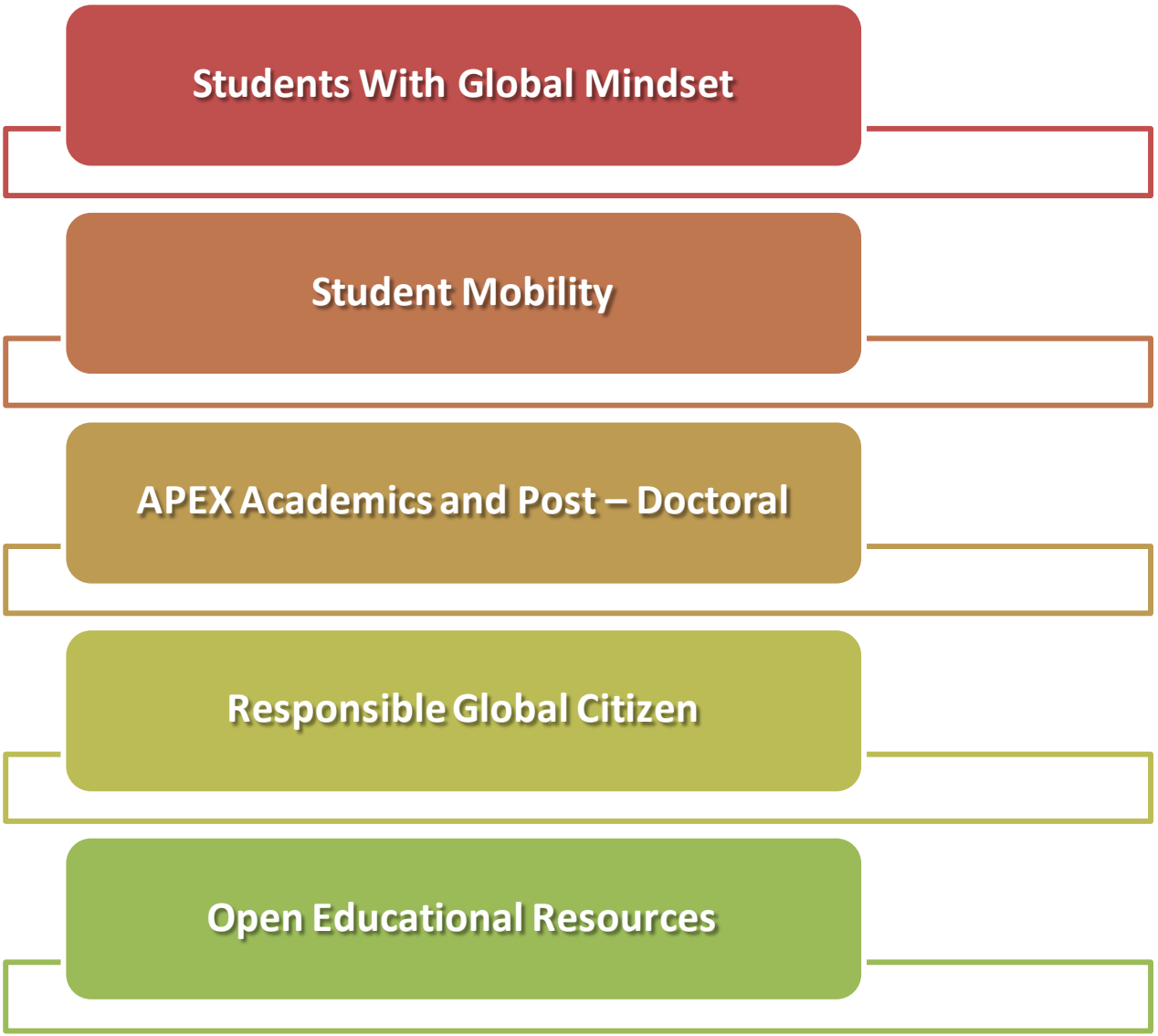
4
APEX
ACADEMIC
AND STUDENTS
DEVELOPMENT


Students With Global Mindset
Student Mobility
APEX Academics and Post – Doctoral
Responsible Global Citizen
Open Educational Resources

t

4.1 STUDENTS WITH GLOBAL MINDSET

Introduction

In today's globalized economy and as the world is getting more borderless, the job market has become increasingly global. Globalized businesses require talent to compete at the global level. In fact, government agencies too are becoming global in nature. A global graduate is not simply a highly educated young adult who can speak foreign languages. Employers want talented graduates who can work with people from different backgrounds and embrace different perspectives. Competition for job placement is becoming increasingly stiff whereby employers now seek graduates who are well equipped for the global market.

It is crucial for higher learning institutions to focus on producing graduates that meet the expectations of global employers, be it Multinational Corporations (MNCs) or Small Medium Enterprise(SMEs), who operate across borders. Universities need to provide the right environment and opportunities for students to flourish and enable them to develop not only sound employability skills as we are currently focusing on, but a global mindset as well.

List Of The Projects (Project Name)

- Pimpin Siswa
- Curriculum Revision For All Programmes
- Excellent Sportsmen
- Career Development
- Culture Development
- Leadership – Global University Student Parliament

Objective And Strategy:

To Produce Students with Global Mindset

Implementation Plan:

The implementation will be based on each programme provided and organized to suit the Global Student Mindset or Global Mindset characteristic.

Output

To make our graduates more relevant for the future job market by producing more graduates to fulfill the needs of various potential employers be they local or international.

Future Graduates will not be limited to having good knowledge in particular areas of studies within a particular nation or society. Graduates will be exposed to a wider range of global issues, problems and challenges. Hence it is important for universities to produce graduates with global mindset.

Budget

No.	Programme	2014-2017 (RM)	2018-2021 (RM)	2022-2025 (RM)	Total (RM)
i.	Pimpin Siswa	RM2mil per year x 3 years = RM6mil	RM3mil per year x 3 years = RM9mil	RM5mil per year x 3 years =RM15mil	30 millions
ii.	Curriculum Revision For All Programmes	RM1 mil per year X 3 years = RM3mil	RM2 mil per year X 3 years =RM6mil	RM3 mil per year X 3 years = RM9mil	18 millions
iii.	Excellent Sportsmen	RM1 mil per year X 3 years = RM3mil	RM1.5 mil per year X 3 years =RM4.5mil	RM2 mil per year X 3 years = RM6mil	13.5 millions
lv.	Career Development	RM1 mil per year X 3 years = RM3mil	RM1.5 mil per year X 3 years =RM4.5mil	RM2 mil per year X 3 years = RM6mil	13.5 millions
v.	Culture Development	RM500,000 per year X 3 years = RM1.5mil	RM1 mil per year X 3 years =RM3mil	RM1.5 mil per year X 3 years = RM4.5mil	9 millions
vi.	Leadership – Global University Student Parliament	RM500,000 per year X 3 years = RM1.5mil	RM1 mil per year X 3 years =RM3mil	RM1.5 mil per year X 3 years = RM4.5mil	9 millions
				Grand Total	**93 millions**

Milestones And Dates:

Phase	Target
2014-2017	i. 25% USM graduates possess between 50% - 70% of key competencies of global graduates. ii. Student development initiatives, programmes and activities, should focus and give emphasis on: - Enhanced employability skills and competencies including soft-skills, communication skills. - Building confidence through student empowerment programmes and activities and involvement in University Governance . - Revisit student activities with proper guidelines and procedures, refocus - Improve student internship and exchange programs, focusing more on international internship. - Develop networking with outsiders (Industry, NGO's, private and public sector)
2018-2021	i. Increase numbers of students involved in activities and programs at national and international level to enhance the student knowledge (e.g Seminar/paper presenting/competitions) ii. Increase student participation in innovation programs or competitions and train them to be more competitive at international level iii. Enculturation of public speaking, debate, forum and paper presentation among all students. iv. Collaborative effort to facilitate opportunities for industry to introduce the idea of global business activity as early as possible v. Developing degree programmes to include more of these global employability skills to ensure we are producing the best talent for multinational employers to recruit from, both for their operations in Malaysia and in other countries vi. More exposure to real world projects within the University
2022-2025	50% Target of USM graduates posses between 75% -100% of key competencies of global graduates. Students development initiative programmes and activities, should focus and give emphasis on; i. Cultural agility – Negotiation across cultures, communication skills across cultures ii. Collaboration and creating networking at the international level iii. Provide more opportunities for students to both study overseas and experience the global workplace through internship and work placement

Conclusion

USM curriculum and students activities should focus on: broad based knowledge, mutli-perspectives, excellent communication and language competencies, multi-lingual and multi cultural outlook, good understanding of continues education, strong values, positive attitude, cross-cultural competencies in problem-solving, decision making and analytical skills.

4.2 STUDENT MOBILITY

The main objective of the USM Mobility Program is to increase the number of the outgoing students in the second phase of the APEX Program. At present, on average of 200 to 250 incoming students enrolled annually in USM for the past three years. In contrary, an annual count of 20 - 30 outgoing students of USM went for Exchange Student Programs overseas.

To increase the number of students' mobility (incoming and outgoing)	Exchange programs
	Short-term exchange programs

Estimated Cost

RM30,000,000

4.3 ACADEMIC IMPACT PROGRAM

Introduction

This project involves 3 main activities, namely, enhancing and strengthening the sustainability-led programmes, enhancing distinctive student experience, and enhancing global presence & visibility. In enhancing and strengthening the programmes, this project will identify flagship programmes and incorporate sustainability elements into them. Effort to embark on joint programmes with international universities and acquire international accreditation will be undertaken. In enhancing student experience, this project will look to revise the curriculum to incorporate the dimension of global citizenship. Appropriate learning spaces with 21st century classroom facilities will be developed, and more awareness programmes will also be implemented. In enhancing global presence, this project will devise strategies to increase the number of international chairs. Courses in Open Educational Resources (OER) will be promoted and efforts will also be undertaken to devise the strategies to increase the number of programs that achieve top 10 ranking at global level.

Project Name

Prominence in Sustainability Programmes to Nurture Responsible Global Citizens (RGC)

Objectives

A. Strengthening & enhancing academic competitive edge of academic
B. Enhancing Distinctive Student Experience
C. Enhancing Global Presence & Visibility

Strategy

4.3.1 Strengthening & Enhancing Academic Competitive Edge of Academic

i. Identify flagship programmes
ii. Incorporate sustainability elements into the curriculum of the flagship programmes
iii. Embark on joint programme with international universities renowned for their sustainability programmes
iv. Acquire international accreditation for flagship programmes from each cluster
v. Use English as medium of delivery for the flagship programmes

4.3.2 Enhancing Distinctive Student Experience

i. Incorporate dimensions of global citizenship in teaching and learning practices
ii. Create learning spaces suitable for 21st century classrooms
iii. Promote the applications of ICT in t&l practices appropriate for 21st century skills
iv. Students to acquire a 3rd language proficiency
v. Enhance student mobility programmes for international exposure

4.3.3 Enhancing Global Presence & Visiblity

i. Increase the number of International Chairs in Sustainable Programmes
ii. Increase the number of international students for flagship sustainability-based programmes
iii. Increase and promote the number of courses related to sustainability as an Open Educational Resources (OER)
iv. Increase the number of international Awards/Fellowships/Visiting Professors
v. Increase the number of programmes that achive top 10 ranking at regional/global level.

Implementation Plan

A. Strenghthening & Enhancing Academic Competitive Edge of Academic

i. PTJ to identify one flagship programme
ii. PTJ, together with CGSS to revise the curriculum to incorporate sustainability elements
iii. SCOMM and PTJ to identify renowned international universities for collaboration via MOU and MOA
iv. PTJ to work together with Pusat Kualiti for international accreditation
v. PTJ to revise the identified programme for English medium of delivery for Senate approval

B. Enhancing Distinctive Student Experience

i. PTJ to revise the curriculum to incorporate dimensions of global citizenship
ii. CDAE to work together with PTPM, PPKT and Jabatan Pembangunan to plan and develop learning space/ environment (21st century classroom facilities)
iii. CDAE and PTKT to conduct more training and awareness programmes
iv. PPBLT to incorporate third language competencies for soft skills requirements
v. International Office to develop new model for enhancing USM's students participation in international exchange programmes.

C. Enhancing Global Presence & Visibility

i. HEA to devise strategies to increase the number of international chairs in sustainable programmes
ii. HEA and SCOMM to devise strategies to increase the number of international student intake in the flagship sustainability-based programmes
iii. CDAE to promote the courses related to sustainability as an Open Educational Resources (OER) and MOOC and to become an affiliated OER/MOOC consortium
iv. HEA to increase the number of International Awards/Fellowships/Visiting Professors
v. PTJ to devise strategies to increase the number of programs to achieve top 10 ranking at regional/global level

Output

A. USM will have flagship sustainability programmes with international collaboration and accredited internationally
B. USM graduates will have global citizenship attributes and be adaptable to the 21st century work force
C. USM will be highly visible internationally

Budget

No.	Objective	2014-2017 (RM)	2018-2021 (RM)	2022-2025 (RM)	Total (RM)
A	Strenghthening & Enhancing Academic Competitive Edge	2,000,000.00	3,000,000.00	1,000,000.00	6,000,000.00
B	Enhancing Distinctive Student Experience	8,000,000,00	9,000,000.00	3,000,000.00	20,000,000.00
C	Enhancing Global Presence & Visibility	3,000,000.00	12,000,000.00	5,000,000.00	20,000.,000.00

4.4 APEX POST DOCS

- As apart retaining APEX talent, quality and high achieving student will be retained via APEX Post Doctoral Program.
- Priority to local students which will be groomed into academics.
- 30 post – Doctoral per year

Estimated Cost

RM30,000,000

4.5 OPEN EDUCATIONAL RESOURCES

Introduction

Open Educational Resources (OER) is an internet-based learning material that can be openly accessed. Leading universities (MIT, Harvard, etc) in the world are racing to provide accessible OER to the global community. Massive Open Online Course (MOOC) was born in 2008 from the movement of OER.

Definitions of each MOOC terminology are as follows:

M-Massive. This terminology means large-scale with as many as 10,000-100,000 students.

O-Open. Open means available freely in terms of registration, content and also in terms of open access.

O-Online. Online means the use of the Internet as a medium of interaction (forums, web collaboration, meeting) and this activity is done in real time format.

C-Course. Course means a programme that takes credit for certification and has a start date and an end date. The existence of a course manager should also aim to guide and enhance the learning process. The course also carry the meaning of the existence of community learning and students self-learning which can occur.

MOOC wave is the hottest wave in education now, and is due to the existence of several suppliers with strong finances such as Coursera, edX and Udacity who are working together with famous University's in the world to offer courses to students with the number reaching tens to hundreds of thousands of people.

This project proposes the USM rides the MOOC waves through the development of OER programmes with more niche area of its own. MOOC USM will support the national agenda in the field of lifelong learning, the knowledge society and the democratization of education (bottom billion), at the same time, boost the name of USM to the global level.

Objectives and strategies

i. To develop and implement a programme of OER USM that can be accessed by all walks of life at a national level and globally support the lifelong learning agenda in implementing the knowledge society.

ii. To enable access to OER by the global community, this project will allow USM joined the Coursera Consortium for the implementation of MOOC internationally. This will catapult USM's visibility at a global level as well as gain the support of democratization of education to all including the bottom billion.

Implementation Plan

i. Identifying USM's niche area which can be highlighted at a global level
ii. Developing USM's OER niche area extensively
iii. Join the MOOC Consortium which will allow OER USM to be accessible to the local and global community

Output

i. Boost USM's name globally and increase the ranking of USM in various international benchmarks
ii. Assist in ensuring the success of the PSPTN agenda from the lifelong learning aspect
iii. Help meet the APEX transformation plan
iv. Increase the competitiveness of the academic programme of USM globally
v. Produce a knowledge society
vi. Implement democratization education

Budget (2013-2025)

The estimated cost for one year is RM1.2 million.
The estimated cost of the project over the period of (12 years) is 12 years x RM1.2 million = RM14.4 million.

Milestone and Date

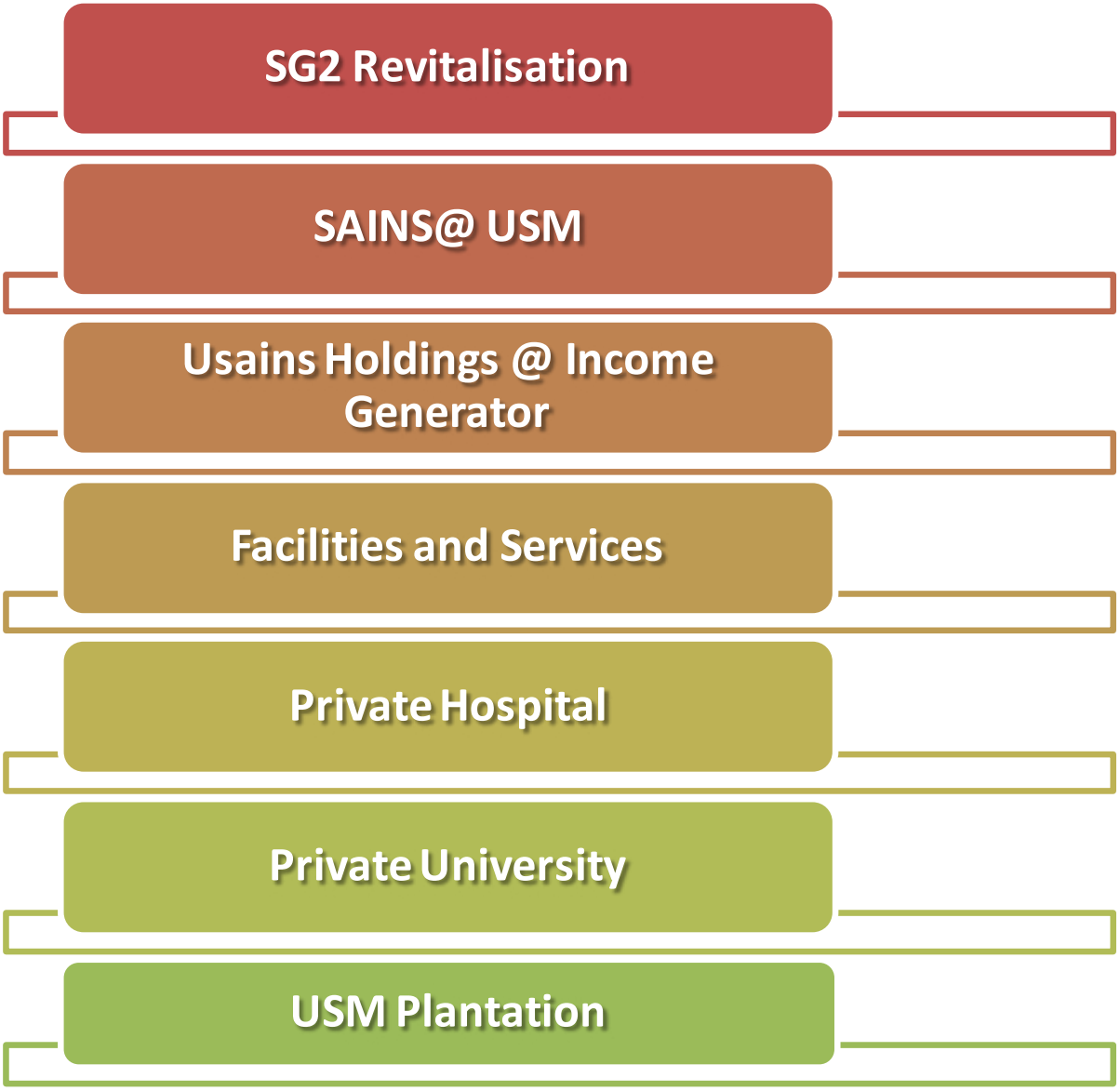
2013 : Identify the niche area of USM which can be further developed as OER and promoted globally
2014 : OER development on an ongoing basis and extensively
2015 : USM affiliates with the Coursera Consortium for the implementation of MOOC
2016 – 2025 : The development of OER for MOOC continuously

Conclusion

This project is very important for the realization of the national agenda which refers to the formation of the knowledge society and the democratization of education. OER USM and MOOC paves the way for USM to be famous not only at the national level, but also at the global level in the cultivation and dissemination of knowledge which can be accessed and utilized by all walks of life.

M+
6,750
6,500
6,250
6,000

5 APEX FINANCIAL SUSTAINABILITY


SG2 Revitalisation
SAINS@ USM
Usains Holdings @ Income Generator
Facilities and Services
Private Hospital
Private University
USM Plantation

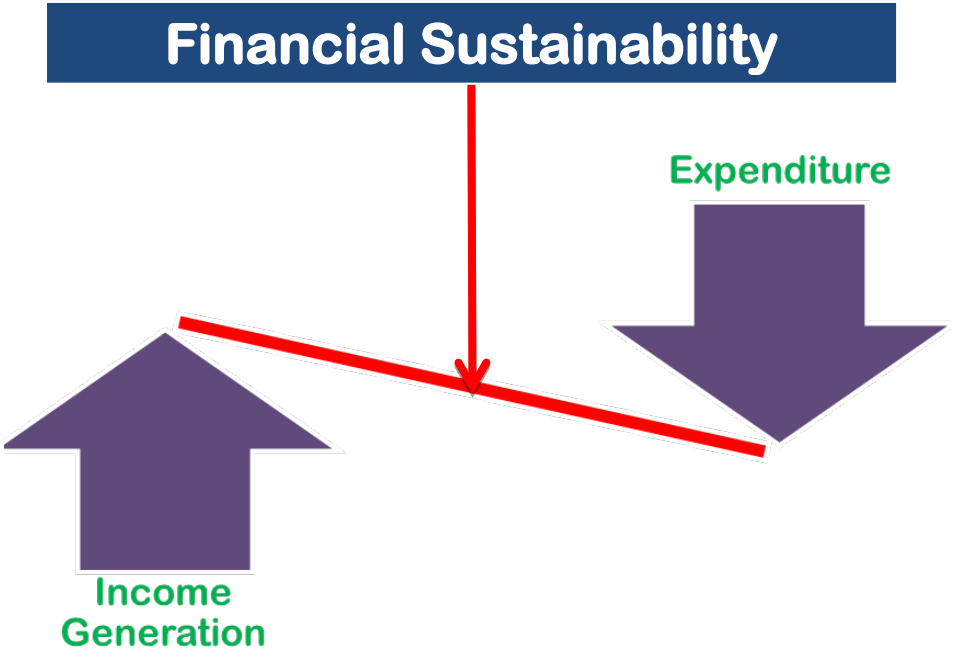
Introduction

Universiti Sains Malaysia's operational cost is expected to increase due to the increasing operational cost and increasing number of student intake. Together with the expected reduction of 30 % Government funding to all IPTA's by 2015 (The National Higher Education Strategic Plan (2007-2020), It will further create bigger funding gap between income and expenditure of IPTAs.

In view of that, it is crucial that USM takes a more strategic step to be financially self-sustainable and start looking for additional financial resources to fund the increasing operational cost. This is because financial sustainability is vital for the survival of any business ventures including USM.

The Philosophy

The philosophy of Financial Sustainability is to create income and reduce cost without reducing the ability to conduct core functions. Figure 1 shows how financial sustainability could be achieved.



Strategic Step Towards Achieving A Financial Sustainable University

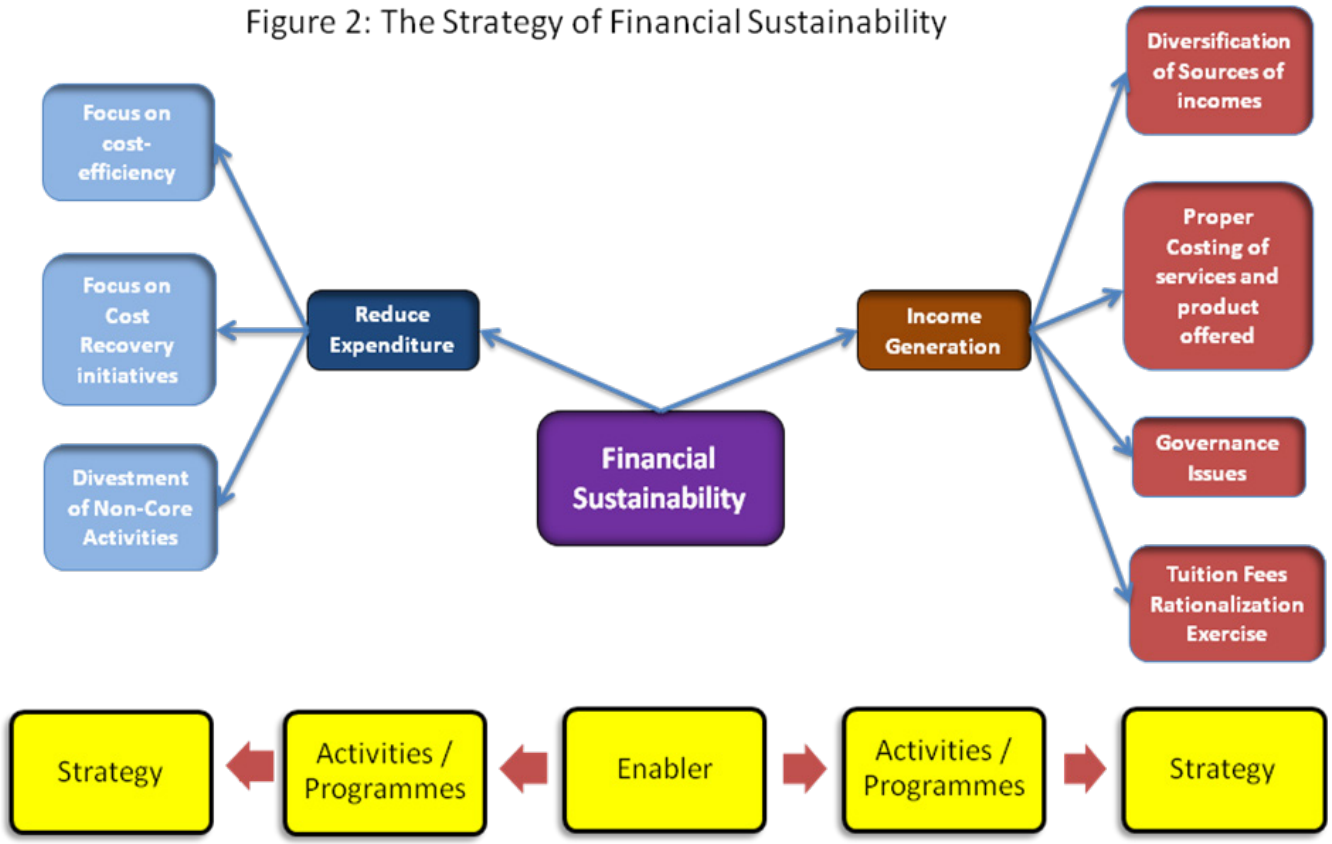
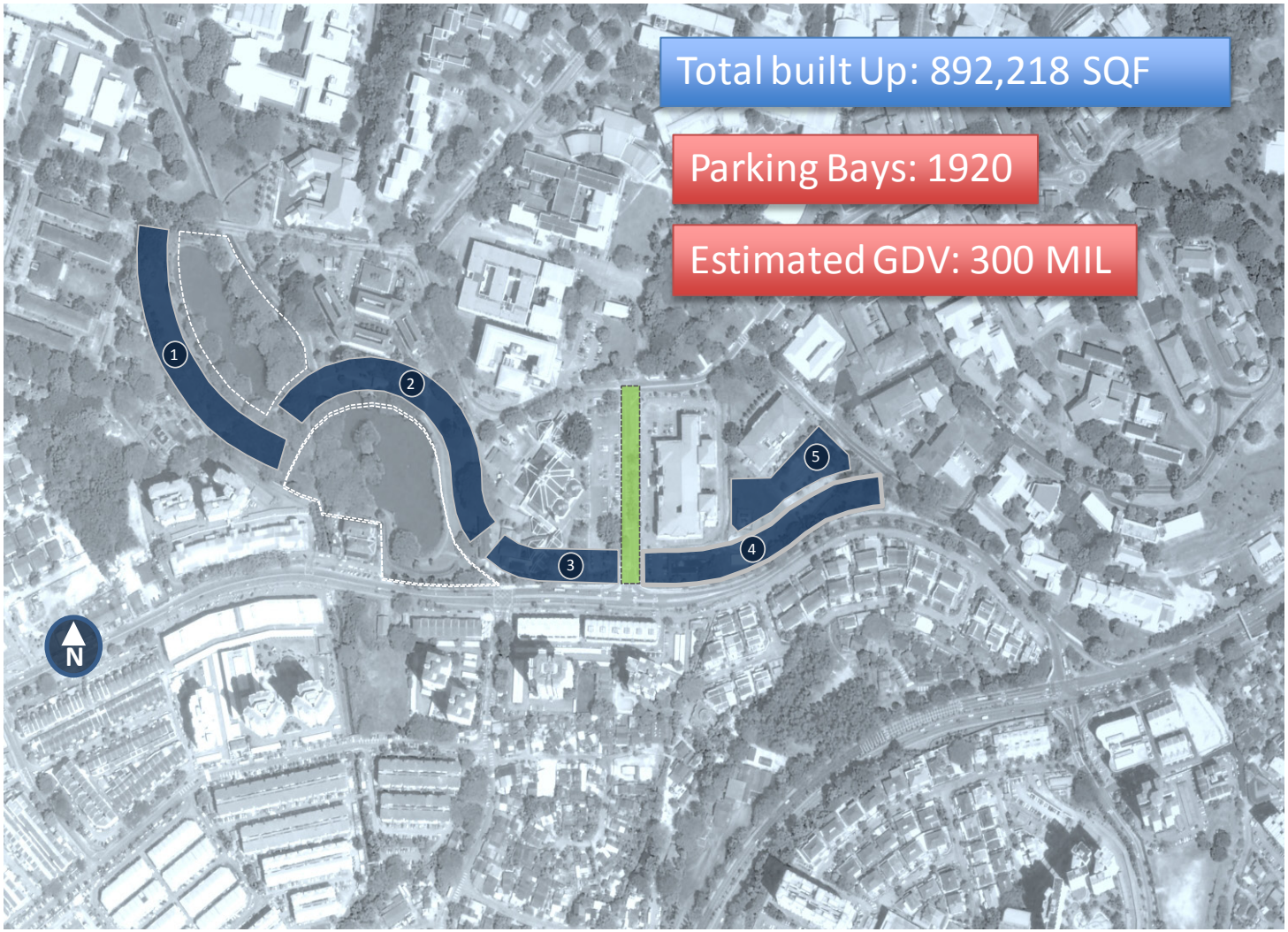


Figure 2 shows the factors that could influence USM's financial sustainability. There are four factors that could increase income generation. They are diversification of sources of income, proper costing of services and products offered, governance and tuition fees rationalization excercise. On the other hand to reduce expenditures are by focussing on cost efficiency, focusing on cost recovery and divestment on Non-Core activities.

5.1 SG2 REVITALISATION

A redevelopment of USM's Sungai Dua entrance, comprising parcels for R&I, commercial establishments, students development centre among others, will expect to generate income to the university in the long run. Consist of 5 solar-paneled rooftop, with a total built up of almost 900,000 sqf, this project has a gross development value of more than RM 300 millions.



Space Facility :

1. Research Based Zone (128 units) : **140,800** SQF
2. Commercial Zone 1 (128 units) : **140,800** SQF
3. Commercial Zone 2 (60 units) : **60,000** SQF
4. Business Zone (150 units) : **150,000** SQF

Pedestrian Walkway: **86,900** SQF

USM Vista: **20,000** SQF

5 Multi Storey Parking : **400** Bays

On Ground Parking : **600** Bays

Semi Basement Parking: **920** Bays

Total Parking Bays : **1920** Bays

Space Facility: **491,600** SQF
Walkway & Vista: **106,900** SQF
Service & Circulation : **110,000** SQF
Multi Storey Parking: **61,218** SQF
Semi Basement Parking: **122,500** SQF
Total Built Up Area: **892,218** SQF

5.2 SAINS@USM

Existing Facilities
Conference spaces
CBER, School of Arts, CREST

On-going Projects
Inkubator Inovasi Universiti (I^2U) - Phase 1 [RM51 million]
Club House, Cafeteria and New Facade

Future Plans
Hotel – Upgrading and Remedial Works on Hostel - Phase 1C
Multipurpose Hall
USM Toyohashi International Classrooms

Requires additional funding of RM300 million

Expected annual returns: RM10 million

Strategic Plan for Financial Sustainability

1. Income Generation

1. Diversification of sources of incomes

Action Plan

a) Create Diversified Investment Portfolio

- Equity / shares / stocks / bonds (Blue Chips – Low risk shares)
- Property – (KL / PG / JB)
- Money Market
- Loan/others

Milestones and dates

Milestone		
2014-2017	**2018-2021**	**2022-2025**
ROI 5%	ROI 10%	ROI 15%

KPI
Return Of Investment (ROI) – 15%

Expected Outcome
Increase income and reduce risk

Estimated Cost
RM 36,000,000.00

b) Encourage all PTJ's to Generate Income and Self-Sufficient

Milestones and dates

Milestone		
2014-2017	**2018-2021**	**2022-2025**
6 independent PTJs - finance own cost of operation	13 independent PTJs - finance own cost of operation	26 independent PTJs - finance own cost of operation

KPI
26 independent PTJs able to finance own cost of operation

Expected Outcome
Increase PTJs income and increase staff exposure in business with entrepreneurial mindset

Estimated Cost
RM 120,000.00

c) Commercialization of services (3 Campuses):

- services provided by all campuses and other servis centers
- rental of space (Hostel / offices / labs)
- testing facilities
- expertise / consultancy services
- USM Club and Sungai Dua Revitalization Projects
- Car Parks
- USM Private Hospital
- Entrepreneurship Carnival

Milestones and dates

Milestone		
2014-2017	**2018-2021**	**2022-2025**
15 % increase in activities from services	30 % increase in activities from services	50 % increase in activities from services

KPI
Average of 15 - 30 % increase income from services yearly

Expected Outcomes
- Upgraded facilities to generate addititional income from the facilities/services
- Increase number of public (individual/companies) using the facilities
- 30% increase in income from sevices

Estimated Cost
RM 120,000,000,000.00

d) Commercialization of Research Products:-
- Create Revolving funds to assist in commercialization - ICO and Usains
- Set up start- up companies (JV student/USM, JV Industry/USM)
- increase Usains Holdings investment in commmercialization
- Increase number of incubators

Milestones and dates

Milestone		
2014-2017	**2018-2021**	**2022-2025**
RM 4 milion Rev Funds / 4 start-up companies	RM 6 milion Rev Funds / 8 start-up companies	RM 8 milion Rev Funds/ 12 start-up companies

KPI
- Established 24 start-up companies
- RM20 million Revolving Funds

Expected Outcomes
- increase number in commercialization
- Increase number of start-up companies
- Increase number of student entrepreneurship

Estimated Cost
RM 1,000,000.00

2. Proper costing of services and product offered

Action Plan

a) Full cost recovery of intellectual services, projects, franchies and programs

Milestone and Dates

Milestone		
2014-2017	**2018-2021**	**2022-2025**
20 % cost recovery	30 % cost recovery	40 % cost recovery

KPI
average 30% - 40% cost recovered yearly

Expected Outcome
- Increase Income
- Save utilities / facilities cost

Estimated Cost
RM 120,000.00

b) Seminar on Value Management – staff and industry

Milestones and dates

Milestone		
2014-2017	**2018-2021**	**2022-2025**
10% Cost Savings and Generate income	20% Cost Savings and Generate income	40% Cost Savings and Generate income

KPI
average 25% cost savings yearly.

Expected Outcome
- Increase income
- Efficient asset management and cost savings

Estimated Cost
RM240,000.00

c) Seminar on Risk Management to reduce / minimize risk – staff and industry

Milestones and dates

Milestone		
2014-2017	**2018-2021**	**2022-2025**
10 success stories	30 success stories	50 success stories

KPI
- increase income
- increase knowledge in risk management

Expected Outcomes
- Increase income
- Efficient asset management and cost saving
- Reduce legal exposure
- Less probability of failure

Estimated Cost
RM 250,000.00

3. Tuition fees rationalization exercise

Action Plan

a) Determine the cost involve in graduating each student and engage in a tuition fee rationalization exercise

Milestone and Dates

Milestone		
2014-2017	**2018-2021**	**2022-2025**
Increase fees	Increase fees	Increase fees

KPI
Income increase by 10%

Expected Outcome
Increase income for University

Estimated Cost
RM 140,000.00

b) Increasing numbers of undergraduate and postgraduate students (International) and fast track postgraduate programmes (local students)

Milestones and dates

Milestone		
2014-2017	**2018-2021**	**2022-2025**
increase by 10%	increase by 20%	increase by 30%

KPI
- Increase income
- Increase number of international students – global recognition

Expected Outcome
- Increase university's income
- Internationalizing USM

Estimated Cost
RM 300,000.00

c) Increasing numbers of franchise / off-shore / short courses

Milestones and dates

Milestone		
2014-2017	**2018-2021**	**2022-2025**
increase by 10%	increase by 20%	increase by 30%

KPI
- 10% increase in income

Expected Outcomes
• Increase income for University

Estimated Cost
RM 220,000.00

4. Governance Issues

Action Plan

a) - Relooking at financial standing order that impede income generation initiatives
- **Incentives for income generation – reward/honorarium**
- **Human Resources (talent management and allow more academic / non-academic to involve in Business)**

Milestone and Dates

Milestone		
2014-2017	**2018-2021**	**2022-2025**
20 % academic/non-academic to do business or become entrepreneur	50 % academic/non-academic to do business or become entrepreneur	100 % academic/non-academic to do business or become entrepreneur

KPI
100 academic / non academic to do business and become entrepreneurs

Expected Outcome
Increasing numbers of academic entrepreneurs and increase income contributions to USM and staff

Estimated Cost
RM 120,000.00

Strategic Plan for Financial Sustainability

2. Reduce Expenditure

1. Focus on Cost-Efficiency

Action Plan

a) - **Shared facilities and human resource**
   - **Shared Administrative set-up**
   - **Human Resources**

Milestones and dates

Milestone		
2014-2017	**2018-2021**	**2022-2025**
10 % cost saving	20 % cost saving	30 % cost saving

KPI
30% save cost and reduce expenditue

Expected Outcome
- **Reduce expenditure on utilities**
- **Increase productivity**
- **Enhance staff interaction**

Estimated Cost
RM 120,000.00

b) Encourage multi tasking work between PTJ's / offices

Milestones and dates

Milestone		
2014-2017	**2018-2021**	**2022-2025**
10 staff involved	30 staff involved	80 staff involved

KPI
- Increase productivity
- Enrich knowledge

Expected Outcome
- Increase staff knowledge,flexibility and mobility
- Less time wastage

Estimated Cost
RM 120,000.00

c) Minimize work duplication (academic / administration)

Milestones and dates

Milestone		
2014-2017	**2018-2021**	**2022-2025**
25 % reduction in duplication	60 % reduction in duplication	100 % reduction in duplication

KPI
- Zero duplication

Expected Outcome
- Reduce time wastage, reduce cost and increase productivity
- Optimizing usage of time on more productive activities

Estimated Cost
RM 120,000.00

2. Cost recovery initiatives

Action Plan

a) Identify hidden costs and proper costing in decision making - maintenance, depreciation, utilities

Milestones and dates

Milestone		
2014-2017	**2018-2021**	**2022-2025**
10 % recovery	30 % recovery	60 % recovery

KPI
30% increase inrecovered amount

Expected Outcome
- Increase amount recovered
- Increase income
- Increase transparency

Estimated Cost
RM 80,000.00

3. Divestment of Non-Core Activities

Action Plan

a) Activities that are non-central must be reexamined to evaluate its usefulness and relevance to the core functions of the university

Milestones and dates

Milestone		
2014-2017	**2018-2021**	**2022-2025**
30 % increase in utilization of the unused assets / space	50 % increase in utilization of the unused assets / space	70 % increase in utilization of the unused assets / space

KPI
70% of the non-centralised idle assets / space are used to generate income

Expected Outcome
Increase optimizing of assests or space used

Estimated Cost
RM 500,000.00

Conclusion

To become a financially sustainable university would require a certain degree of change that will allow USM not just to survive, but also thrive with a focused strategy and a sustainable financial base.

The implementation of these strategies would allow USM to focus on the core, reduce costs, outsource and monetize assets and develop self–sustained and innovative programs to increase income.

Also together with these clear strategies, streamlined operations, strong financial foundation, trust and accountability, and willingness to invest , these strategies will help to create value for USM.

5.3 USAINS HOLDINGS-EXPANSION OF FUNCTIONS

USM holdings, a private arm of the university will undergo a restructuring exercise which will see the realization of its existing functions to act as a holding company that manages smaller companies underneath. This realignment is a part of USM strategies to widen income generation potentials from its subsidiaries.

5.4 FACILITIES AND SERVICES

Synopsis

Universiti Sains Malaysia can be described as a heterogeneous organisation and as a public university whose primary role is in the development of the country's human capital. To share in global growth, Universiti Sains Malaysia has to compete effectively. This will depend on education, teaching and research and a clear focus on higher value added goods, services and industries.

SERVICES at Universiti Sains Malaysia encompass all forms of service activities which can generate monetary gains for USM through commercialised services as well as activities that can improve the quality of life and wellbeing of an individual, group or community through social services.

Objectives

Financial Strategy: Cost Recovery + xx %

- To minimise misuse of government funding
- To achieve supplementary income for USM and Staff

Scope

In order to achieve the objectives, scopes of SERVICES need to be identified and emphasised as shown in Figure 13 & 14.

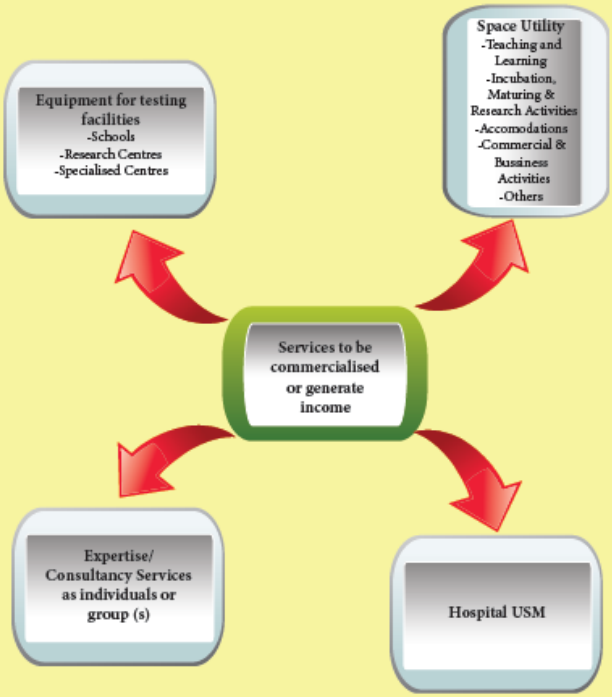


Figure 13: Income generation

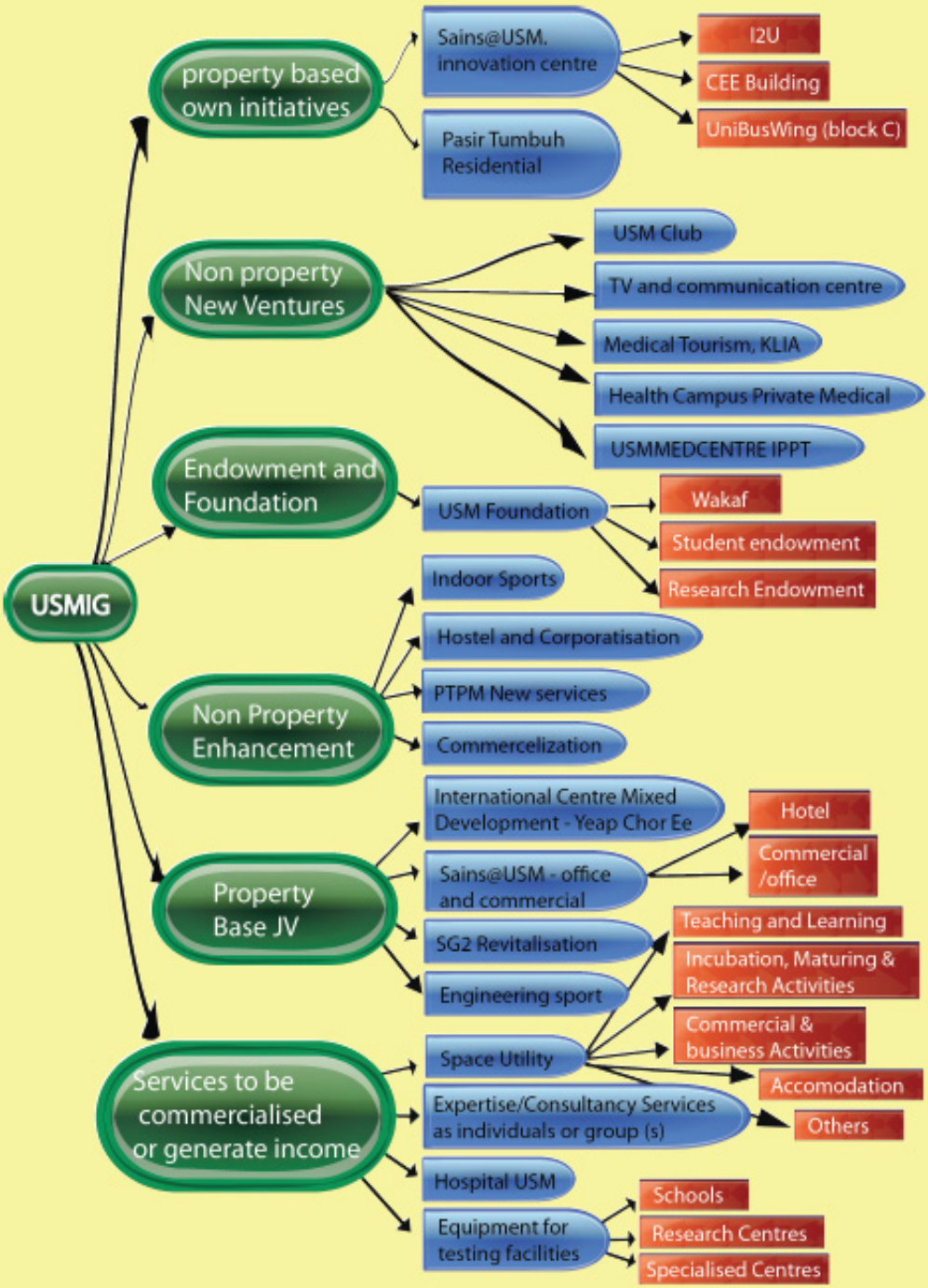


Figure 14: Income generation

Under the current situation, the average contribution from the above defined SERVICES (Item 5 and 8 to 10, see Table 1) is about 10%, hence there is some room to enhance these.

Item	Types of Income (for 2006-2011)	Average Contribution	Projected Contribution
1	Government grant - Operational	75.10%	NA
2	Government grant - IRPA/E-science	0.84%	NA
3	Tuition and miscellaneous fees	5.93%	NA
4	Amortisation of Government development grant	6.50%	NA
5	Rental	0.69%	1.00%
6	Dividend	0.10%	NA
7	Interest	1.01%	NA
8	Hospital services	0.80%	1.00%
9	Contributions for research and others	3.79%	4.50%
10	Other income	5.52%	6.00%

Conclusion

In conclusion, SERVICES provided must not compromise the primary role of "cost-centres" and at the same time "enhance" others which have a niche with low cost and high return – relooking service.

5.5 PRIVATE HOSPITAL

Required funding: RM100 million

Estimated annual returns: RM50 million

5.6 PRIVATE UNIVERSITY

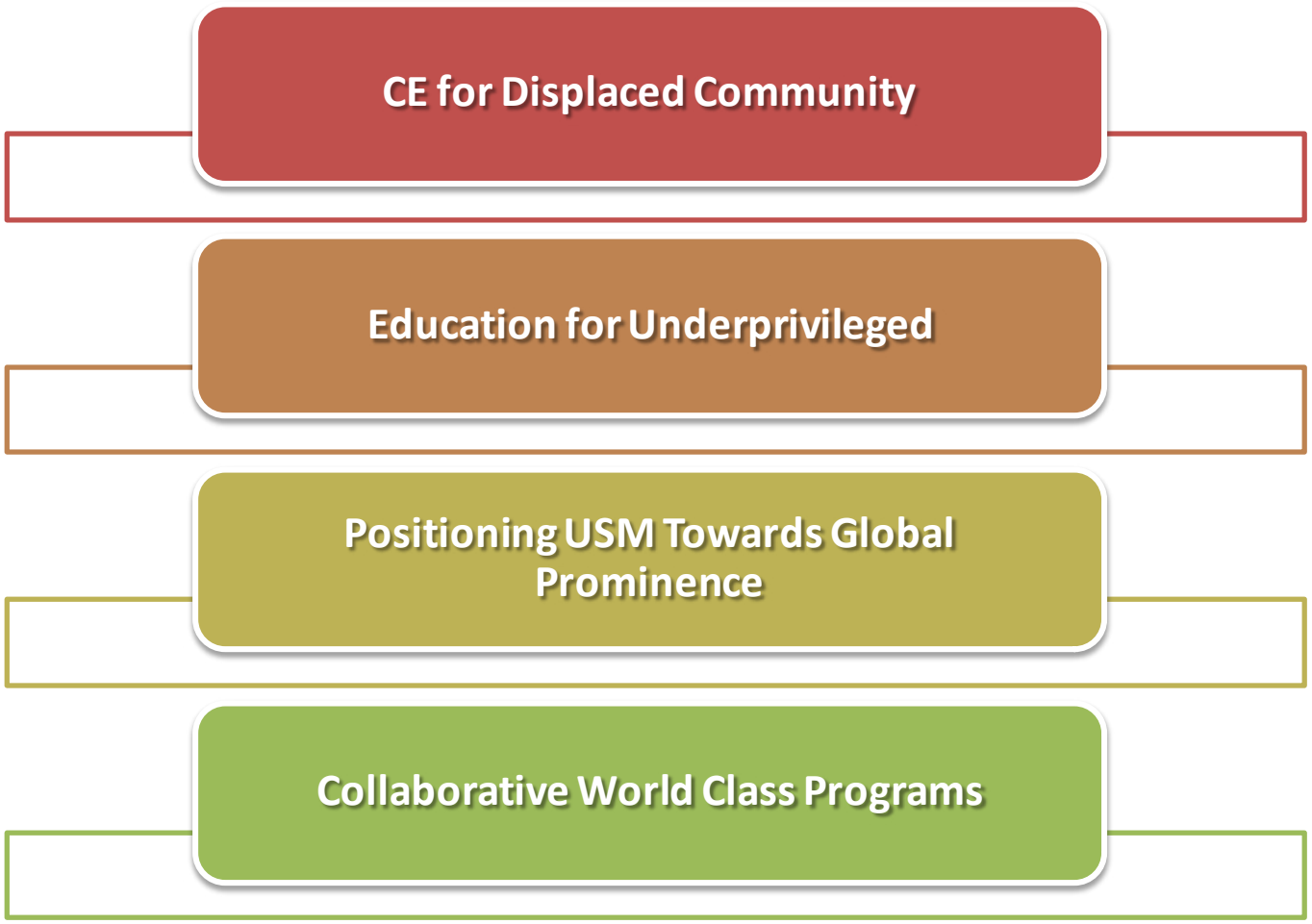
As a part of extension program, USM will embark into the establishment of its private arm in Malaysia, to offer courses in demand. USM looks for a joint-venture development with international partner(s) or perhaps domestic ones. This venture is a part of USM efforts to export quality programs, enhancing Malaysia's position as an international students hub as well as toward generating income to the university's coffer.

Estimated Cost
RM200,000,000

Estimated Income Generation
RM15million per year

B737-800 photo:Henk Boom jr.

6 APEX EXTENSIONS AND POSITIONING


CE for Displaced Community
Education for Underprivileged
Positioning USM Towards Global Prominence
Collaborative World Class Programs

6.1 CE FOR DISPLACED COMMUNITY

Introduction

The term 'community engagement' can mean many different things to different stakeholders. In the Universiti Sains Malaysia (USM) context, Community Engagement (CE) refers to the process by which USM's staff and students nurture symbiotic relationships shaped by a collaborative vision to benefit target communities. Basically, CE involves joint identification of problems, planning of strategies, and the combined mobilisation of resources to transform the psycho-socio-economic well-being of target communities. CE is a bi-directional process that involves community synergising its manpower base with the expertise, facilities and knowledge database of the university to affect a more holistic economic and social transformational impact on target groups. In return for such collaboration, the university obtains both quantitative and qualitative data feedback that could serve as input in the design of more effective transformational collaborative programs in the future. We also train people with holistic outlook and humanitarian heart. Elements for effective engagement include synergistic partnership, altruistic commitment, and project sustainability allied to the tenets of cooperation, the objectives of cross-disciplinarity and the ideals of humanity.

The principles of CE are in line with USM's cherished vision of empowering the disadvantaged and marginalised within the framework of a sustainable tomorrow. It is a testimony to our noble ideals of reshaping tertiary education as an 'Insaniversiti", and CE plays a prominent part in positioning USM. The ultimate goal is the collective mobilisation and orchestration of the strengths of USM academia, administrative staff and the student body to collaborate as a synchronised whole, working to transmute lives, remold and transform societies for a better future.

Benefits Of Community Engagement To USM

Engagement is both multifaceted and multidimensional and incorporates an array of integrated projects, activities and programme that provide value or benefit for all involved. University-community engagement activities can significantly enrich a students' learning experience while contributing to the broader community.

6.1.1 USM Prihatin Initiative

USM Prihatin Initiative

(a) Ad hoc Projects
(b) Short-Term/ Long -Term Projects

Objective & Strategy

- To address the economic, social-cultural, educational, health and environmental issues affecting the Bottom Billions and in the process inculcate in them the idea of sustainability
- To contribute towards and lead in the sustainability of the social and economic development, advancement and transformation of the nation
- To empower future talents to be community minded

Implementation Plan

- To offer ad-hoc/ short-term/ long-term grants throughout the year
- To conduct needs analysis at identified target communities
- To extend the CE activities/projects/programs to national and international level
- To engage with international partners in conducting CE activities/projects/programs

Output

- Increase in the number of project leaders amongst staff and students
- Increase in the number of participation from staff and students
- Increase in the number of collaborators/partners
- Increase in the number of projects that can be replicated
- Staff and students learn to develop a sense of commitment to address community vocational market needs of their region, their nation and the globalised world.
- The establishment of a meaningful working relationship that would yield beneficial outcomes through the exchange of ideas and sharing of best community engagement practices.
- USM gets to expand collaboration with external entities. This will allow the possibilities of securing external fund under CSR to fund USMPrihatin initiatives.

Budget

Phase 1: 2014 – 2017
= RM 3 mil a year x 4 years
= RM 12 mil

Phase 2: 2018 – 2021
= RM 3.3 mil a year x 4 years
= RM 13.2 mil

Phase 3: 2022 – 2025
= RM 3.6 mil a year x 4 years
= RM 14.4 mil

Total amount : RM 39.6mil

Milestones & Dates

Phase 1: 2014 – 2017
= 400 projects
(100 projects/year)

Phase 2: 2018 – 2021
= 480 projects
(120 projects/year)

Phase 3: 2022 – 2025
= 600 projects
(150 projects/year)

6.1.2 Flagship Projects

Implementation Plan

- Ensure that initiatives devised are not exclusive in nature, but take into account the needs of the public without excluding certain groups.
- Attend to the cultural sensitivities and local values whereby approaches used must not deviate from the values and the norms of Malaysia.
- Ensure that all aspects they offer can be attained by all community members from all levels of society- specifically those at the bottom billions
- Ensure that every project offered is always at the disposal of those who need them
- Encourage sustainable collaboration with strategic stakeholders

Output

- More community members benefit from the replication of meaningful projects in other community.
- Provide a platform for USM as a force to reckon within community engagement and a valuable intellectual resource that contributes to addressing national issues by empowering and transforming communities for a better tomorrow.
- The establishment of Referral Centre
- MoUs/MoAs.

Budget

Phase 1: 2014 – 2017
= RM 4 million
= (RM 100k X 10 project X 4 years)

Phase 2: 2018 – 2021
= RM 5.8 million
= (RM 120k X 12 project X 4 years)

Phase 3: 2022 – 2025
= RM 9 million
= (RM 150k X 15 project X 4 years)

Total amount : RM 18.8 mil

Milestones & Dates

Phase 1: 2014 – 2017
= 40 projects
(10 projects/year)

Phase 2: 2018 – 2021
= 48 projects
(12 projects/year)
(Increase by 10%)

Phase 3: 2022 – 2025
= 60 projects
(15 projects/year)
(Increase by 10%)

6.1.3 Promotional and Capacity Building Initiatives

Objective & Strategy

- To educate and instill the concept and practice of community engagement.
- To move towards becoming Human Towers to engage the community and industry in mutual learning and co-creation of knowledge that benefit humanity.

Implementation Plan

- Conduct roadshows on university-community engagement.
- Develop training materials for the promotion of university-community engagement.
- Conduct training sessions/workshops.

Output

- 80% of USM staff and students are trained in CE.
- Engaged teaching strategies to enhance students' retention, career selection, academic performance, and the development of social and civic responsibility. Their commitment to lifelong learning and the betterment of their communities will increase graduate employability.
- The active participation of staff and students in community engagement will make them better citizens in understanding society and societal issues.

Budget

- Brochures/Modules
- Corporate video
- Electronic board
- Workshops

Phase 1: 2014 – 2017
RM400,000.00

Phase 2: 2018 – 2021
RM400,000.00

Phase 3: 2022 – 2025
RM400,000.00

Total amount: RM 1.2 mil

Milestones & Dates

Phase 1: 2014 – 2017
= 2 workshops per year

Phase 2: 2018 – 2021
= 2 workshops per year

Phase 3: 2022 – 2025
= 2 workshops per year

6.1.4 University Community Engagement Conference (USM as driver)

Objective & Strategy

- To raise awareness and understanding of the concept and practice of community engagement.
- To disseminate and share experiences of good practices in community engagement.
- To recognize, legitimize and promote scholarship of university-community engagement.
- To collaborate with local and international communities for mutual benefit.

Implementation Plan

- Organize UCEC conference every 2 years with partner university (s)
- Encourage publications.

Output

- USM recognizes community as knowledge-rich partners that facilitate knowledge transfers and exchanges of expertise, knowledge and skills that benefit all parties.
- Engaged research, teaching and learning produce knowledge outputs, outcomes and products that are valuable assets for USM's academia.

Budget

RM 100,000 per conference.
6 conferences for the next 10 years. The budget will include;

- Joint organization of UCEC
  = RM 50, 000 (seed money to kick start the conference)

- Accommodation and transportation for secretariat and participants from USM
  = RM 50, 000

Total amount: RM 100, 000 per conference x 6 conferences

= RM600,000.00

6.1.5 Asia Pacific University-Community Engagement Network (APUCEN)

Objective & Strategy

- To promote and instill university-community engagement concepts and values to staff and students of institutions of higher education
- To create capacity building for university-community partnerships
- To disseminate and share information, knowledge, resources and good practices in community engagement
- To implement joint flagship projects
- To collaboratively develop resources to support regional flagship projects

Implementation Plan

- Reaching out to the institutions of higher learning in Asia Pacific region to lead in a proactive, inclusive, holistic and participatory university-community engagement.
- Increase 8 new memberships every year.
- Sourcing external grants to carry out APUCEN University Community Engagement Projects/ Flagship Projects nationally and internationally.
- APUCEN draws on the expertise and resources from an extensive number of her members to foster the culture of university-community engagement.

Output

- Institutions of higher learning and the community unite to co-create knowledge to enhance the social, economic, health, education, culture/heritage and environment of the community in the Asia-Pacific region.
- Establishment of APUCEN Trust Fund
- Recognised nationally and internationally as the university-community engagement network in the Asia Pacific region.

Budget

RM500,000.00 per year x 12 years
= RM6 mil

Milestones & Dates

Phase 1: 2014-2017:
Actively involved in university-community engagement activities/projects at Asia regional level

Phase 2: 2018-2021:
Actively involved in university-community engagement activities/project at Asia Pacific Regional level

Phase 3: 2022-2025:
Actively involved in university-community engagement activities/projects at global level

6.1.6 Centre for Community Network (CCN)

Objective & Strategy

- The CCN is initiated as the ultimate goal in mobilizing and orchestrating the strengths of USM academia, administrative staff and the student corp body to collaborate as a synchronized whole, working to transmute lives, remold and transform societies for a better future.
- The CCN introduces rigor and discipline across various community engagement initiatives and provides benefits by building skills and competencies to sustain successful execution of challenging CE initiatives.

Implementation Plan

- Promote and foster reciprocal partnerships between community and university.
- Foster an institutional community engagement culture that integrates outreach and engagement throughout the university with identified outcomes.
- Appoint Visiting Professor/Scholar/Practitioner/Consultant of university-community engagement

Output

- An interdisciplinary approach to doing CE work.
- An efficient system for supervising and monitoring CE related works thus providing solutions to problems.
- The objective assessment of different treatment modalities to determine their benefits.
- Greater university social responsibility is projected through volunteerism which is in line with the APEX vision of empowering the disadvantaged and marginalized within the framework of a sustainable tomorrow.
- Efficient use of resources.

Budget

1) To establish the Centre for Community Network (CCN)

Operational cost
= RM 500, 000 per year

Salary of Director
= RM 180, 000 per year

Salary of officer
= RM 120, 000 per year

Salary of Clerk
= RM 60, 000 per year

Amount:
(RM 860,000.00 X 12 years)
= RM 10.32 mil

2) To establish a chair for CCN:

Salary of Visiting Professor/ Scholar/ Practitioner/ Consultant
= RM 240, 000 per year

Travel expenses = RM40,000.00 per year

Amount:
(RM 280,000.00 X 12 years)
= RM 3.36 mil

Total amount (1+2): 13.68 mil

Milestones & Dates

Phase 1: 2014 – 2017:
CEC will be recognized as a leading community engagement center in Malaysia.

Phase 2: 2018 – 2021:
CEC will be recognized in Asia Pacific region and act as a referral center.

Phase 3: 2022 – 2025:
CEC will be recognized as a global center and act as a referral center.

6.2 EDUCATION FOR UNDERPRIVILLEGED

The proposed of the project is to bringing social, economic transformation by providing opportunities to the students in the rural and semi urban communities in Malaysia to get access to education at USM Being aware that children are nation's greatest future resource, the project intends to ensure and support the child's complete development that's mentally, physically, socially, spiritually and economically.

Estimated Cost
RM 5,000,000.00

6.3 POSITIONING USM TOWARDS THE WORLD RANKING

6.3.1 USM Into The World Ranking

While it has been agreed that the measure of USM achievement in phase 1 was not to be measured based on any ranking, the scond phase will see USM making an appearance in two more realiable world ranking systems, namely the World University Rankings, THE & Shanghai Jiao Tong. Realizing the expectation of the stakeholders to see APEX university to be ranked, enhancements in various facets of rankings such as -research, teaching, internationalisation or partnerships, employability, facilities, innovation, etc will be strengthened.

Estimated Cost
RM20 Millions

6.3.2 Championing Domestic Ratings

USM will champion domestic rating systems such as MYRA, SETARA, DSETARA (5-6 STAR), etc. Ensuring the development of USM, as a university to be holistic, USM must excel and be seen at the top of these rating systems.

Estimated Cost
RM 10 Millions

6.3.3 Strategic Marketing- Diversification

USM to be the a global brand with marketing strategy that attract quality students and researchers, more diversified. Understanding the USM market, the university will continue to evaluate its strengths and its competitors. While maintaining the traditional markets, the top 15 countries with the most students studying in USM, we will explore the potential new strategic markets (Blue Ocean countries) for promotions, networking and brand positioning.

Milestones

Phase	Target
2014-2017	USM will be known at 10 blue ocean countries with a strong global brand and polished reputation
2018-2021	USM will be known at 20 blue ocean countries with a strong global brand and polished reputation
2022-2025	USM will be known at 30 blue ocean countries with a strong global brand and polished reputation

USM networking, research collaborations, student intakes are expected to gain 50% from the traditional markets and blue ocean countries. The expected outcome of this strategic marketing would be USM be known globally as the university with strong branding and reputation, networking and provide one of the best service in the world.

Estimated Cost

RM 20 Millions

KAZAKHSTAN
MONGOLIA
CHINA
JAPAN
UKRAINE
BELARUS
POLAND
GERMANY
FRANCE
SPAIN
ITALY
GREECE
TURKEY
SYRIA
IRAQ
IRAN
AFGHANISTAN
PAKISTAN
ALGERIA
LIBYA
EGYPT
SAUDI ARABIA
INDIA
MALI
NIGER
CHAD
SUDAN
ERITREA
YEMEN
THAILAND
NIGERIA
ETHIOPIA
SOMALIA
UGANDA
KENYA
TANZANIA
INDONESIA
ANGOLA
ZAMBIA
NAMIBIA
BOTSWANA
SOUTH AFRICA
AUSTRALIA
Traditional Market (Top 15)
Emerging Market
Blue Ocean Market

6.3.4 USM Regional Expertise

USM to engage the global representatives from USM community to identify, manage and report the market condition of USM traditional, emerging and blue ocean market in order to maintain the branding and positioning at these countries. The USM global representatives will be identified and will be sent 4 times a year to selected regions. They are required to study the market, get good students and look for new collaborations and business opportunities to enhance USM image and visibility at international level.

Milestone

Phase	Target
2014-2017	USM to engage in research/business collaborations and student intake from 10 Universities in each countries
2018-2021	USM to engage in research/business collaborations and student intake from 20 Universities in each countries
2022-2025	USM to engage in research/business collaborations and student intake from 30 Universities in each countries

Estimated Cost

RM 5 Million

6.3.5 Strategic Global Events

Bringing USM to the world. More strategic events will be conducted outside USM and outside the country. Together with strategic partners, USM will embark in co-hosting impactful events that would put USM onto the world map. Annual International Summit and Leaders Talk Series that gather leaders from universities across ASEAN and the world over, will be invited to share knowledge on the future of education and innovation.

Milestone

Phase	Target
2014-2017	4 summits and 16 talk series.
2018-2021	6 summits and 16 talk series.
2022-2025	8 summits and 16 talk series.

KPI

18 international summit from 2014 - 2025 & a series of talk series in every 3 month each year from 2014-2025.

Expected Outcome

To gain leadership knowledge from these leaders.
To brand and positioning USM quality leadership role globally.

Estimated Cost

RM 500,000 x 18 summits = RM 9 Million
RM 50,000 x 48 talk series = RM 2.4 Million

6.3.6 Regional Champions

Championing the cause of the bottom billion population is synonym to USM, especially in the early years of APEX. Partnership with world class research institutes and top scientists will strengthened, and USM will play the mediating role that bridge the developed and the developing countries. Existing networks with research institutes such as RIKEN & United Nations Research Institute for Social Development (UNRISD) will be expanded. USM will play a major role in THE OIC, Asia as well as Asean countries.

Milestone

Phase	Target
2014-2017	4 collaborations
2018-2021	8 collaborations
2022-2025	12 collaborations

KPI

24 collaborations between developed countries and developing countries on strategic areas.

Expected Outcome

Transforming the bottom billion society to become more sustainable, value added society and to create good quality of talents, using technology garnered from more developed society.

Estimated Cost

RM 5 Million

6.4 APEX WORLD CLASS PROGRAMS

More selected World Class Programs will be offered with the partnership with strategic partners globally. Among potential program are Global Archeology, Chemical Engineering, Chemical Biology, Women Entrepreneurship and Sustainability.

Estimated Cost
RM15 million

Return
RM3 million per year

Apo
/ 0.42

7 APEX RESEARCH AND INNOVATION

Advanced Research Initiatives
Achieving Global Research Prominence

7.1 ADVANCED RESEARCH INITIATIVES

To create transdisciplinary teams and clusters that can be nurtured to become a CoE/HiCoE.

Advanced Research Initiatives (ARI) that include formation of Research teams, clusters, and CoE/HiCoEs that will drive USM's research that create landmarks at international arena.

Upgrade for 1 ARI per year

Estimated Cost

RM60,000,000

7.2 ACHIEVING GLOBAL RESEARCH PROMINENCE

Achieving Global Research Prominence	Research Icons
	Iconic Research
	Next Generation Researchers
	Upgrading & maintaining State Of Art Infrastructure
	Research-to-market Program

7.2.1 Research Icons

Strategy

Transform USM researchers to become world renowned research icons in their respective field of research.

Action Plan

Staff placement in world renowned laboratories and enhancing presence in Editorial Boards of world renowned refereed journals.

Milestone

Phase	Target
2014-2017	5% of academic staff
2018-2021	15% of academic staff
2022-2025	30% of academic staff

KPI

Percentage of academic staff being recognized as world renowned research icons.

Expected Outcome

Branding of USM as a world renowned research institution in selected research areas.

Estimated Cost

RM 20 Million.

7.2.2 Iconic Research

Strategy

Selected ARIs, RUC and LRGS will be converted to iconic research that will result in outcome that can give high impact to the nation. High impact outcomes are defined as either policy implementation or commercialization with revenue exceeding RM 1 mil or increasing the income per capita of the bottom billions.

Action Plan

Create strategic partnership with various Ministries such as Internal Affairs Ministry and also the research division of Government Linked Companies such as Khazanah Nasional, Pemodalan Nasional Berhad to conduct iconic research funded by both sides.

Milestone

Phase	Target
2014-2017	3 iconic research projects
2018-2021	5 iconic research projects
2022-2025	10 iconic research projects

KPI

Research outcomes that can contribute strictly to one of the following; policy implementation or commercialization revenue exceeding RM 1 mil or increasing the income per capita of the bottom billions.

Expected Outcome

Making USM relevant to nation building.

Estimated Cost

RM 30 Million.

7.2.3 Next Generation Researchers

Strategy

Dissemination of research findings to the masses.

Action Plan

Conversion of highly technical research materials related to areas of interest to the nation into forms understandable by the public.

Milestone

Phase	Target
2014-2017	3 books
2018-2021	10 books
2022-2025	20 books

KPI

Number of research books.

Expected Outcome

Getting more people interested in science.

Estimated Cost

RM 15 Million.

7.2.4 Upgrading & Maintaining State of The Art Infrastructure

Strategy

Partnership between public and private institutions to upgrade and maintain state of the art laboratories.

Action Plan

Source of funding will be win-win partnership between public and private sector for shared state of the art facilities.

Milestone

Phase	Target
2014-2017	1 Public and 1 Private
2018-2021	1 Public and 2 Private
2022-2025	1 Public and 5 Private

KPI

Number of state of the art laboratories .

Expected Outcome

World renowned research laboratories.

Estimated Cost

RM 50 Million.

7.2.5 Research-To-Market Program

Strategy

To initiate industry based research.

Action Plan

To create strategic partnerships with relevant industries.

Milestone

Phase	Target
2014-2017	3
2018-2021	5
2022-2025	10

KPI

Number of products developed together with the industries.

Expected Outcome

Marketable products.

Estimated Cost

RM 60 Million.

8 APPENDIX

DEWAN TUANKU SYED PUTRA

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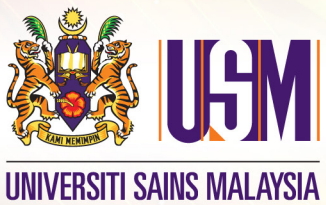

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