



Insights on

UTP TRANSFORMATION JOURNEY

Interview with Prof Ir Dr Hilmi
Mukhtar



TABLE OF CONTENTS

3	Transformation Plan
4	Task Delegation
5	Moving towards Changes
6&7	Centre of Excellence (COE)
8	Monitoring Instruments

» *What are the actions taken?*

What was very important in the journey of transformation was the implementation of the plan, to monitor the plan, UTP has set up two committees. One is called a transformation working committee, and the second is called a transformation standing committee. The transformation working community was headed by a champion.

Assalamualaikum w.h.k. saya Prof. Dr. Hilmi Mukhtar, I would like to share how the transformation of UTP happened from 2009 until 2016. Initially, the transformation was planned in 2009, after reviewing the academic master plan and RnD master plan. Alongside, we were also taking the corporate agenda of PETRONAS as well as *pelan strategik "Jati Diri Negara"*. From the planning, we have 35 key subjects focus, 55 initiatives, and 159 action plans. These 159 action plans include the strategic focus and initiative, we classed it into four important domains. Firstly, we classed it into competency which includes the capability of our researchers in winning the research proposal. Secondly, we classed it into leadership, which indicates how the lecturers have become principal investigators in running a funded research project. Thirdly, we classed it into research performance which includes publications and other areas such as awards in research, etc. Lastly, how can we mold into a research culture? So, the four important areas were being orchestrated and championed by each of the MC.

Prof Ir Dr Hilmi Mukhtar



» **Initially, it was run by a task force, but to expedite in terms of enhancement, the transformation office was set up in April 2010 and I got the opportunity to lead the transformation from 2010 until 2016.**

I had the opportunity to lead on the competency, at the same time, Prof. Mohd Fadil was leading for the leadership, while Prof. Rashid was leading on the performance as well as Tuan Haji Mohd Noor was leading on the research culture. In each of the domains that I have mentioned earlier, I was having the opportunity to ask the working committee on competency

Prof. Mohd Fadil was on the leadership, Prof. Rashid was on the performance as well as Tuan Haji Mohd Noor was on the competency. We were monitoring the monthly progress of the intended plan. In addition to that, this working committee was answerable to the steering committee, which was reported every quarterly, and it was chaired by Yang Berbahagia our Vice-Chancellor. We also have members from Education Division Learning (EDL) in PETRONAS.



The establishment of The 9 Mission-Oriented Research

Our duty was to facilitate, monitor, analyze, and present all the repulse in the strength community in a quarterly manner. Any gap analysis that we faced will be reported and receive feedback from the strength community. The most important point in charting our research journey is the establishment of mission-oriented research. During the transformation journey, we have established 9 Mission-Oriented Research (MOR). They are Enhance Oil Recovery, we have Carbon Dioxide Management, Deep Water Technology, and Hybrid Water Technology.



The significant thing during the transformation journey is to convert UTP from a teaching-focused university to become a research university.



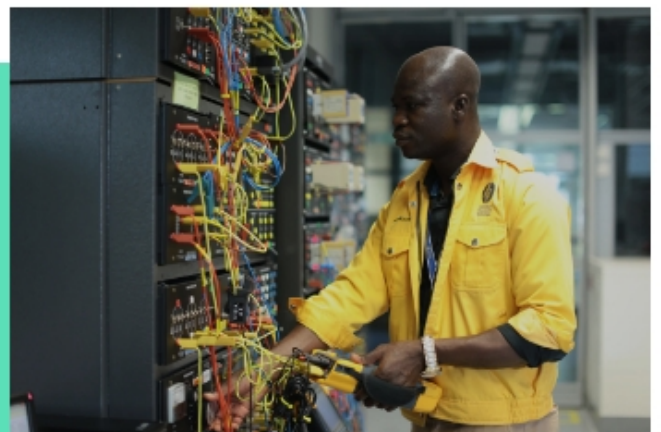
UTP on Becoming a Research - Focused University



It's the establishment of the 9 Mission-Oriented Research, the multi-disciplinary, and the members of MOR that came from various departments, whether Engineering, Technology Science, Social Science, and Humanities. It is considered as 'virtual' instead of 'landed' as the members were located from various departments. These 9 Mission-Oriented Research namely Enhance Oil Recovery, Carbon Dioxide Management, Deep Water Technology, Hybrid Energy System, Grid Technology, Sustainable Resource, Nano Technology, Boil Medical Technology, as well as Intelligent City.

Road Map Progression

The development of these MOR is based on three important areas. The first area is business need, after we possessed the business need and justifications, the second area is the capability, and the technology. In moving forward, we monitored the progress of the road map and on an annual basis, any gap is addressed during the meeting with the steering committee. The crucial element under the MOR is the setup of what we called as the Centre of Excellence (COE).



The Establishment of 15 Centers of Excellence



During the last transformation, we have managed to establish 15 COE. Among others, The Centre for Intelligent Signal & Imaging Research (CISIR), Centre of Innovative Nanostructure & Nanodevices (COINN), Centre for Biofuel & Biochemical Research (CBBR), CO₂ Research Centre (CO₂RES) Centre of Excellence in Subsurface Seismic Imaging & Hydrocarbon Prediction (CSI), South East Asia Carbonate Research Lab (SEACARL), Centre of Enhanced Oil Recovery (COREOR), Centre for Automotive Research & Electrical Mobility (CAREM), Centre of Research in Ionic Liquids (CORIL), Gas Separation Research (GSRC), Centre for Corrosion Research (CCR), Centre of Social Innovation (COSI), Offshore Engineering Centre UTP (OECU), Centre of Advanced Process Safety (CAPS), High Performance Cloud Computing Centre (HPC3). These centers consist of members from the Mission Oriented Research (MOR) and they are “landed” in the sense that they have labs and facilities.

UTP on Measuring Achievements

How do we monitor the progress in terms of transformation? We are using two instruments and the first instrument tool is called Mission Research Assessment (MyRA). We are using MyRA to see the progress of the university, departments, and MOR instruments. The second tool that we are using is the Center of Excellence instrument to measure the achievement of the center. From there, we can observe the progress of the transformation. At the same time, we are also participating in Quacquarelli Symonds (QS) and Times Higher Education (THE). The purpose of this is to monitor the rating and ranking of UTP and any weaknesses will be addressed as a part of continual improvement.



What are our Quick Wins? I just give a few examples, we achieved 5 stars MyRA in 2011. Afterward, we managed to achieve 4 stars QS rating in 2014 before we obtained the top 200 QS Asian University, follows by 6 stars MyRA and 5 stars QS rating in 2015. Now, we are also continuing to improve our rating and ranking, UTP is becoming the best private university in the country in terms of teaching & learning, and research. The transformation journey was closed in April 2016, after we have achieved those objectives to become a nationally recognized university, and the journey continues to become a global prominent by Project Management Office (PMO) and it should be arranged by 2025.