

# The Possible University-Industry Partnership between DRB –HICOM and University Malaysia Pahang

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## **Abstract**

University- industry relationships are highly heated topics which rope in the high economic value, political and the constant academic interest among industry scientists and the academicians. In the shift of the present economic world, the university –industry partnership has co-lateral relationship in which one cannot fulfil the existing job market without another. The knowledge and technological transfer is a catalyst the industry’s innovation. It not only narrows the paradigm of knowledge to one per se but it has wider access that might be fruitful to the industry and also the partnering university. The purpose of this paper is to investigate the possible university-industry relation between DRB-HICOM and University Malaysia Pahang and the factors that might affect the knowledge flow between the partnerships. The data for this paper was collected through an interview with an officer from DRB-HICOM. DRB-HICOM has sound expectations of the company employees. They welcome the partnership and also gave suggestions to improve the engineering curriculum of the university for a brighter and greater good for UMP students.

**Keywords:** University-industry partnership, technology knowledge, co-lateral relationship, industry scientist, DRB-HICOM.

## **1. Background of study**

The higher institutions Malaysia are relatively new to this improved frontier of university-industry partnership. This partnership is vital for the growth of the economy and also the for the knowledge based economy that we have been striving hard for. The economic globalization around the working industries and firms institution has coined a new knowledge on education globalization. One of the most identifiable criteria in the partnership would be the research funding for universities to ignite and nurture new thread of interest in the partnering of corporations and universities. Viewed critically, this partnership puts the academician under the pressure of researching and teaching in academia. This university-industry partnership will ‘develop working relationships and can greatly facilitate job placement for students’ (Jiang, Normah binti Othman,2011)

## **2. Faculty of Mechanical Engineering of University Malaysia Pahang**

In this light, the faculty of Mechanical Engineering of University Malaysia Pahang has been producing mechanical engineers that are highly knowledgeable in the field. The university management offers two postgraduate programme and several masters courses in the field of Mechanical, Automotive and also Manufacturing Engineering. Apart from the academic teaching, the faculty forays into the researches of multidisciplinary areas like Engine Development, Noise, Vibration and Harshness Intelligence (NVH), Manufacturing and Intelligent Machine Tool.

The faculty has good networking with automotive and manufacturing industry with the other related companies in the related field. Companies like Environment Tectonic Corporation (ETC) had expressed great interest in collaborating with the faculty especially with Automotive Research Group of the university. ETC is a company that works on the building of conditioned air supply, altitude simulation room and driven case room. The faculty is also equipped with latest software that is used in the industry such as Autocad, Catia, and SolidWorks. This software is particularly important in manufacturing. With the availability and the recognition of the industry like ETC, the faculty has continued to grow into new heights; students are sculptured through an intensive soft skill development, industrial placement scheme and also to gain the necessary professional experience to increase the rate of employability. (Miss Vanessa Visit for Etc. 2012, Retrieved from <http://fkm.ump.edu.my/index.php>)

## **3. DRB-HICOM MALAYSIA**

DRB-HICOM is the leading incorporated automotive company in the country that manufactures and assembles automotive components for a wide range of vehicles such as ambulances, police vehicles, ambulance, fire trucks and also garbage compactors.

The company has 10 working companies that specialises in manufacturing and also in engineering. The vendors involved in the field of manufacturing are Tier-1 vendors, with world-class technology and engineering expertise. DRB-HICOM has productive partnership with prestigious technological resources to produce products of high quality to the domestic and also international markets. The technology partners include Akashi Kikai, Futaba, Hiruta Kogyo, Honda, Imasen, Kikuchi Press, Mitsubishi Engineering, Plakor, Shiroki, Suryo Plastics, Thai Summit, TRW Steering, Yamaha and ZF steerings. Apart from that, the international automakers and the original equipment manufacturers include Toyota, Honda, Zf Steerings, TRW, Brose, Volvo, Ford, Nissan and Yamaha.

Apart from that, DRB-HICOM is the single Mercedes S class assembler outside of Germany. This giant automotive company has eight world-class assembly plants. Four of the assembly is for the motor vehicles and three at the assembly complex in Pekan and one Honda plant in Melaka. There are also assembly plants for motorcycle, namely MODENAS, Honda, Yamaha and Suzuki. The assembly plant in Pekan is the most important plant in the assembly operations. It has attracted international manufacturer for the reputation in providing supply chains and logistical network to boost Pekan as the automaker for the Asean Market. (Fully integrated automotive business, 2010. Retrieved from <http://www.drhicom.com/CMS/SolutionPages/Core>).

#### **4. The Partnership**

With the expertise and international recognition that DRB-HICOM has, the university –industry partnership can go a long way for both parties. The university-industry partnerships integrate various fields of intellectual properties. In this integration, the member brings different type of skills, experiences and expectations. The emergence of two strong equities can develop into a collective community of innovation that has common platform of common values, vision and mission. The knowledge based economy can be unified within the new frontier of community of innovation and to be practiced towards the designed goals

The collaboration with the industry and academic organizations has many benefits. The first benefit is the sharing of research findings between the university and industry. The symbiotic relationship will ensure that university uses the latest research findings to impart knowledge to students. As for the industry, time and resources can be saved in training and introducing graduates to the contemporary on-field knowledge, with the trust that the academicians have equipped students with the same understanding.( Theotoky, Beath, Siegel ,2002) Apart from that, the partnership will also give access to the state-of-the-art facilities. The university management can make requests of products or items to enable proper, supervised research to be conducted in the university so that students will learn effective and thoroughly. A strong trust and commanding relationship between the two parties can go a long way in realising the mission and the objective of the university and also the partnered firm. ( Normah, 2011) The industries have the privilege of working with the latest technology in the market. Good collaborative partners would share and re-create new opportunities for technology learning.( Roediger, 2007). It will boost the knowledge based economy and also aid the ever growing economic giant.

#### **1.5 Research Objective:**

The research objectives are as follows:

- 1.To investigate the possible partnership between DRB-HICOM and University Malaysia Pahang.
- 2.To make recommendations to cement the partnership.

#### **6. Research Questions:**

The following are the research questions that were formulated based on the research objective above:

1. What are the expectations of the partnering bodies?
2. What are probable ways in cementing the partnership?

#### **7. Research Design**

This research was carried out in University Malaysia Pahang , Pekan Campus. This research is aimed to reach at the higher officials of DRB-HICOM in the Pekan Plant and also at the headquarters. The interviewee has worked with DRB-HICOM for more than a year. The transcription of the interview will be attached with the report. This research was conducted in

order to forge a possible partnership with DRB-HICOM and University Malaysia Pahang to a trusting and commanding relationship between the two parties to realise the mission and the objective of the university and also the partnered firm. The research questions of this research was answered by the survey and interviews conducted by the researcher with the DRB-HICOM officials. The selected participants of this interview are expected to answer questions that lines with topic of the research. The data obtained from the interview will be transcribed using qualitative measures. The method of research used is a survey that includes interview. The qualitative research gathers more verbal information than statistical analysis. The qualitative approach has a valid measurement and also reliable. The qualitative method does not give room to biasness. Apart from that, it gives more room for the research to grow as the study progresses. The data collected are also flexible and there are zero chances of data manipulation. In this research, 22 interview questions will be asked on the University-Industry Partnership to the DRB-HICOM officials. The sanctity of the information on this partnership is highly valued and because of that the C.E.Os of the company will be interviewed. The C.E.Os or the participants in this research must be attached with the company longer than a year. An appointment with the official was made through telephone conversations.

### **1. Instrumentation**

The research instrument (interview questions) was sent via email to the possible interviewee. Once the interviewee agrees to be interviewed, the researchers sets a appointment and conducts the interview for at least 30 minutes or more depending on the saturated information that is given by the interviewee.

### **2. Analysis of Data**

After the interview is conducted, it was transcribed for all the 22 questions. It was categorised into table depending on the related components to the research. The participants were briefed about the research topic and were made to understand that their co-operation in this research can go to greater heights where the partnership is concerned. The participant were not forced to be roped into the research but were politely addressed to solicit their help in making this partnership a success. The relevant information that would aid the research question and research objective were meticulously chosen.

### **8. Findings and Discussions**

The finding of this research suggests that DRB-HICOM has its' own specification on hiring employees. It is also made to understand that the giant automotive company plays strictly by its' own company rules in ensuring the quality of work and also of the employees. From the interview that was conducted with an official from DRB-HICOM, the scope on the University-Industry Partnership between DRB-HICOM and UMP widened. According the Mr.A, the human resource officer was has been working in DRB-HICOM since 1995, 70% of the people working in DRB-

HICOM are from UMP. This population does not include the practical students from UMP. The employees from UMP enjoy number of benefits that is in clause of the company. At the moment the research was conducted, there are 60,000 employees ranging from blue to white collars. Each sub-company of DRB-HICOM has different company policies that can be benefitted by the employees. Different is the case with the students who attach themselves with the group for industrial practice, they will not be paid during the practical sessions. The students who work in DRB-HICOM for practical trainings must fall under certain category that is set by the group. Each of the practical students will be evaluated by the mentor; they will be tested on technical knowledge and communication. The testing will be done by the mentors they are attached too. The students will have different mentors based on the areas they are assigned too. The students are expected to have the eagerness to learn during the practical trainings. This will aid in reducing the learning curve once they begin working. The group often looks for people with effective communication and good social skills to ensure the quality and the credibility of the international business dealings. The group strongly believes in succession planning, they expect students or graduates to climb the ladder.

Before that takes place, the fresh graduates where this matter is pertinent, must prepare themselves with excellent leadership qualities and at the same time must have sound experiences in their assigned field. Fresh graduates with great communication, leadership and excellent attitude will be sent to countries like Germany, Thailand, Indonesia, and Japan for training. For this purpose, the internal resources with young graduates were set-up. A fresh graduate must be able to learn the business as fast as possible regardless the different type of engineering that exists. He is expected to know and understand the process involved in producing a car from scratch. The possible partnership between DRB-HICOM and UMP needs to be established in the most prevalent method possible. The opinion on the working quality of UMP students must be taken into consideration. According to Mr. A, he has never received complaints on the quality of work produced by the UMP students. This puts UMP as a better choice in partnering with DRB-HICOM. Partnering with DRB-HICOM provides great benefit for the university. The technologies in the automotive industry are constantly changing. The golden opportunities to work with DRB-HICOM must be seized and students must have agile mind-set to grab the relevant knowledge. They too, will be exposed to the high impact working culture in DRB-HICOM. Practical students who work in DRB-HICOM will be handling improvement projects like technical improvement projects, quality improvement and motion studies. Students are not allowed to handle projects without supervision. Students are always paired with senior engineers where learning can be optimised. It will also be documented in the interview that, the higher engineering education in our country must make attempts to expose the students as early as possible not at the tail-end to fulfil their graduation requirement. In order to tie a partnership with DRB-HICOM, UMP must recognise the issue raised by the official to make sure it is formidable with the giant automotive. The interview with the official proved fruitful to where this path of partnership is leading to. To form a better relationship with DRB-HICOM, we were told to propose the idea to the headquarters of DRB-HICOM.

## **9. Conclusion**

In conclusion, the chances of good partnering between DRB-HICOM and UMP are bright. This

matter should be taken into serious consideration and good groundwork must be prepared by the university to reap and seize the working opportunities with DRB-HICOM. This research meets the objectives; to investigate the possible partnership between DRB-HICOM and UMP and also the suggestions to cement the partnership. Mr. A, gave an explicit explanation on the expectation of the company from the students and fresh graduates employed in the organization. This research has kick-start the possible new beginnings in the university-industry partnership.

## 10. References

- Roediger-Schluga T. (2007): Public-Private R&D partnerships: Current issues and challenges. In J.C Malich and W.Pascha (Eds.), Innovation and Technology in Korea. Springer (105-116)
- Theotoky, Beath, Siegel (2002): Universities and Fundamental Research: Reflection on the Growth of University-Industry Partnerships. Oxford Review of Economic Policy.
- Fully integrated automotive business. (2010). Retrieved from [http://www.drhicom.com/CMS/SolutionPages/Core\\_Business.aspx?ContentID=a56dfd3e-7f11-4eb1-b2dd-3927ea0bb346](http://www.drhicom.com/CMS/SolutionPages/Core_Business.aspx?ContentID=a56dfd3e-7f11-4eb1-b2dd-3927ea0bb346)
- Miss vanessa visit for etc. (2012, February 16). Retrieved from [http://fkm.ump.edu.my/index.php?option=com\\_frontpage&Itemid=1&limit=4&limitstart=1](http://fkm.ump.edu.my/index.php?option=com_frontpage&Itemid=1&limit=4&limitstart=1)
- Jiang C, Normah binti Othman(2011) The Effect of Education Condition for the University-Industry Collaboration: A Case Study of Faculty Mechanical Engineering in UMP. Journal of Management Science and Engineering.pg 169.
- Normah binti Othman(2011) Factors Contributing to the Effectiveness of a University-Industry Partnership. Published in Sino- US English Teaching. David Publishing, Vol (8), No.11, 681-688.

### 1.12 Appendix 1

1. How many UMP graduates do you have in your organization?
2. Are the students being paid during their practical session with DRB-HICOM?
3. How do you evaluate the students' performance? What types of criteria or method do you use?
4. What are the qualities that you are looking for in UMP's students if they were to be hired?
5. ICAM-International College of Automotive. Your students will have their placement for practical session within the group companies. Will this situation affect the opportunity of UMP students during their practical session with DRB-HICOM?
6. Do you provide training programme for UMP students who are doing practical with your company?
7. What is your opinion on the quality of work produce by UMP students? How to improve? Suggestion?
8. In the long run, how does this industry partnership with UMP benefits you?
9. Can you describe what a successful project is and the reason why it is considered a success?
10. As we know DRB HICOM focuses on automotive manufacturing and heavy industries, how would you consider a fresh graduate to cater the needs of your company in achieving your objectives?
11. What is the working percentage of foreign graduates in your company?
12. If you are given a choice, would you employ a person with a foreign degree or a local

degree?

13. What are benefits offered by DRB-HICOM for the employees?
14. What are the challenges faced by higher engineering education in our country
15. How can UMP come forth to overcome the challenge?
16. What do you think about Education model and mechanisms provided by UMP lecturers in the field of Engineering
17. How do you think the university can administer graduates with poor academic knowledge in the related field?
18. How do you think UMP should change its curricula design?
19. How can company best achieve competitive impact from industry university research collaborations?
20. What do you think about the creation of knowledge with the emergence of university –industry partnership?
21. Are there any possibilities of sponsoring excellent UMP students in the future?
22. What are probable ways in cementing the partnership?