MPC

MALAYSIA PRODUCTIVITY CORPORATION

CALL FOR PAPERS

International Convention on Quality Concept Circles - 2010

ICQCC 2010

Hyderabad, India
12th – 15th October, 2010

Call for Papers

The Malaysia Productivity Corporation (MPC) cordially invites Quality Control Circles (QCC) or Innovative and Creative Circles (ICC) and practitioners to submit papers for presentation at the International Convention on Quality Concept Circles – 2010 (ICQCC 2010, Hyderabad, India). ICCs or speakers who wish to present their projects must complete the application form together with Abstract submission. An abstract must be submitted with the length not to exceed six (6) letter size pages. Abstract should include:

- Title of Paper
- Name/Affiliation/Mailing Address/ Email Address/Phone & Fax Numbers
- Designation of Author/Presenter
- Description of Topic
- Summary of 6 Pages Maximum (excluding bibliography with 12-point font, double spacing and 1-inch margins all around)

The summary must clearly describe the status of the reported work, its significance and highlights. Also to be notified are supporting data, results and conclusions and any references to prior work. Deadline of submission is on **May 15, 2010**. All authors will be notified by **June 15, 2010** if the paper is accepted or not.

Technical Papers based on practical experience are invited on:

Quality Control Circles based Topics:
- HRD through QCC
- Revitalising of QCC in Organisations
- Effect on behavioral aspect in QCC Members
- Organization growth through QCC (stimulating organizational learning and growth though QCC. QCC's for stimulating organizational learning)
- QCC in Service Sector
- QCC for Rural Development
- Role of QCC in Work Place Management
- Effect of training on QCC's performance

Other Quality Concepts:
- Integrated approach of different Quality concepts for Total Quality
- Role of Six Sigma in the growth of Service Sector Industries
- Organisation Development through TPM
- Soft Skill Development
- Promotion of TQM in Small Scale Industries
- Role of TQM in Service Sector
- Development of society through different Quality Concepts
- Application of Statistical Tools for Productivity Improvement

Any Other Related Topics

Case Study Presentation by Group of Members:
- Quality Control Circles
- TPM Circles
- Quality Improvement Teams (Cross Functional)
- SGA Group
- Six Sigma Project
- Projects on '5-S', SMED, Poka-Yoke, BPR, etc.
- Kaizen
- Any other emerging Quality Team Concepts

The competition provides a venue to:

- Showcase the effectiveness of group effort in systematic problem-solving, problem prevention, and work improvement;
- Highlight the circle/ team's competency in the use of basic and advanced tools and techniques in problem-solving process;
- Demonstrate circle/team ability and confidence in presenting ideas orally and in writing, given limitations in time, space and media; and
- Foster learning experience for presenters and audience. Competition is open to all participating countries.

Note: Case study presentation will be in two categories viz. competitive and non-competitive. Group has to mention in the registration form for their choice. All circles in competition category will be awarded as per following criteria.

Gold Award: 90% and above
Silver Award: 80% and above, below 90%
Bronze Award: Below 80%

General Programme

12th October 2010

Registration	:	09.00 AM to 06 :00 PM
Welcome Reception	:	04:30 PM to 06:00 PM

13th October 2010

Inaugural Session	:	09:00 AM to 11:00 AM
Technical Session	:	11:30 AM to 06:00 PM
ICQCC - Co ordination Committee Meeting	:	06.30 PM to 08.00 PM

14th October 2010

Technical Session in Parallel streams	:	08.30 AM to 03.00 PM
Valedictory session and cultural event from teams of participating countries	:	04.00 PM to 07.30 PM
Farewell Dinner	:	07.30 PM to 08.30 PM

15th October 2010

Industrial Visit / Sightseeing	:	09.00 AM to 03.00 PM

Further Information please contact :
Secretariat
ICQCC 2010, Hyderabad, India
Malaysia Productivity Corporation (MPC)
P.O Box 64, Jalan Sultan, 46904 Petaling Jaya
Tel : 03-7955 7266
Fax : 03-7957 8068
C/P : Mohd Rashid Kanchil @ e-mail:mrashid@mpc.gov.my
        Nor Robaayah Mohd Noor @ e-mail:nrmn@mpc.gov.my

MPC

PRELIMINARY APPLICATION FORM

Name of Organisation:	

Mailing Address:	

Contact Person:	**Designation :**
Contact No:	**Fax :**
E-mail :	**M/Phone :**
Billing Address :	
Contact Person :	**Designation :**

Type of Presentation *(please check accordingly)*

☐   Case reports implemented by QC Circles in the workplace.

Please Tick (√)   ☐ Competition   ☐ Non-Competition

Title :	
Group Name :	

No.	Name of participants

☐   Reports on promotion, education and management of Quality and Productivity activities.
(e.g: ISO, Knowledge Management, Supply Chain, Six Sigma, Customer Satisfaction)

Title :	
Name of Speaker :	
Position :	

INTERNATIONAL CONVENTION ON QUALITY CONCEPT CIRCLES - 2010
ICQCC – 2010, HYDERABAD - INDIA
12th─15th October, 2010

Theme: "Develop People for Better Tomorrow"

CONVENTION OVERVIEW

It is our proud privilege to announce that the **International Convention on Quality Concept Circles**, will be hosted by Quality Circle Forum of India, which will be held from **12th - 15th October, 2010 at, Hyderabad, India.** India is hosting ICQCC for the third time, the previous ones having been held at New Delhi, in 1989, and at Lucknow in 2002. The third one is going to be held at Hyderabad in 2010. Every convention is an opportunity for the Members practicing Quality Control Circles and other Quality Team Concepts, to share the experience and knowledge from one another, to rub shoulders with one another, discover each other's culture and unite in the creed of Quality and Human Brotherhood.

The theme of the convention is **"Develop People for Better Tomorrow"** - Developing people is an eternal theme for the world. As long as there is lack of development of the people, there will be disparities in the economic status of the countries. Development of the people through QC Circle intermingled with other Quality Concepts is a need to build a better tomorrow for people all over the world. **ICQCC - 2010**, India will provide opportunities for Quality and QC Circle experts to exchange views and search for new avenues to improve process management, value addition and cost reduction. Every time one visits India, they will find a vibrant country forging ahead, overcoming every hurdle that comes in its way. We extend to you all a warm welcome to attend the convention not only to contribute to the Quality movement as a whole, but also rediscover India with its diverse cultures. The idea of organizing the International Convention on Quality Control Circles began in 1975. During the Korean Control Conference, the organizers proposed to widen the exchange of ideas and experiences on QC circle activities. A year after, the first international event materialized in Seoul.

Convention delegates are quality practitioners, professionals, facilitators, trainers, QC circle members from various industries, private and government agencies, and the academe as well. They come mainly from the Asia-Pacific region and of late there has seen an increasing participation from Africa, the United States, Europe, Australia and New Zealand. Over the years and in keeping with new developments, other quality improvement initiatives were also featured in the convention. However, the basic approach of people involvement through QCC remained the focus of interest even as variant approaches emerged. ICQCC is administered by the Union of Japanese Scientists and Engineers (JUSE). Hosting of the annual event, however, is rotated among member countries of the ICQCC Coordinating Committee. India has so far hosted two conventions: in 1989 and 2002. It is represented by Quality Circle Forum of India, in coordination with its 20 chapters in different part of India.

Official Language**:** Presentations and documentation of proceedings are in English.

CONVENTION PROGRAMME

12th October 2010

| Registration | : 09.00 AM to 06 :00 PM |
| Welcome Reception | : 04:30 PM to 06:00 PM |

13th October 2010

Inaugural Session	: 09:00 AM to 11:00 AM
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14th October 2010

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15th October 2010

| Industrial Visit / Sightseeing | : 09.00 AM to 03.00 PM |

Opening Session
Plenary Opening Session Consists of Opening and Welcome Address, Keynote Speech and Special Lecture.

Presentation
Technical Presentation Session is divided into five parallel streams. In the stream A & B Case Report implemented by QC Circles in their workplace will be presented. The stream C, D & E will take the presentation of reports on the improvement, promotion, education and management of the QC Circle activities by managers, facilitators and instructors.

Closing Session & Farewell Dinner
In this plenary session, the closing remark will be given followed by the Farewell Dinner ICQCC 2010 is to be announced.

Speaker's Technical Meeting
All speakers are invited to attend for knowledge of presentation requirements and communication with their respective interpreters**.**

Industrial Visit
The Participants from abroad are provided with a chance to visit India workshops to see how the QC Circle activities actually work in Chinese companies. There will be an arrangement for discussion and sharing between QC Circle and managers of the companies.

Proceeding
Papers presented at the Convention are printed in the proceedings in English summaries. The participants are provided with one copy of proceeding at the registration desk.

CONVENTION PACKAGE

PACKAGE	FLIGHT OPTION (✔) PAPER PRESENTER (Maximum of 5 persons in a Quality Circle)		FLIGHT OPTION (✔) OBSERVER	
	Economy Class (RM)	Business Class (RM)	Economy Class (RM)	Business Class (RM)
Package A (Single - 6D 5 N) Flight + Accommodation + Convention Fees + Industrial Visit	7600.00	12000.00	8000.00	12500.00
Package B (Twin-Sharing - 6D 5N) Flight + Accommodation + Convention Fees + Industrial Visit	6000.00	10300.00	6400.00	10800.00
Package C (Single - 5D 4N) Flight + Accommodation + Convention Fees	6700.00	11000.00	7100.00	11500.00
Package D (Twin Sharing - 5D 4N) Flight + Accommodation + Convention Fees	5400.00	9700.00	5800.00	10200.00

The fees are inclusive of the followings:
- Convention fees
- Airport Tax Ex-Kuala Lumpur and Hyderabad
- Return Airport Transfer Airport-Hotel-Airport
- Accommodation at 4/5 Star hotel

- Insurance Coverage
- Welcome Reception
- Farewell Dinner on October 14, 2010
- The Proceedings of ICQCC 2010
- Industrial Visit (for package A & B)

REGISTRATION
Kindly complete the enclosed registration form at the payment. Confirmation of application will be made upon receiving the full payment of the convention package fees.

CLOSING DATE FOR REGISTRATION - August 1, 2010

PASSPORTS
A valid passport (at least SIX MONTH from the date of departure) is to be submitted to the Secretariat by **September 10, 2010.**

PAYMENT
Banker's cheque / bank draft/ money order to be made payable to Director-General, Malaysia Productivity Corporation.

TERMS OF CANCELLATION
In the event of any cancellation before August 15, 2010 in writing or by fax, a cancellation fee of 10% will be charged for administration cost. No fee refund for cancellations after August 30, 2010. The organization however, may opt for replacement and the replacement will be accepted subject to written notification two months prior to departure.

Further Information please contact:
Secretariat, ICQCC 2010, Hyderabad, India, Malaysia Productivity Corporation (MPC),
P.O Box 64, Jalan Sultan, 46904 Petaling Jaya. Tel : 03-7955 7266 Fax : 03-7957 8068
(Mohd Rashid Kanchil) e-mail: mrashid@mpc.gov.my
(Nor Robaayah Mohd Noor) e-mail: nrmn@mpc.gov.my

REGISTRATION FORM

ICQCC 2010 HYDERABAD, INDIA
12- 15 OCTOBER, 2010

Please complete and return this form to:

Director-General
Malaysia Productivity Corporation
P.O Box 64, 46904 Jalan Sultan, Petaling Jaya.
(Attn : MOHD RASHID KANCHIL)
Tel: 03-7955 7266 Fax: 03-7957 8068

1.Name : (as in passport)	2. Passport No:	3. Expiry Date :

4. Designation :	5. Department :
6. Organisation/mailing Address :	

7. Phone :	8. Fax :	E-Mail:

Please choose (√) your flight option according to your preferred package.

PACKAGE	FLIGHT OPTION (✓) PAPER PRESENTER (Maximum of 5 persons in a Quality Circle)		FLIGHT OPTION (✓) OBSERVER	
	Economy Class (RM)	Business Class (RM)	Economy Class (RM)	Business Class (RM)
Package A (Single - 6D 5 N) Flight + Accommodation + Convention Fees + Industrial Visit	7600.00	12000.00	8000.00	12500.00
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Package D (Twin Sharing - 5D 4N) Flight + Accommodation + Convention Fees	5400.00	9700.00	5800.00	10200.00

Name of Nominating Officer:_____

Authorized sign & stamp:_____

Date:_____

PRESENTATION:

- Presentation equipment allowed are LCD / overhead projector. The organizers shall provide only one set of LCD and laptop.

- QCCs are encouraged to bring their own hardware equipment, i.e., LCD and laptop to prevent problems on software and hardware incompatibility extension wires and socket adapters.

- Presenters shall be limited up to the supervisory level only.

- Facilitators/advisers are not allowed to present and answer any question during the Question & Answer portion unless asked by the Judge. However, he/she may operate the projector during presentation.

- Presentation is limited to five (5) minutes set-up time, twenty (20) minutes project presentation and ten (10) minutes for Question & Answer portion. One (1) point will be deducted for every excess fraction of a minute for set up and presentation times. When time is up, the QCC will be asked to stop, whether the presentation is completed or not.

- Local language may be allowed during presentation as long as such is translated into English by a translator provided by the entrant company.

JUDGING CRITERIA:

- Problem Identification and Selection
- Analysis of the Root Causes
- Solutions Formulation
- Implementation
- Evaluation
- Standardization
- Oral and Written Presentation

AWARDS:

Adjudged QCC project presentations shall be awarded using the following rating plan:

- GOLD Award: 90 points and above
- SILVER Award: 80 to 89 points
- BRONZE Award: 79 points and below

http://kmanblog.com

ICQCC 2010
HYDERABAD, INDIA
15-20 OCTOBER 2010

SI. No.	ITEM	Sub-Item	Performance	Circle the Number as Mark	
			Case Study Evaluation Sheet for Quality Control Circles		
1.0	Identification/Selection of Problem/Theme/Project (12)	1.1 Relevance	Not relevant	1	
			Little	2	
			Relevant/Justified	3	3
		1.2 Controllability	Beyond Control	1	
			Not in full Control	2	
			Fully within control of QCC	3	3
		1.3 Method of Selection	General Choice	1	
			Data based	2	
			Data based & Prioritized	3	3
		1.4 Definition	Not in match	1	
			To some extent justified	2	
			Appropriate	3	3
2.0	Analysis (12)	2.1 Root Causes Identification	Not adequate	1	
			Generally Identified	2	
			Precisely Identified	3	3
		2.2 Use of data/statistics	No/Negligible	1	
			Used but not relevant/Moderate	2	

			Adequate & Relevant	3	3
		2.3 Appropriateness of Tools & Techniques	Unnecessary Tools applied	1	
			Relevant but not adequate tools used	2	
			Most relevant & appropriate	3	3
		2.4 Approach	Not logical	1	
			Moderate	2	
			Logical & Sequential	3	3
3.0	Solution Formulation (9)	3.1 Clarity of Solution	Not clear	1	
			Moderate	2	
			Well defined/Clear	3	3
		3.2 Quality of Solution	Solution not logical/appropriate	1	
			Moderate	2	
			Precise/Specific/Appropriate	3	3
		3.3 Action Plan	Not prepared	1	
			Not adequate	2	
			Prepared well	3	3
4.0	Implementation (9)	4.1 Conformance to plan	Little	1	
			Average	2	
			Full Compliance	3	3
		4.2 Team Effort	Little	1	
			Moderate	2	
			Strong	3	3
		4.3 Use of PDCA	Not used	1	
			Moderate use	2	

			Good use of PDCA	3	3
5.0	Evaluation/Feedback of Result (9)	5.1 Analysis	Not adequate/relevant	1	
			Moderate	2	
			Adequate analysis of facts/data	3	3
		5.2 Appropriateness	Evaluation not appropriate	1	
			Moderate	2	
			Appropriately evaluated	3	3
		5.3 Communication	Hazy/not effective	1	
			Moderate	2	
			Results effectively communicated	3	3
6.0	Standardization (3)	6.1 Standardization	Little evidence of Standardization	1	
			Moderate	2	
			Institutionalized/Replicated in all areas	3	3
7.0	Presentation (36)	7.1 Documentation	Badly organised	2	
			Some portion organised	4	
			Logical flow: one part leads to another	6	6
		7.2 Visual Aids	Hazy	2	
			Some what satisfactory	4	
			Clear & Explicit	6	6
		7.3 Time Management	Time over run	2	
			Hurriedly finished	4	
			Finished on Time	6	6
		7.4 Delivery	Poor	2	
			Some what sustained	4	

			Established rapport with listeners/Professional	6	6
		7.5 Teamwork	Not effective	2	
			Moderate	4	
			Displayed effective Teamwork	6	6
		7.6 Question & Answer	Could not handle QA	2	
			Not very effectively answered	4	
			Convincingly answered all	6	6
8.0	General Impression (10)	8.1 General Impression	Very poor	2	
			Poor	4	
			Good	6	
			Very Good	8	
			Excellent	10	10
			TOTAL MARKS OBTAINED OUT OF 100		100
	Note: Serial No. 1 to 6 will be Pre-Evaluated and Serial No. 7 to 8 will be evaluated at the time of presentation				

Gold Award: 90% and above

Silver Award: 80% and above, below 90%

Bronze Award: Below 80%

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CONVENTION ICQCC HYDERABAD, INDIA
12 – 15 OCTOBER 2010

BOOK LOAN FACILITY LIMITED ON PEAK HOUR

PROFILE TEAM MEMBERS

NO	NAME	POSITION	EXPERTISE	DURATION SERVICE
1	AHMAD FAIZAR JAAFAR	LIBRARIAN	EXPERT IN DEVELOPMENT WEB	6 YEAR
2	HJ. AZIZI HJ. JANTAN	LIBRARIAN	EXPERT IN DEVELOPMENT SYSTEM	6 YEAR
3	AHMAD NAZRI JAAFAR	LIBRARIAN	EXPERT IN NETWORK	9 YEAR
4	JA'AMAYAH KOSNAN	PROGRAMMER	EXPERT IN DEVELOPMENT SYSTEM	2 YEAR
5	MUHAMAD AZMIR HJ. SULAIMAN	SENIOR LIBRARY ASSISTANT	EXPERIENCE IN CIRCULATION PROCESS	25 YEAR
6	ABDUL HAMID MOHD SALLEH	PROGRAMMER	EXPERT IN MAINTENANCE	24 YEAR
7	HJ. ROSLI MOHAMAD	TECHNICIAN	EXPERT IN ELECTRICITY AND DESIGN	29 YEAR
8	MOHD YAZID YAHAYA	COMP. TECHNICIAN	EXPERT IN MULTIMEDIA	9 YEAR
9	RIZANA MOHD RADWAN	LIBRARIAN	EXPERT IN PRESENTATION	7 YEAR

CONVENTION ICQCC
HYDERABAD, INDIA
12 – 15 OCTOBER 2010

INTRODUCTION

LOCATION OF UNIVERSITY

UNIVERSITI TEKNOLOGI MARA

PERLIS

P.PINANG

KEDAH

PERAK

KELANTAN

SABAH

TERENGGANU

SELANGOR

PAHANG

N.SEMBILAN

SARAWAK

MELAKA

JOHOR

PEMENANG Anugerah Kualiti Perdana Menteri 2008 Q

Premier Quality Award

Congratulations UiTM!
winner of the prestigous
AKPM Anugerah Kualiti Perdana Menteri 2008 PROVEN!

Reader Digest Trusted Brand

TRUSTED BRAND 2009

UiTM is Malaysia's premier institution of higher learning that has experienced phenomenal growth since its inception in 1956. The university has expanded nationwide with 15 branch campuses, 3 satellite campuses, 9 campuses, 21 affiliated colleges and a smart campus for the future. With this vast network and a workforce of 15 000, the university offers more than 300 academic programmes in a conducive and vibrant environment. It is also home to almost 120,000 students

1

ORGANIZATION CHART : UNIVERSITY
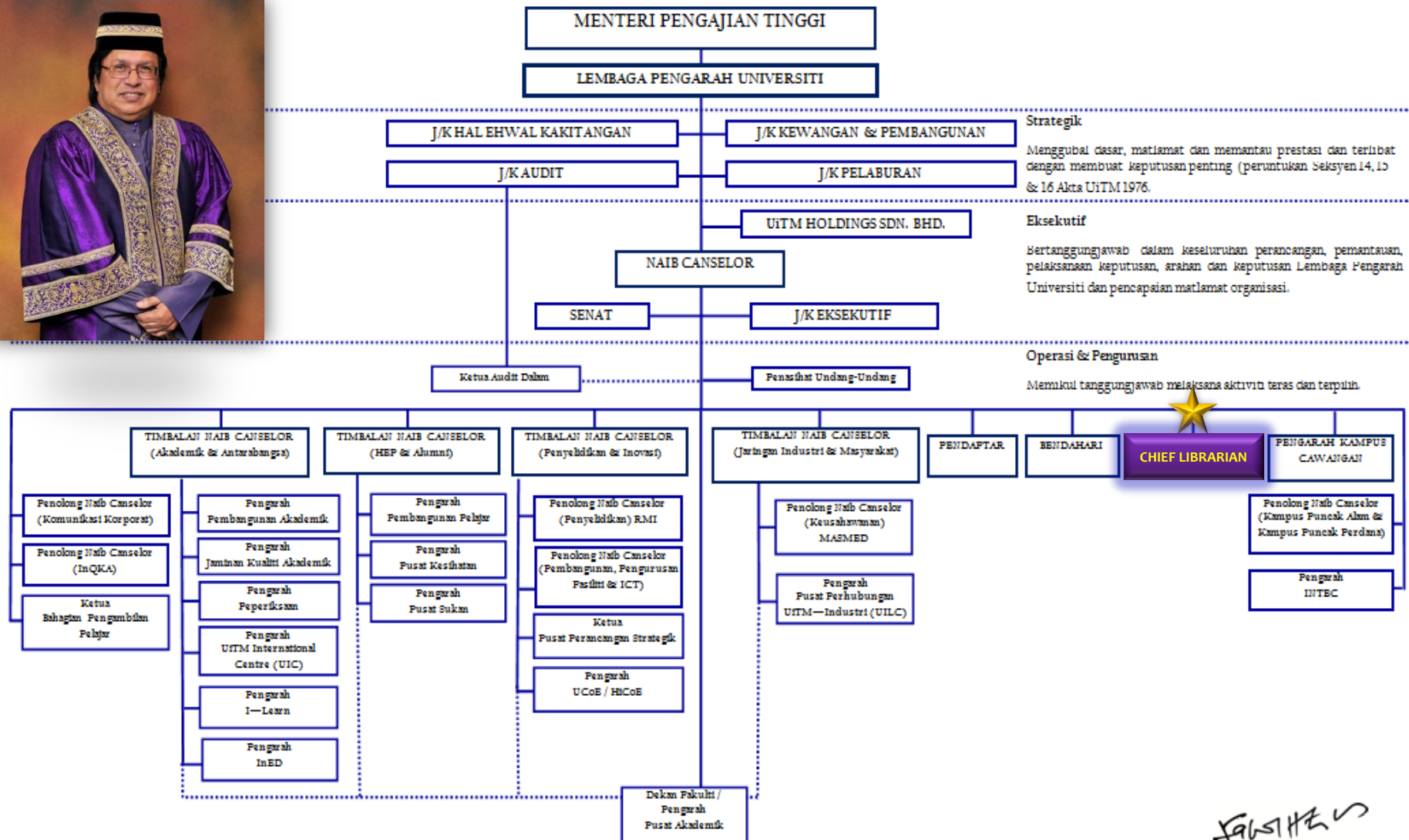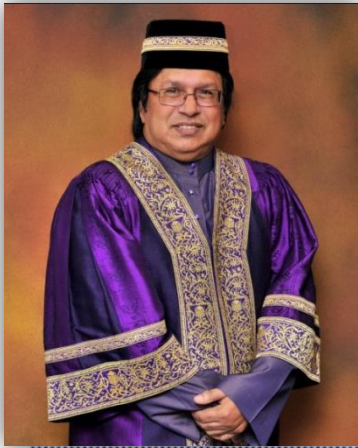
ORGANIZATION CHART : LIBRARY

NAIB CANSELOR

KETUA PUSTAKAWAN (Jusa C)

JABATAN PENGURUSAN SUMBER ILMU — KETUA (S52)

JABATAN PENGURUSAN PELANGGAN & JURNAL — KETUA (S52)

JABATAN PENGURUSAN SISTEM & TEK. MAKLUMAT — KETUA (S52)

- BPBPT
  - PEMB. & VERIFIKASI BIBLIOGRAFIK
  - PENYE. BIBLIOGRAFIK & PEMPROSESAN TEKNIKAL
- BP SI
  - PEROLEHAN BAHAN
  - PEMB. KOLEKSI
  - PELUPUSAN BAHAN
- PERP. CAWANGAN
  - KELANTAN, T'GANU, PAHANG, JOHOR, N. SEM-BILAN

- BPPPK
  - JURNAL BERCETAK
  - PANGKALAN DATA DALAM TALIAN
- BJPD
- BHG PERP. FAKULTI
  - PTAR 2, PTAR 3, PTAR 4, FSPU, J. OTHMAN, P. PERDANA, H. SELAYANG, H. SG. BULOH
- PERP. CAWANGAN
  - PERLIS, KEDAH, P.PINANG, PERAK
- BSTM

- BPM
  - INTEC, SABAH, SARAWAK MELAKA
  - PENG. PENGE-TAHUAN
- PERP. CAWANGAN
  - KORPO RAT
  - RUJUKAN
  - PEND. PENGGUNA

- BPKL
  - PENGUKURAN & PENGUKUHAN
  - PENG. KUALITI
  - LATIHAN & PENYELIDIKAN
    - ISO
    - GERAKAN KUALITI
- BAHAGIAN PENTADBIRAN
  - PENG. SUMBER MANUSIA
  - KEWAN G-AN & STOR
  - SELE NG-GARA A
  - JILI D

- PENG. KOLEKSI
- PENG. PERHUB. PELANGGAN
- E-KOMPONE N & WEB
- PENG. SISTEM ILMU
- PEMB. & PENYELI-DIKAN ICT
- PENG. OPERASI ICT
- PENG. PER-KAKASA N & PER-ISIAN
- PENER-BITAN DIGITAL & TAXONO MY

Kedudukan Kumpulan

★ **Library awards outstanding**

★ **Vice Chancellor of quality award**

3

Mission

To improve library services through physical resources, knowledge management and current technology in support of learning and research through delivery of Quality services and conducive ambience for UiTM communities.

Vision

To achieve a world class library status, catalyst to scholarship and excellence to the University's teaching, learning and research attainable through physical and virtual means.

4

ORGANIZATION CHART : DEPARTMENT OF SYSTEM & INFORMATION TECHNOLOGY

KETUA PUSTAKAWAN (S54)
HARON WEE AH BOO

HEAD DEPT OF MIS AND TECH**. (S48)**
NOOR HIDAYAT ADNAN

E-COMPONENTS & WEB UNIT

LIBRARIAN (S41)
AHMAD FAIZAR JAAFAR

PROGRAMMER (F29)
JA'AMAYAH KOSNAN

COMP. TECHNICIAN (FT17)
MOHD YAZID YAHAYA

OMPD KANAN (F14)
HAZANI HAMZAH

LIBRARY MGT SYS. UNIT

LIBRARIAN (S41)
AZIZI JANTAN

R & D UNIT

LIBRARIAN (S41)
AHMAD NAZRI JAAFAR

INFRA

PROGRAMMER (F29)
ABD HAMID MOHD SALLEH

ELECTRIC/NETWORK

TECHNICIAN (J17)
ROSLI MOHAMED

H/WARE & S/WARE

J/TEKNIK KOMP. (FT17)
MOHD ZAIDAN ZAINAL ABIDIN

OPERATION MGT. UNIT

SERVICES

SENIOR LIBRARY ASSISTANT (S22)
MUHAMMAD AZMIR SULAIMAN

DOCUMENTATION & HELP DESK

ICT FACILITIES

DIGITAL RESOURCES DEVELOPMENT UNIT

SENIOR LIBRARIAN (S44)
ABDUL GHANI AHMAD

TAXANOMY UNIT

LIBRARIAN (S41)
RIZANA RADWAN

PENDIGITAN TEKS & IMAGING

PEMB. PERPUSTAKAAN (S17)

PEMB. PENERBITAN (N17)
MOHD JAMIL SIRAN

PTAR 1 (P/IT 1)

PTAR 2 (P/IT)

J/T KOMP. (FT17)
ABD RAHMAN KAMARUN

PTAR 3 (P/IT)

J/TEKNIK KOMP. (FT17)
UMAR MD ZIN

PTAR 4 (P/IT)

PTAR PP (P/IT)

PERP. HOSP. SG. BULOH (P/IT)

PERP. HOSP. SELAYANG (P/IT)

PTAR 1 (P/IT 2)

PEMB. AM PEJABAT (N1)
ZULKIFLI YUSOF

PERP.PUNCAK ALAM (P/IT)

5

SERVICES PROVIDED BY

DEPARTMENT OF INFORMATION SYSTEMS & TECHNOLOGY

E-COMPONENT & WEB UNIT

LIBRARY PORTAL
http://www.library.uitm.edu.my

MANAGEMENT. UNIT (SERVICES ICT)

IT CENTER SERVICES

LIBRARY MANAGEMENT SYSTEM UNIT

LIBRARY SYSTEM
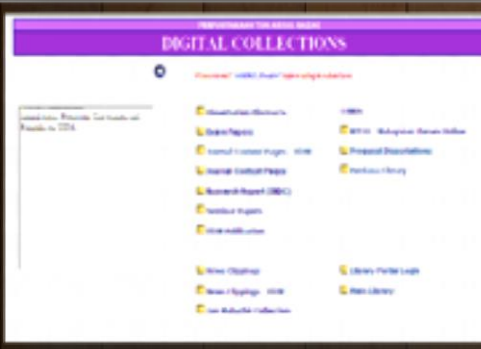
DEVELOPMENT OF DIGITAL RESOURCES

TAXONOMY & DIGITAL COLLECTIONS

RESEARCH & DEVELOPMENT UNIT

RESEARCH & SYSTEM DEVELOPMENT

ICT MANAGEMENT UNIT (INFRA ICT)

MAINTENANCE & EQUIPMENT ICT

PROFILE TEAM MEMBERS

NO	NAME	POSITION	EXPERTISE	DURATION SERVICE
1	AHMAD FAIZAR JAAFAR	LIBRARIAN	EXPERT IN DEVELOPMENT WEB	6 YEAR
2	HJ. AZIZI HJ. JANTAN	LIBRARIAN	EXPERT IN DEVELOPMENT SYSTEM	6 YEAR
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8	MOHD YAZID YAHAYA	COMP. TECHNICIAN	EXPERT IN MULTIMEDIA	9 YEAR
9	RIZANA MOHD RADWAN	LIBRARIAN	EXPERT IN PRESENTATION	7 YEAR

TEAM INTRODUCTION

GROUP NAME	:	e-WAVE
ESTABLISH	:	04 MAC 2005
ORGANIZATION	:	PERPUSTAKAAN TUN ABDUL RAZAK
DEPARTMENT	:	SYSTEM AND INFORMATION TECHNOLOGY
MOTTO	:	TEAMWORK KEY TO SUCCESS

GROUP OBJECTIVE

Enhance the effectiveness of library services while giving satisfaction to the users

LOGO

The form of jewels are a symbol of the values of quality work

The letter 'W' in the range of gems. Dedication to the success

'E' represents electronic synonymous with the field of ICT in our

'WAVE' means wave or explosion of knowledge that there is no limit.

COLOR LOGO

RED   : Fighting Spirit

WHITE   : The Strength Of The Soul, Heart

                     And Physical Purity

BLUE   : The Unity Among Members

TEAM ACHIEVEMENTS

STUDENT OFTEN ABUSED PC OPAC

LEVEL	ACHIEVEMENT
Mini Convention	ICC UiTM (Shah Alam Campus) 16-17 August 2005 ⭐ 1st Winner (Management Category) ⭐ The Best Innovation Award
UiTM	ICC UiTM (Malaysia) 29-31 Ogos 2005 ⭐ 2nd Winner (Management Category) ⭐ The Best Documentation Award
Malaysia Public Education Institution (MPEI)	ICC MPEI 27-28 Sept 2005 ⭐ 1st Winner (Technical Category)

TEAM ACHIEVEMENTS

COMPUTER LAB INFORMATION SYSTEMS (CLIS)

LEVEL	ACHIEVEMENT
Mini Convention	**ICC UiTM (Shah Alam Campus) - 8-9 Ogos 2007** ⭐ Overall Winner ⭐ The Best Presentation Award ⭐ The Best Documentation Award ⭐ The Best LogoAward ⭐ The Best ICT Innovation Award
UiTM	**ICC UiTM (Malaysia) - 27-30 Ogos 2007** ⭐ Overall Winner ⭐ The Best Documentation Award ⭐ The Best LogoAward
	Invention, Inovation & Designs [IID] UiTM - Jan 2007 ⭐ Silver Medal
	Best Practice (UiTM) ⭐ Top 10 ⭐ Project Winner

TEAM ACHIEVEMENTS

COMPUTER LAB INFORMATION SYSTEMS (CLIS)

LEVEL	ACHIEVEMENT
UiTM	**Vice Chancellor Quality Award [AKNC]** **19 Dec 2007** ⭐ICC Winner AKNC 2007
	The Best ICC Award **Perpustakaan Tun Abdul Razak** **7 Dec 2007**
REGION	**ICC MPC Southern Region** **10-11 June 2008** ⭐**Gold Award**
NATIONAL	**ICC (National)** **19-21 August 2008** ⭐**Gold Award (3 Stars)** ⭐**Top 10 Public Sector Award**
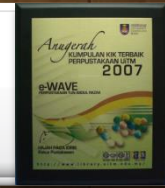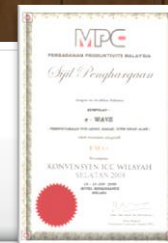
TEAM ACHIEVEMENTS

COMPUTER LAB INFORMATION SYSTEMS (CLIS)

LEVEL	ACHIEVEMENT
NATIONAL	**ICC MPC Malaysian Library** **3 November 2008** ⭐ **1stWInner** ⭐ **The Best Presentation Award**
INTERNATIONAL	**International Exposition of Research and Inventions of Institutions of Higher Learning [PECIPTA] 2007** **10-12 Ogos 2007 KLCC** **Seoul International Invention Fair 2008** **11-15 Disember 2008** ⭐ **Gold Award**

SCHEDULE MEETING

Main activities presentation	Techniques used										Date	
Project Selection	Decision making Matrix, Previous data analysis	√	√	√	√	√	√	√	√	√		Week 2
Target Selection	Check sheet, summary, trend chart.	√	√	√	√	√	√	√	√	√	Jan-10	Week 4
Current Analysis	Previous data analysis	√	√	√	√	√	√	√	√	√	Feb-10	Week 2
Root Cause Analysis	5W1H, bar chart	√	√	√	√	√	√	√	√	√	Mar-10	Week 2
Alternative Solution	brainstorming, alternative proposal, 5W1H	√	√	√	√	√	√	√	√	√	Apr-10	Week 5
Corrective Action	Design of experiment testing	√	√	√	√	√	√	√	√	√	May-10	Week 4
Monitoring Result	Check sheet, diagram	√	√	√	√	√	√	√	√	√	Jun-10	Week 3
Standardisation	S.O.P, schedule (training, calibration, meeting)	√	√	√	√	√	√	√	√	√	Jul-10	Week 2

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IDENTIFICATION / SELECTION OF PROBLEM / THEME / PROJECT

LISTING OF THE PROBLEMS

NO	PROBLEM	PICTURE	RESULT
1	**Late preparations of ICT Maintenance Request Schedule to Computer Technician** **Suggested by - Yazid**		✔️ 👍
2	**Difficulties to search online thesis title at IT Centre** **Suggested by - Ja'amayah**		✘ 👎
3	**Un-effective Maintenance Report & Record of ICT hardware & software** **Suggested by - Abdul Hamid**		✔️ 👍

LISTING OF THE PROBLEMS

NO	PROBLEM	PICTURE	RESULT
4	**Laserjet Printed output at IT Centre does not meet a standard** **Suggested by - Muhamad Azmir**		✔ 👍
5	**Quantity of Self Service Book Borrowing Machine are limited, cannot cater the demand at pick time** **Suggested by - Ahmad Nazri**		✔ 👍
6	**Disposal process of absolute or outdated ICT component are not efficient and late to be processed** **Suggested by - Hj. Rosli**		✘ 👎

LISTING OF THE PROBLEMS

NO	PROBLEM	PICTURE	RESULT
7	**Non-static ICT Hardware and component** **Suggested by - Abd. Hamid**		✔ 👍
8	**Difficulties of digital scanning for hard-cover materials.** **Suggested by - Nurhayati**		✘ 👎
9	**Miss place of Networking OPAC PC Cable** **Suggested by - Hj Azizi**		✔ 👍
10	**Uncontrolled Original Software CD distributions among the technician** **Suggested by - Mohd Yazid**		✘ 👎

ANALYSIS DATA MATRIX

NO	PROBLEM	PRIORITY	CAPABILITY
1	Quantity of Self Service Book Borrowing Machine are limited, cannot cater the demand at pick time	10+10+9+9+9+10+9+9 75/8 = 9.4	10+9+9+10+9+9+9+9 74/8 = 9.3
2	Laserjet Printed output at IT Centre does not meet a standard	10+9+9+9+9+9+9+9 73/8 = 9.1	9+8+8+9+8+10+9+8 69/8 = 8.6
3	Un-effective Maintenance Report & Record of ICT hardware & software	9+9+8+8+9+8+9+8 68/8 = 8.5	9+8+7+7+6+7+7+7 59/8 = 7.4
4	Late preparations of ICT Maintenance Request Schedule to Computer Technician	8+6+7+8+9+8+7+8 61/8 = 7.6	9+8+7+7+6+7+7+7 58/8 = 7.3
5	Miss place of Networking OPAC PC Cable	9+7+7+8+6+6+7+7 57/8 = 6.5	8+9+9+7+6+7+6+7 59/8 = 7.4
6	Non-static ICT Hardware and component	5+7+6+6+7+5+6+6 48/8 = 6	6+7+6+6+6+7+6+6 50/8 =6.3
7	Difficulties to search online thesis title at IT Centre	5+4+5+5+4+4+5+4 36/8 = 4.5	5+4+4+4+5+5+5+4 36/8 = 4.5
8	Disposal process of absolute or outdated ICT component are not efficient and late to be processed	5+4+4+4+4+4+5+4 34/8 = 4.3	5+4+3+3+3+4+5+4 31/8 = 3.9
9	Difficulties of digital scanning for hard-cover materials.	5+3+3+3+4+3+4+5 30/8 = 3.8	3+5+4+4+3+3+3+3 28/8 = 3.5
10	Uncontrolled Original Software CD distributions among the technician	3+3+3+2+3+3+3+3 23/8 = 2.9	3+2+2+3+2+3+4+3 22/8 = 2.8

6 major problem identified

IMPORTANT

ACCEPTED

CAPABALITY

REJECTED

Method: Value of the Group

SCALE		
VERY IMPORTANT	:	9 – 10
IMPORTANT	:	7 – 8
AVERAGE	:	5 – 6
LESS IMPORTANT	:	3 – 4
NOT IMPORTANT	:	0 – 2

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VERIFICATION OF THE PROBLEMS

NO	LISTING OF PROBLEM	RESULT
1	Quantity of Self Service Book Borrowing Machine are limited, cannot cater the demand at pick time	29
2	Laserjet Printed output at IT Centre does not meet a standard	10
3	Un-effective Maintenance Report & Record of ICT hardware & software	5
4	Miss place of Networking OPAC PC Cable	4
5	Late preparations of ICT Maintenance Request Schedule to Computer Technician	2
6	Non-static ICT Hardware and component	0
TOTAL		50

SAMPLE

Total Of Respondent   : 50 staff
Period of data obtained : 14 - 16 Jan 2008
Collecting data   : Hj. Rosli dan Mohd Yazid
 Location   : Library
Source   :Questionnaire (STAF)
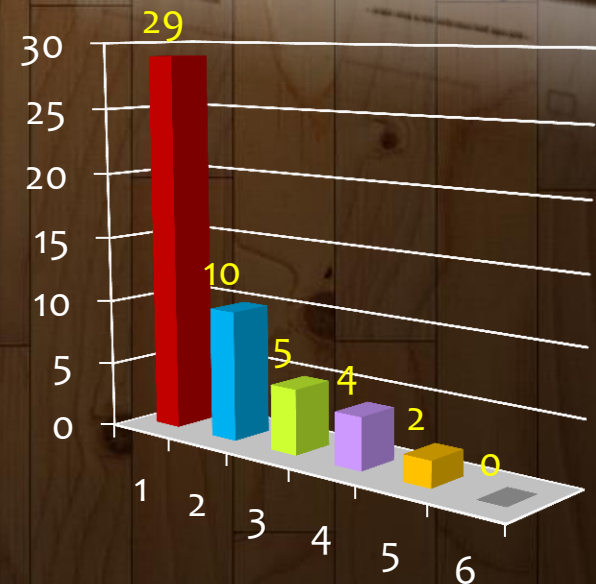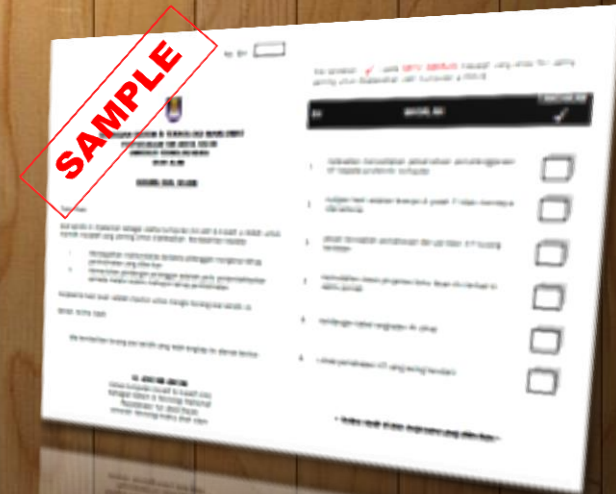
PROJECT TITLE

BOOK LOAN FACILITY LIMITED ON PEAK HOUR

ANALYZE PROBLEM

5W + 1H

BOOK LOAN FACILITY LIMITED ON PEAK HOUR

WHAT

**Using Existing Machine
(1 unit)**

Using Counter

Library offers library loan process by two methods. First to the counter. Both can deal in books vending machines. However, this loan facility through the machine has only one unit only in the library.

Unfortunately 1 unit available MPLD no longer sufficient to accommodate the student loan book, particularly in the peak at 12.00 noon to 1.00 pm. The study found that students take a break around 12.00 am to 1.00 pm. But here occurred a jam and a long queue of students had to use the facilities MPLD.

Nowadays many user like to use concept 'Do It Yourself'. So impossible for library just have only 1 machine to cater the 40,000 thousand student.

FLOW CHART SELF SERVICE

BOOK LOAN PROCESS

A — Start

1 — Put Your Matrix Card

2 — Verify Card
- No
- Yes

3 — Put Your Book

4 — Wait for verifying
- No
- Ya

Service At The Counter.

5 — Pick up Your Book and Card

6 — Wait for receipt

Tamat

1 & 2

3 & 4

Welcome NUR FARZANA BINTI MOHD ZAM ZAM
Press * to continue.

Patron ID: 2008522837
Items Checked Out: 0
Items Overdue: 0
Items On Hold: 0
Fines or Fees Due: $0.00

5 & 6

24
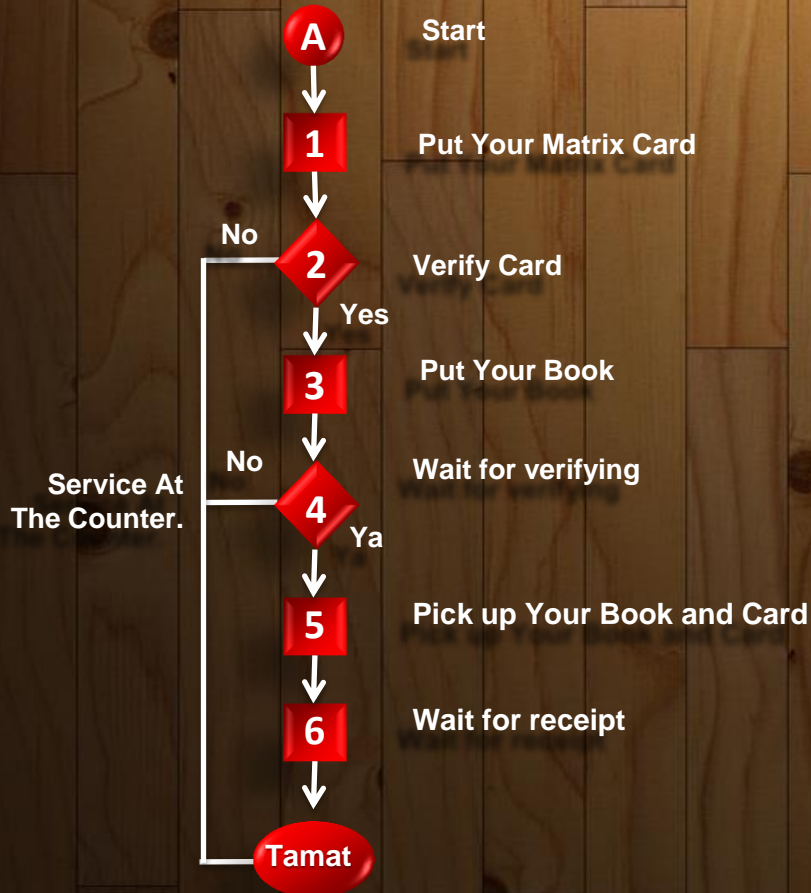
WHERE

Perpustakaan Tun Abdul Razak1
UiTM, Shah Alam

WHO

Students who use the library facilities to borrow books

WHY

Library only have 1 unit machine.
Customers have no choice and have to take turns to make the loan process self.

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WHEN

Each time the students want to borrow books Students use the opportunity because of the time there are no classes, from 12.00 t / day to 1.00 pm to make books using one unit of Self Book Lending Machine

HOW

Students use only one unit

BOOK LENDING TRANSACTIONS BY HOUR (BEFORE PROJECT)

NO	DATE	HOUR														TOTAL TRANSACTION
		8	9	10	11	12	13	14	15	16	17	18	19	20	21	
1	28/1/08	1	3	34	25	34	40	3	24	15	17	6	2	13	6	223
2	29/1/08	0	15	36	48	92	50	39	33	51	45	48	16	4	40	518
3	30/1/08	6	21	26	77	73	92	58	70	48	37	60	22	23	30	643
4	31/1/08	4	12	48	87	108	48	41	29	64	38	44	55	4	11	593
5	01/2/08	1	19	48	95	61	38	38	25	45	56	16	2	19	22	485
TOTAL		12	70	192	332	368	268	179	181	223	193	174	97	63	109	2,462

Peak Hour
12.00 pm – 1.00 pm

Date taken : 28 Jan - 1 Feb 2008
Taken by : Hj Azizi
Source : System

120
100
80
60
40
20
0

34 92 73 108 61

28/1 (Mon)   29/1 (Tue)   30/1 (Wed)   31/1 (Thu)   01/2 (Fri)
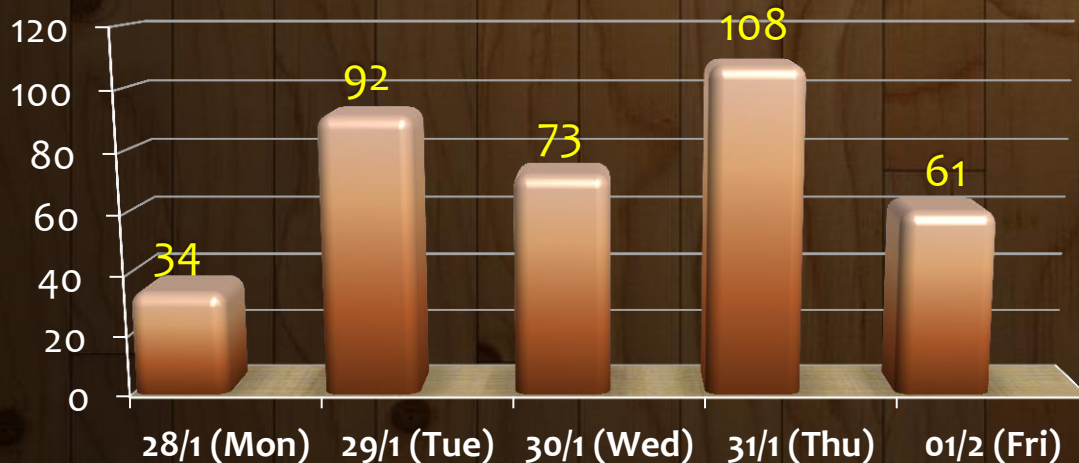
AVERAGE COPIES OF BOOKS AT PEAK HOUR USING EXISTING BOOKS LOAN MACHINE (1 UNIT)

368 / 5 =74 TRANSACTION

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PROJECT IMPLICATIONS

CATEGORY	IF IMPLEMENTED	IF NOT IMPLEMENTED
Staff	Can focus on other tasks	More load on staff to process loans
	Loan process can be controlled	Staff cannot control the loan process
	Reduce man power (staff)	Need more staffs
	Reduce human errors	Human error
Customer	Can do loan process by their selves	Still using the loan counter
	No need to queue	Customers queuing
	Save time	Customer wait time for loan
	More comfortable	Customers rushing to make loans
Department	Cost savings	Higher expenses
	Good impression to department	Services are still in the old notch
	In line with the intention of enrollment 200.000	Unable to accommodate the services required by customers

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FAST, SYSTEMATIC AND INNOVATIVE

OBJECTIVE PROJECT

- Avoid congestion in the loan book vending machine
- To ensure customer comfort while making the process without waiting for the old books
- To encourage customers to use self-service
- Help improve the image of the department
- Helps management to save money maximum possible

29

INCREASE THE PROCESSING CAPACITY BOOK OF LOANS:

74 COPIES 148 COPIES TO AVERAGE DAILY DURING PEAK T IS FROM 12:00 HOURS / DAY TO 1:00 PM

100%

PRINCIPLE OF DECISION

1

Quality Objectives PUiTM support to ensure improvement books by customers of 3% per year

2

Instructions from management to increase the number of books
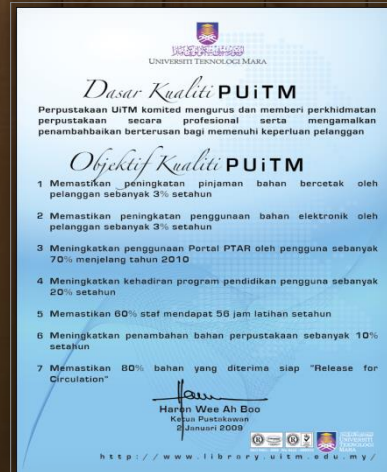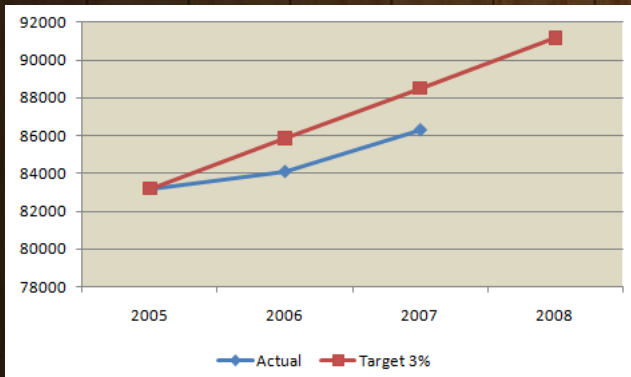
REPORT BASED ON MKSP NO 1 / 2008

UNIVERSITI TEKNOLOGI MARA

Dasar Kualiti **PUiTM**

Perpustakaan UiTM komited mengurus dan memberi perkhidmatan perpustakaan secara profesional serta mengamalkan penambahbaikan berterusan bagi memenuhi keperluan pelanggan

Objektif Kualiti **PUiTM**

1 Memastikan peningkatan pinjaman bahan bercetak oleh pelanggan sebanyak 3% setahun

2 Memastikan peningkatan penggunaan bahan elektronik oleh pelanggan sebanyak 3% setahun

3 Meningkatkan penggunaan Portal PTAR oleh pengguna sebanyak 70% menjelang tahun 2010

4 Meningkatkan kehadiran program pendidikan pengguna sebanyak 20% setahun

5 Memastikan 60% staf mendapat 56 jam latihan setahun

6 Meningkatkan penambahan bahan perpustakaan sebanyak 10% setahun

7 Memastikan 80% bahan yang diterima siap "Release for Circulation"

Haron Wee Ah Boo
Ketua Pustakawan
2 Januari 2009

h t t p : / / w w w . l i b r a r y . u i t m . e d u . m y /

TERMINOLOGY

TERM	MEANING
PTAR	Perpustakaan Tun Abdul Razak
PKPA	Pekeliling Kerajaan Perkhidmatan Awam
ILMU	Integrated Library Management Utility
ICT	Information, Communication & Technology (Teknologi Maklumat & Komunikasi)
PC	Personal Computer (Komputer Peribadi)
PUiTM	Perpustakaan UiTM
IPTA	Institusi Pengajian Tinggi Awam
ISO	International Organization for Standardization
IT	Information Technology (Teknologi Maklumat)
HUKM	Hospital Universiti Kebangsaan Malaysia
DBKL	Dewan Bandaraya Kuala Lumpur
SSBBM	Self Service Book Borrowing Machine

APPLICATION LETTER

APPROVAL LETTER

ANALYSIS

CAUSE AND EFFECT DIAGRAM 1

BOOK LOAN FACILITY LIMITED ON PEAK HOUR

MACHINE
- Expensive
- High Usage
- Need to Import
- Machine Costly
- Frequently out of service
- No TOS
- Delayed Maintenance
- Waiting for orders from overseas

HUMAN
- Personnel Budget Takes Time
- Number of Users Increases
- Staff shortage
- Instruction from Ministry
- High maintenance cost
- No Class
- Enrolment 200,000 UiTM
- Components must be imported
- Many students Borrow Books

LOCATION
- New Campus
- Increasing Number of Faculty
- Increasing Number of Library
- New Faculty

METHOD
- Miscellaneous Services
- Registration
- Convocation
- Payment of fines
- Counter Busy
- Simple
- Easy
- Effective
- Fast
- Consumer Like to use Self Service facility

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ROOT CAUSE ANALYSIS

CAUSE	ANALYSIS	SOLVE BY GROUP	GROUP JOB SCOPE	RESULT	EVALUATION MARK
HUMAN STAFF SHORTAGE	PERSONNEL BUDGET TAKES TIME	NO	NO	REJECT	1
HUMAN NUMBER OF USERS INCREASES	INSTRUCTION FROM MINISTRY, ENROLMENT 200,000 UITM	NO	NO	REJECT	1
METHOD COUNTER BUSY	MISCELLANEOUS SERVICES PAYMENT OF FINES, CONVOCATION	YES	YES	ACCEPT	2
METHOD CONSUMER LIKE TO USE SELF SERVICE FACILITY	EASY TO USE, SIMPLE AND EFFECTIVE	YES	YES	ACCEPT	2
MACHINE FREQUENTLY OUT OF SERVICE	HIGH USAGE	YES	YES	ACCEPT	3
MACHINE MACHINE COSTLY	FOREIGN PRODUCT	YES	YES	ACCEPT	3
MACHINE HIGH MAINTENANCE COST	WAITING FOR ORDERS FROM OVERSEAS	YES	YES	ACCEPT	3
MACHINE DELAYED MAINTENANCE	NEED TO IMPORT FROM OVERSEA	NO	NO	REJECT	1
LOCATION INCREASING NUMBER OF FACULTY	INCREASING NUMBER OF LIBRARY	NO	NO	REJECT	1

Evaluation :- 3: Most Possible , 2: Possible , 1: Not possible

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CAUSE AND EFFECT DIAGRAM 2
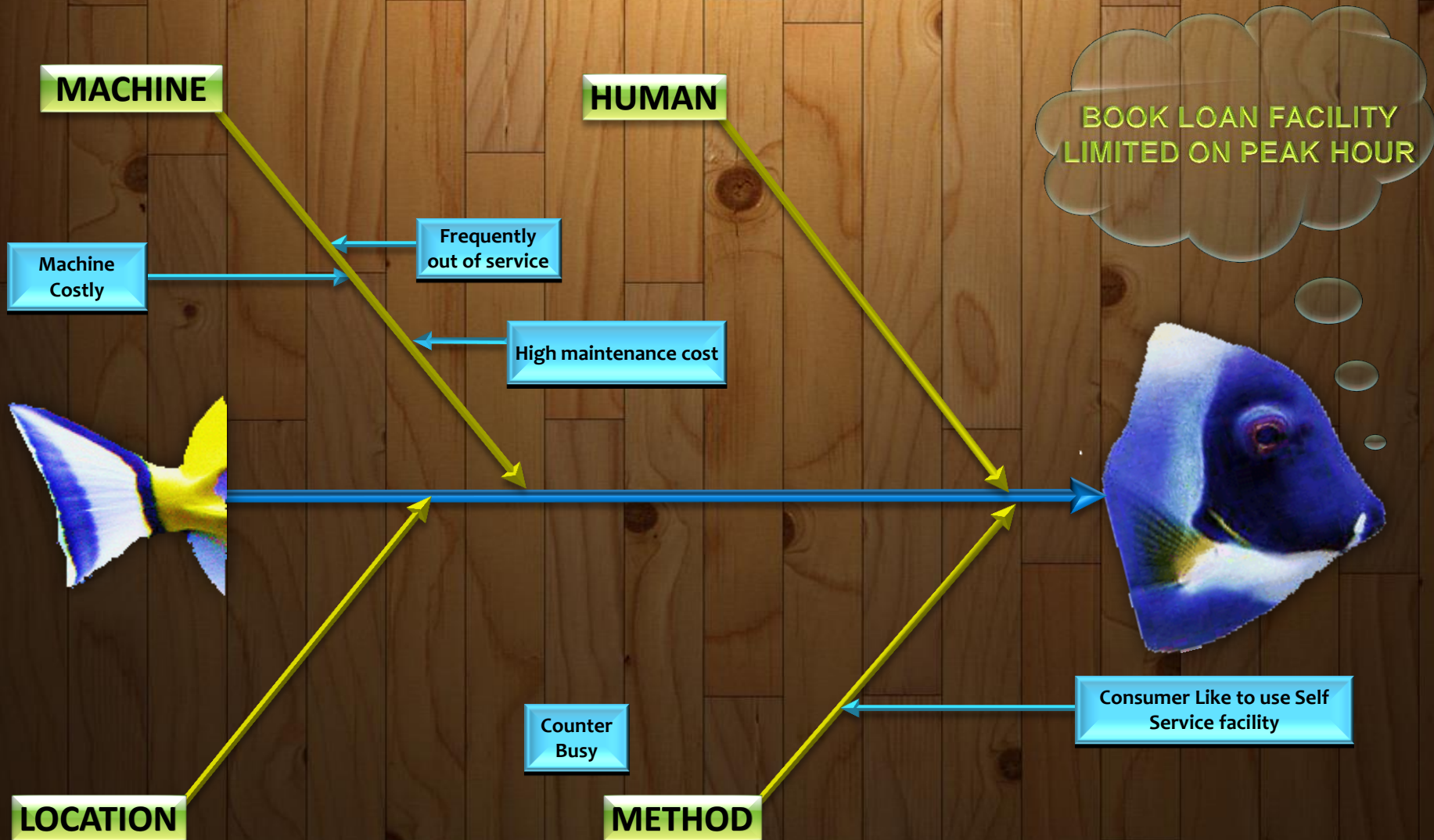
MACHINE

HUMAN

BOOK LOAN FACILITY
LIMITED ON PEAK HOUR

Frequently
out of service

Machine
Costly

High maintenance cost

Consumer Like to use Self
Service facility

Counter
Busy

LOCATION

METHOD

FACTOR	ROOT CAUSE	REVIEWS	RESULT
HUMAN	COUNTER BUSY	MISCELLANEOUS SERVICES	2
METHODS	SELF SERVICES	MORE EASY, FAST, EFFECTIVE, SHORT	5
MACHINE	FREQUENTLY OUT OF SERVICE	OLD MACHINE HAS NOT IMPLEMENTED AND SOFTWARE RELEASE	11
	MACHINE COSTLY	DEPENDING SUPPLIERS AND IS MACHINE PRODUCTS OVERSEAS	24
	HIGH MAINTENANCE COST	PART OF THE COMPONENT NEED HIGH COST	8

Date : 11 hingga 15 FEB 2008
Data taken by Hj Rosli and validate by Hj Azizi
Source : Questionaire(STAFF)

SAMPLE

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SOLUTION FORMULATION

BENCHMARKING AT LIBRARY

SELF SERVICE FACILITY

UNIVERSITY OF MALAYA — The Leader in Research & Innovation	**1** UNIT	**4** UNIT — INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA
UKM MEDICAL CENTRE	**1** UNIT	**3** UNIT — UNIVERSITI KEBANGSAAN MALAYSIA — National University of Malaysia
Dewan Bandaraya Kuala Lumpur	**6** UNIT	**2** UNIT — UNIVERSITI MALAYSIA SARAWAK — UNIMAS
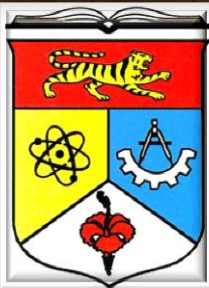
MEMERLUKAN KOS YANG TINGGI

Source of Benchmark : Telephone, Emel & Site Visit

Universiti Malaya not use it as often damaged and unable to bear the cost of maintenance

CREATIVE AND INNOVATIVE SOLUTION

ROOT CAUSE	PROPOSAL SOLUTIONS	SUGGESTOR	BENEFIT	NON - BENEFIT	RESULT	
					ACCEPT	REJECT
1 MACHINE COSTLY	1. Design a new machine		Cost Saving	No	👍	
	2. Borrow at the counter		No Cost	Need extra staff		👎
2 FREQUENTLY OUT OF SERVICE	1. Add machine with invention group		Easy to manage	No	👍	
	2. Buying another machines directly from the supplier		Meet the requirement	Still high cost		👎
3 HIGH MAINTENANCE COST	1. Use our group expertise		No Cost	No	👍	
	2. Find other part		No	Need to buy same brand		👎

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CREATIVE AND INNOVATIVE SOLUTION

ROOT CAUSES	PROPOSAL SOLUTIONS	SUGGESTOR	BENFIT	NON BENEFIT	RESULT	
					ACCEPT	REJECT
4 SELF SERVICE	1. Put 1 staff at the machine		Can monitoring	Staf terhad dan tidak relevan		👎
	2. Buy a new one		Standard with the existing machine	High Cost		👎
5 COUNTER BUSY	1. Add staff		Can improve the quality of service	Add extra budget		👎
	2. Create Q system		User will not long queue	Not suitable with location counter		👎

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ACTION PROPOSED SOLUTION IMPLEMENTATION SCHEDULE

BIL	ACTION	YEAR 2008 (BY NUMBER OF WEEKS)																					
		JAN					FEB				MAC				APR					MEI			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	IDENTIFY PROTOTYPE INPUT & OUTPUT						■																
2	CASING							■	■	■													
3	INSTALLATION & TESTRUN										■	■	■										
4	COLLECT DATA													■									
5	DATA ANALYSIS														■								
6	CORRECTIVE ACTION															■	■	■					
7	CORRECTIVE ACTION ANALYSIS																		■	■			

■ PLAN   ■ ACTION

NO	ACTION	PIC
1	IDENTIFY BASIC FEATURES & CREATIVE MACHINE (NEEDS HARDWARE & SOFTWARE)	HJ. AZIZI
2	INTERFACE SYSTEM WITHOUT CASING	HJ. ROSLI
3	PROTOTYPE CASING	HJ. AZIZI
4	FITTING	HJ. ROSLI
5	TESTRUN MACHINE	NAZRI
6	SYSTEM IMPROVEMENTS	HJ. AZIZI

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PERMISSION TO IMPLEMENT PROPOSE SOLUTION

APPLICATION LETTER

APPROVAL LETTER

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COMPARATIVE COST OF PURCHASE BARCODE SCANNER

Conversion barcode scanner

RM13,365.88

Barcode scanner

RM949.00 unit

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IDENTIFY EQUIPMENT REQUIRED

Central Processing Unit (CPU)

Touch Screen Monitor

Bar Code Scanner

Receipt Printer

Sensitizer - Strip Off Electromagnetic

Slot Matrix Card

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PROTOTYPE 1

SKETCHES...
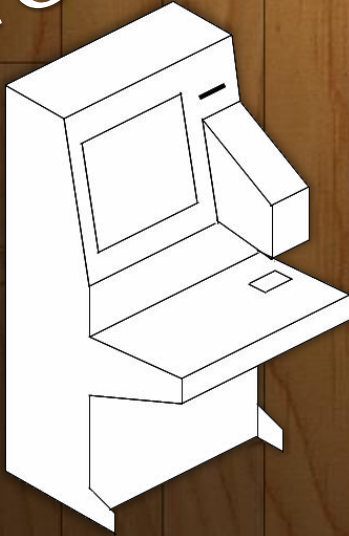
SSBBM 0801

ARTICLE	TEST RUN
METHODS	MAKING REFERENCE TO EXISTING MPLD
RESULTS	PRO: PORTABLE UNIT WITH A SMALL SIZE AND EASY TO HANDLE CONTRAST : REQUIRED A TABLE AS SUPPORT
CORRECTIVE ACTION	DESIGN A NEW SSBBM WITH STAND

PROTOTYPE 2

SKETCHES..

SSBBM 0802
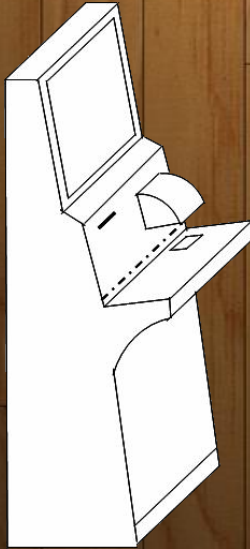
ARTICLE	ANALYSIS OF IMPROVEMENT
METHODS	MAKE IMPROVEMENTS ON A PROTOTYPE 1
RESULTS	PRO : UNIT IS MORE STABLE AND THE HEIGHT IS MORE ERGONOMIC TO USER KONTRA: DIFFICULT TO RELOCATE DUE TO HEAVY AND NO WHEEL ATTACHED TO IT
CORRECTIVE ACTION	DESIGN A NEW SSBBM WITH WHEEL
TESTER	ABD. HAMID

PROTOTYPE 3

ANALYSIS OF IMPROVEMENT (RESULTS BRAINSTORMING)
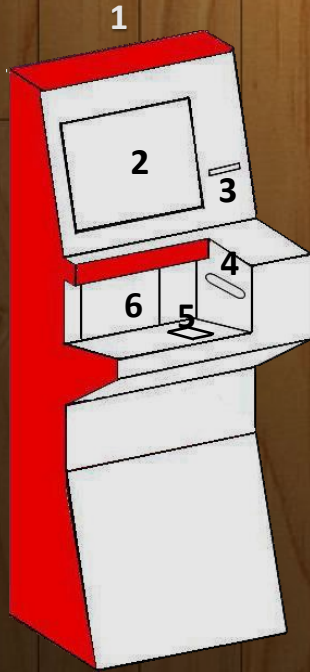
1	Central Processing Unit
2	Touch Screen Monitor
3	Receipt Printer
4	Barcode Scanner
5	Slot User Card
6	Sensitizer
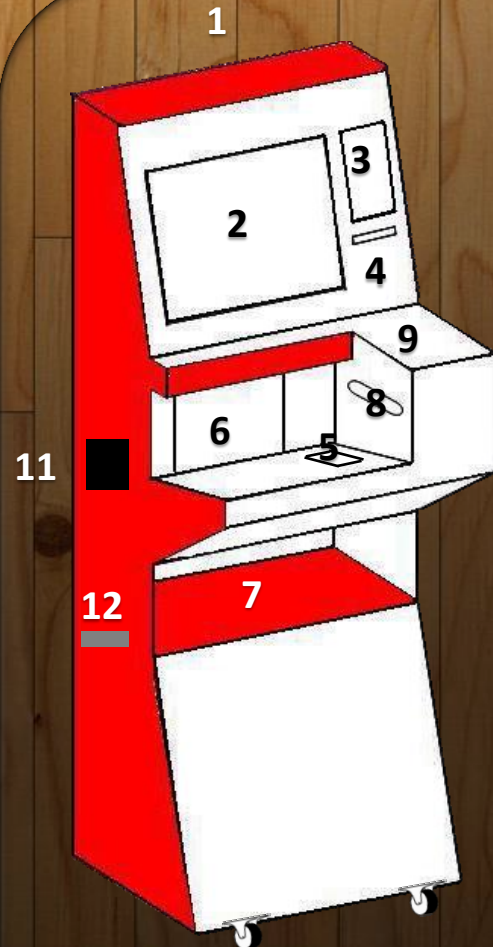
SSBBM 0803

1	Central Processing Unit
2	Touch Screen Monitor
3	Guidance Notes
4	Receipt Printer
5	Slot User Card
6	Sensitizer
7	Place Books
8	Barcode Scanner
9	Book Area
10	Wheel
11	Extra Fan CPU
12	Holder

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SUMMARY OF THE WHOLE BOOK LOAN PROTOTYPE
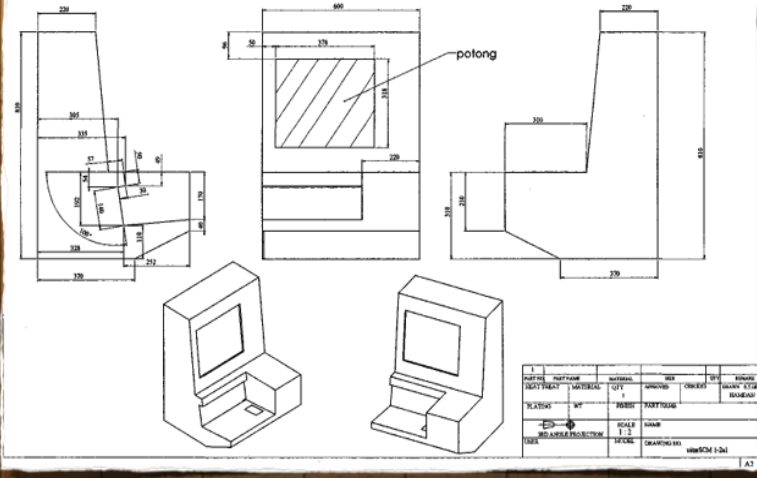
SKETCHES 1.. SKETCHES 2.. SKETCHES 3.. SKETCHES 4..

50
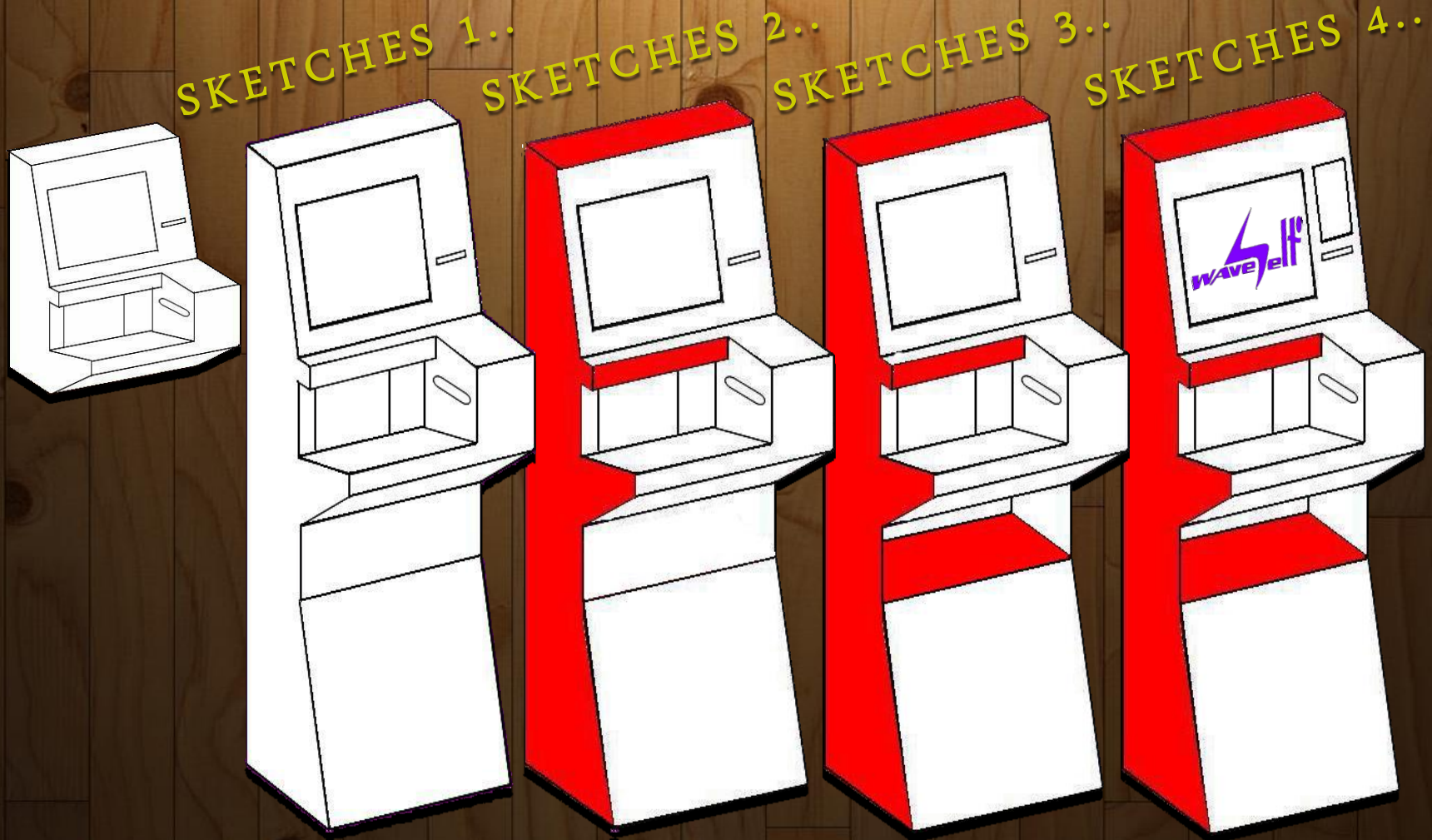
SCHEMATIC DIAGRAMS

OUT VIEW
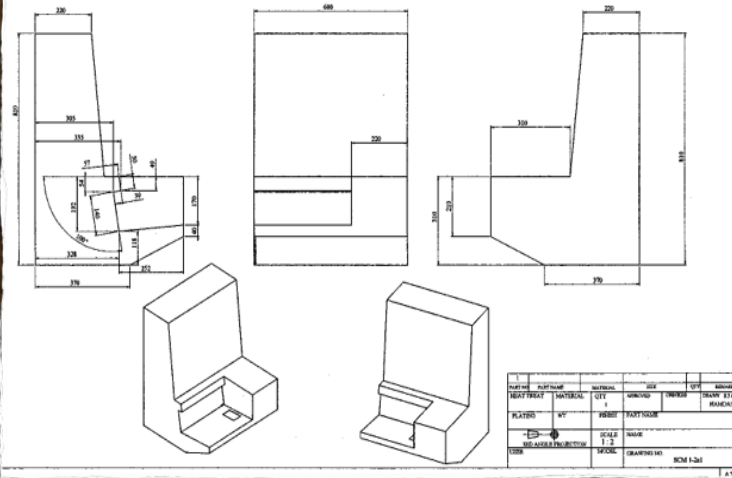
IN VIEW

SIDE VIEW
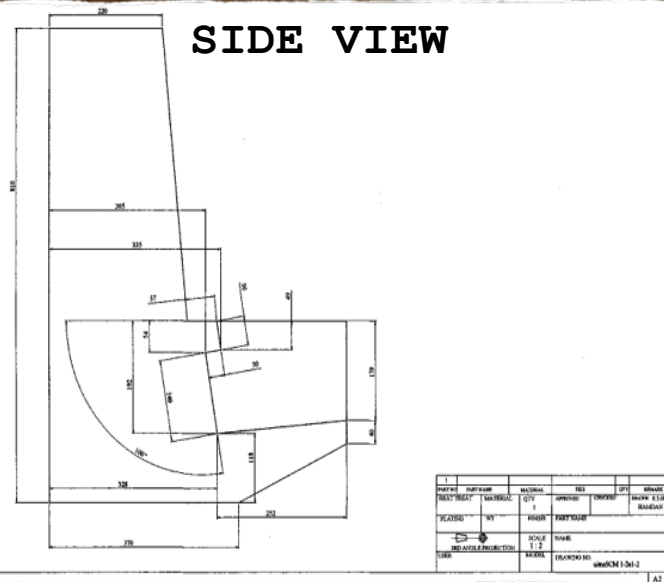
BOTTOM VIEW
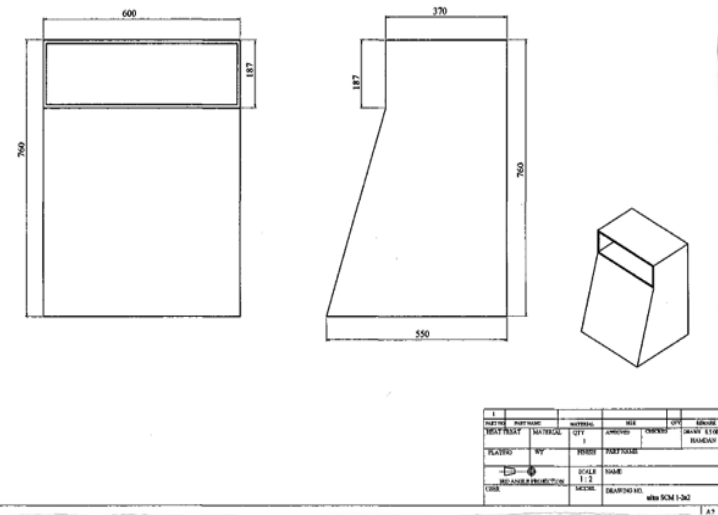
MAKING CASING

52

SPACE TO ADJUST THE BARCODE SCANNER

PUNCH A HOLE TO ACTIVATED SENSITIZER

INSTALLATION RECEIPTING CUTTER & FRAME SLOT MACHINE FOR USE NOTICE

INSTALLING HOLDERS

Letter 1

Perpustakaan
Tun Abdul Razak (PTAR)
Tun Abdul Razak Library

Universiti Teknologi MARA
40450 Shah Alam, Selangor MALAYSIA
Tel: (+603) 5544 2288 / 3700 / 3702
Faks: (+603) 5544 3730

UNIVERSITI
TEKNOLOGI
MARA

Surat Kami : 600-PTAR (BSTM. 12/4/2) : e-Wave

Tarikh : 19 Mac 2008

Jawatankuasa Elektrik UiTM
Fakulti Kejuruteraan Elektrik
Universiti Teknologi MARA
Shah Alam
Selangor

Memohon Pengesahan Pendawaian Protataip Mesin Pinjaman Buku Layan Diri

Berhubung dengan perkara di atas kami ingin dapat pengesahan pendawaian Protaip Mesin Pinjaman Buku Layan Diri.

Untuk pengetahuan Tuan, kami kumpulan e-Wave telah mencipta Mesin Pinjaman Buku Layan Diri untuk digunakan di Perpustakaan Tun Abdul Razak.

Tujuan kami untuk mendapat pengesahan pendawaian di atas adalah untuk memastikan pendawaian yang kami buat di Mesin Pinjaman Buku Layan Diri ini selamat digunakan dan mengikut stardard pendawaian yang telah ditetapkan.

Kerjasama yang tuan berikan diucapakan terima kasih.

Sekian terima kasih.

Yang menjalankan tugas

(TUAN HJ AZIZI BIN JANTAN)
Ketua
Kumpulan e-Wave

http://www.library.uitm.edu.my/

Letter 2

Fakulti Kejuruteraan Elektrik
Faculty of Electrical Engineering

Universiti Teknologi MARA
40450 Shah Alam, Selangor, MALAYSIA.
Tel: (+603) 5543 5052 Faks: (+603) 5543 5077
E-mail: dekanfke@salam.uitm.edu.my

UNIVERSITI
TEKNOLOGI
MARA

Surat Kami : 100-FKE (34/1)

Tarikh : 27 Mac 2008

Tuan HJ Azizi bin Jantan
Ketua Kumpulan e-Wave
Perpustakaan Tun Abdul Razak
Universiti Teknologi MARA
Shah Alam
Selangor

Permohonan Pengesahan Pendawaian Protataip Mesin Pinjaman Buku Layan Diri

Merujuk surat tuan 600-PTAR (BSTM. 12/4/2) : e-Wave bertarikh 19 Mac 2008 adalah dirujuk.

Setelah semakan dilakukan keatas Mesin Pinjaman Buku Layan Diri ciptaan kumpulan e-Wave, jawatankuasa mendapati Mesin tersebut selamat digunakan dan mengikut stardard pendawaian yang telah ditetapkan.

Semoga dengan pengesahan dapat membantu mesin ciptaan kumpulan dapat digunakan pakai keseluruh cawangan.
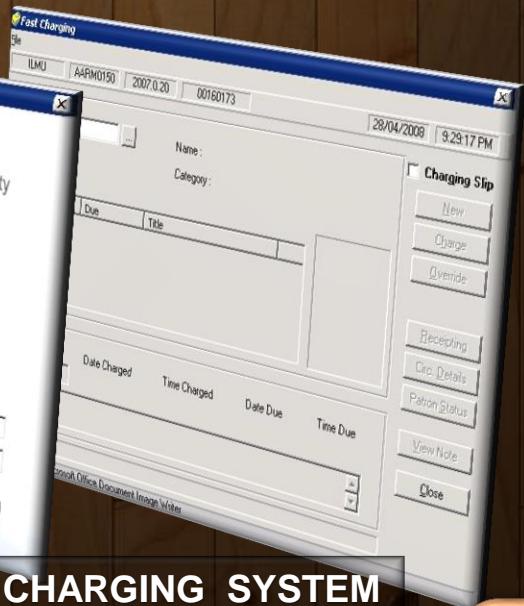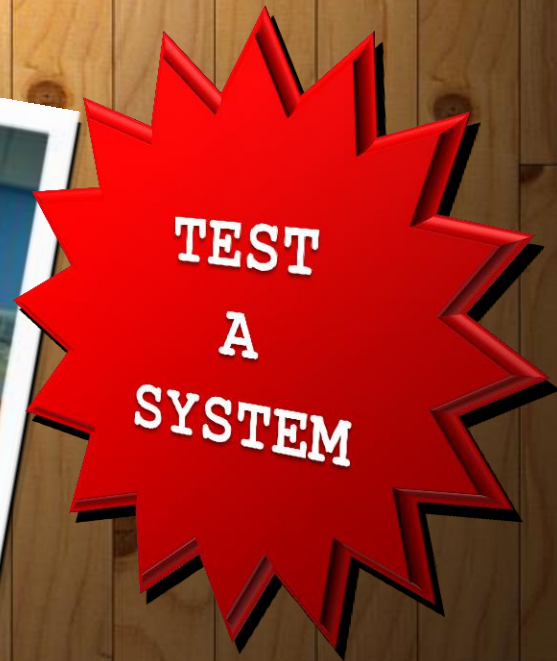
Sekian terima kasih.

Yang benar

Prof Madya Kartini Salam
Jawatankuasa Elektrik UiTM
Fakulti Kejuruteraan Elektrik

TEST A SYSTEM

INTERFACE CHARGING SYSTEM

PROBLEM WITH BIG SIZE

NOT EFFICIENT

MIRROR (Reflector)

Barcode Scanner

Reflection light scanner

Barcode

CORRECTIVE ACTION

SUCCES

READY TO USE

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BOOK LOAN MACHINE FEATURES & SPESIFICATIONS

NO.	EQUIPMENTS	VOLTAGE	AMPHERE
1	RECEIPT PRINTER	12 V DC	1.0 A
2	CPU	240V AC	5 A
3	MONITOR 17"	240V AC	1.0 A
4	SENSITIZER	240V AC	5 A
5	FAN	9 V DC	1.0 A
6	BARCODE SCANNER	5.2 V DC	6.5MA

1. Maintenance Is Done "Inhouse"

2. User Friendly

3. Simple Interface Operated

4. Easily Installed In Any Place (Mobile)

5. Parts Readily Available

6. No Need To Rely On Vendor

TRAINING SESSION TO USER

EVALUATION / FEEDBACK OF RESULT

FACTOR	ROOT CAUSE	REVIEWS	RESULT
MACHINE	FREQUENTLY OUT OF SERVICE	OLD MACHINE HAS NOT IMPLEMENTED AND SOFTWARE RELEASE	0
	MACHINE COSTLY	DEPENDING SUPPLIERS AND IS MACHINE PRODUCTS OVERSEAS	0
	HIGH MAINTENANCE COST	PART OF THE COMPONENT NEED HIGH COST	0

Date : 24 hingga 28 MAC 2008
Data taken by Hj Rosli and validate by Hj Azizi
Source : Questionaire(STAFF)

NOOR HIDAYAT BIN ADNAN
Timbalan Ketua Pustakawan
Bagian Automasi & Teknologi Maklumat
Perpustakaan Tun Abdul Razak
UiTM SHAH ALAM
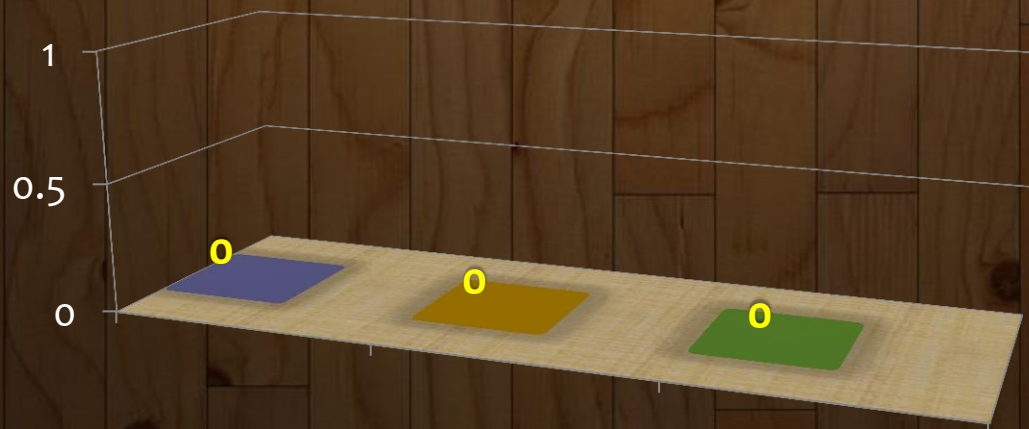
CUSTOMER SATISFACTION FORM

BOOK LENDING TRANSACTIONS BY HOUR (AFTER PROJECT)

NO.	DATE	TIME (O'CLOCK)														TOTAL TRANSACTION
		8	9	10	11	12	13	14	15	16	17	18	19	20	21	
1	24/3/08	4	15	54	88	189	129	89	44	79	59	38	43	8	17	865
2	25/3/08		23	47	79	166	130	99	46	80	79	53	48	38	12	900
3	26/3/08	4	3	38	112	212	132	77	78	48	59	29	20	17	28	857
4	27/3/08		4	59	109	186	122	83	54	56	49	18	58	38	16	852
5	28/3/08	0	16	38	99	155	104	65	26	54	58	38	9	16	7	865
TOTAL		8	61	236	487	917	617	413	248	317	304	176	178	117	80	4159

Peak Hour
12.00 pm – 1.00 pm

Date taken : 24 - 28 Mac 2008
Taken by : Hj Azizi
Source : Library Mgt System (ILMU)

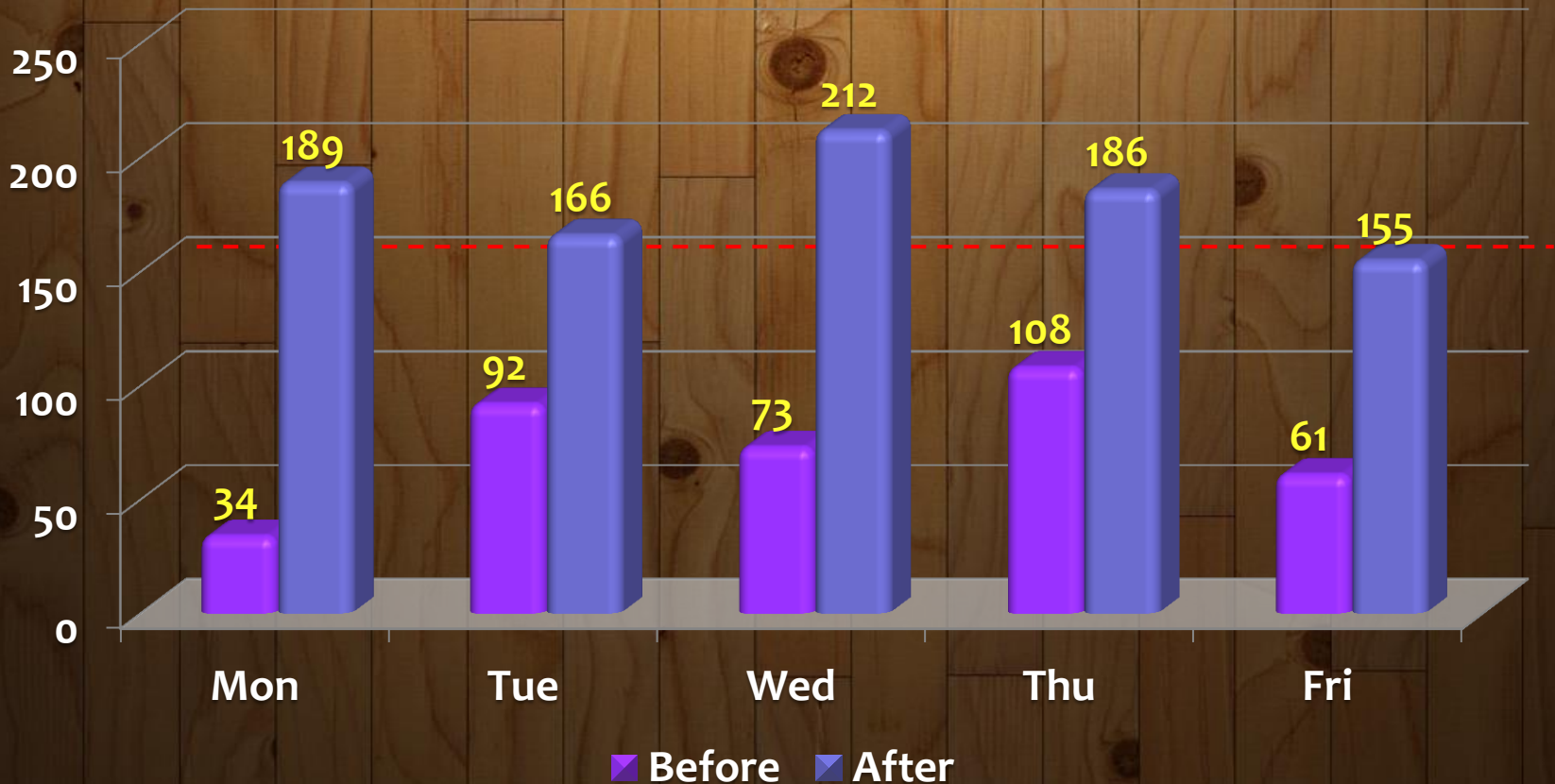| | 189 | 166 | 212 | 186 | 155 |
| 28/1 (Mon) | 29/1 (Tue) | 30/1 (Wed) | 31/1 (Thu) | 01/2 (Fri) |
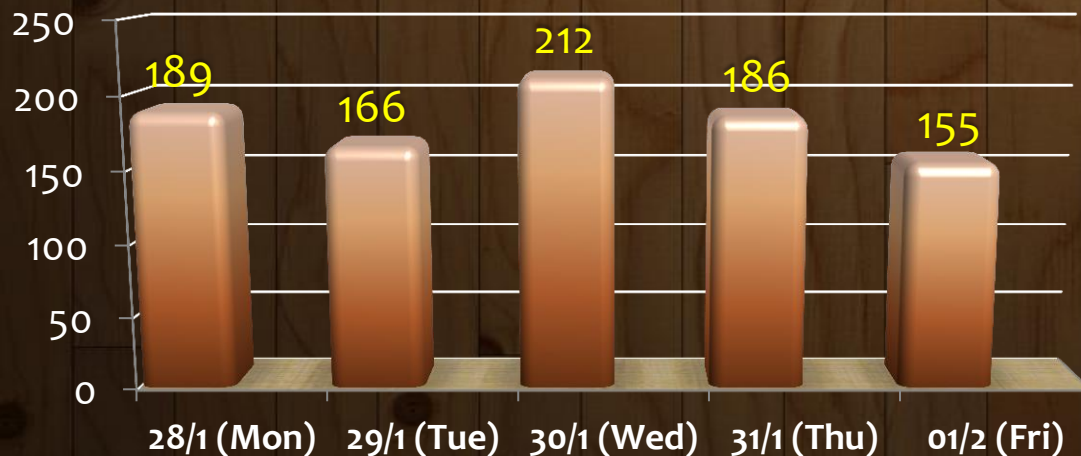
AVERAGE COPIES OF BOOKS AT PEAK HOUR USING GROUP INNOVATION 'BOOKS LOAN MACHINE' (2 UNIT)

917 / 5 =183 TRANSACTION

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COMPARATIVE BETWEEN EXISTING MACHINE AND GROUP INNOVATION

1. **Central Processing Unit (CPU)**
2. **Touch Screen Monitor**
3. **Sensitizer**
4. **Receipt Printer**
5. **Barcode Scanner**
6. **Book space**
7. **Wheel**
8. **Fan**
9. **Handle**

1. **Central Processing Unit (CPU)**
2. **Sensitizer**
3. **Receipt Printer**
4. **Barcode Scanner**

1. ESTIMATED COST OF DEVELOPING MPLD0801 : Salary Cost per day RM 67 / 8 hours = RM 8 (1 hour) Time allocation = 2 hours per day Completed a period of system development = 10 weeks Salary Cost : = RM 8 x 2 hours x 50 days x 3 person = RM 800.00 **Total cost for workers** = 3 person x RM 800.00	**RM 2,400.00**
2. EQUIPMENT PURCHASE PC 1 Unit = RM2,750.00 Receipt Printer = RM1,329.00 Barcode Scanner = RM949.00 Sensitizer = RM4,485.00 Touch Screen Monitor = RM1,780.00 Casing = RM2,500.00 *CHE NOR ASIAH CHE MUDA* Timbalan Bendahari Unit Kewangan Zon 6, Tkt. 3, Menara Sultan Abdul Aziz Shah, Universiti Teknologi MARA 40450 Shah Alam.	**RM 13,793.00**
3. PROJECT EXPENSES: - Meeting (8 times) - Stationeries & Papers	**RM 400.00** **RM 50.00**
TOTAL COST	**RM16,643.00**

PROJECT COSTS FOR MACHINE DEVELOPMENT = RM 16,643.00

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STANDARDIZATION

APPLICATION LETTER & UNIFICATION SCHEDULE

JADUAL PENYERAGAMAN PROJEK KIK

MENAMBAH KEMUDAHAN MESIN PINJAMAN BUKU LAYAN DIRI
KE SELURUH PERPUSTAKAAN SATELIT & PERPUSTAKAAN KAMPUS CAWANGAN UiTM

TEMPOH: JAN HINGGA DISEMBER 2009

	NEGERI	JAN	FEB	MAC	APRIL	MEI	JUN	JULAI	OGOS	SEPT	OKT	NOV	DIS	CATATAN	STAF YANG TERLIBAT
PERPUSTAKAAN SATELIT	PTAR 1						■							1,2,3,4	a,b,c
	PTAR 2														
	PTAR 3														
	PTAR 4														
	PTAR FSPU														
	PTAR JO							■						1,2,3,4	a,b,c
	PTAR P. PERDANA														
	PTAR HS							■						1,2,3,4	a,b,c
	PTAR HSB							■						1,2,3,4	a,b,c
PERPUSTAKAAN CAWANGAN	JOHOR								■					1,2,3,4	a,b,c
	MELAKA								■					1,2,3,4	a,b,c
	N.SEMBILAN									■				1,2,3,4	d,e,f
	PERAK									■				1,2,3,4	a,b,c
	PERLIS									■				1,2,3,4	d,e,f
	KEDAH										■			1,2,3,4	d,e,f
	P.PINANG										■			1,2,3,4	d,e,f
	KELANTAN										■			1,2,3,4	a,b,c
	TERENGGANU											■		1,2,3,4	a,b,c
	PAHANG											■		1,2,3,4	d,e,f
	SARAWAK												■	1,2,3,4	a,b,c
	SABAH												■	1,2,3,4	d,e,f

■ PERANCANGAN
■ PELAKSANAAN

CATATAN :
JENIS KERJA
1 : MEMBUAT 'INSTALLATION SOFTWARE'
2 : MEMBUAT 'INSTALLATION HARDWARE'
3 : SESI TAKLIMAT DAN PENERANGAN
4 : MELAKUKAN SEMAKAN PEMANTAUAN

NAMA STAF TERLIBAT
a : Hj. Azizi Jantan
b : Ahmad Nazri Jaafar
c : Abd. Hamid Mohd Salleh
d : Muhd. Azmir Hj. Sulaiman
e : Mohd Yazid Yahaya
f : Hj. Rosli Mohamad
g : Rizana Mohd Radwan
h : Nurhayati Hassan
i : Ja'amayah Kosnan

APPLICATION

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ACHIEVEMENTS AND VALUE CREATION

PROJECT ACHIEVEMENTS

BOOK LOAN FACILITY LIMITED ON PEAK HOUR

LEVEL	ACHIEVEMENT
International	**9th BIS, 2001 - 2009 Alexandra Palace London 14 -15 - 16 - 17 October 2009** ⭐ Gold Medal
National	**National ICC Convention 18-20 AUGUST 2009** ⭐ **ICC Runner Up** ⭐ **10 Best Public Sector**
	Malaysia Technology Expo 2009 19-21 FEB 2009 ⭐ **Gold Medal**
	ICC East Coast Region 22 - 23 June 2009 ⭐ **Gold Award**

TEAM ACHIEVEMENTS

BOOK LOAN FACILITY LIMITED ON PEAK HOUR

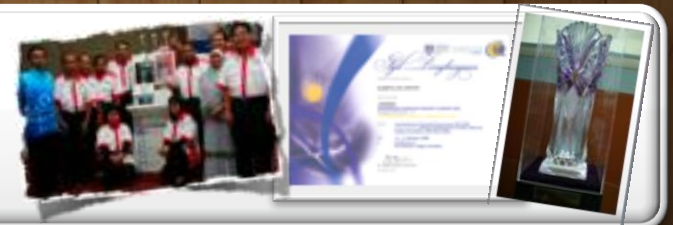| LEVEL	ACHIEVEMENT
Malaysia Public Education Institution (MPEI)	**ICC MPEI 6-8 Feb 2009** ⭐ **2nd WINNER** ⭐ **The Best Technical Award**
UiTM	**ICC UiTM - 14-17 Oct 2008** ⭐ Overall Winner ⭐ The Best Cost-Saving Award ⭐ The Best Project Award **Invention, innovation & Designs [IID] 13-15 Jan 2008** ⭐ Gold Medal **Vice Chancellor Quality Award [AKNC] 2008** ⭐ **ICC Winner AKNC**
Mini Convention	**ICC UiTM (Shah Alam) - 4-5 Aug 2008** ⭐ Overall Winner ⭐ The Best Technical Innovation Award
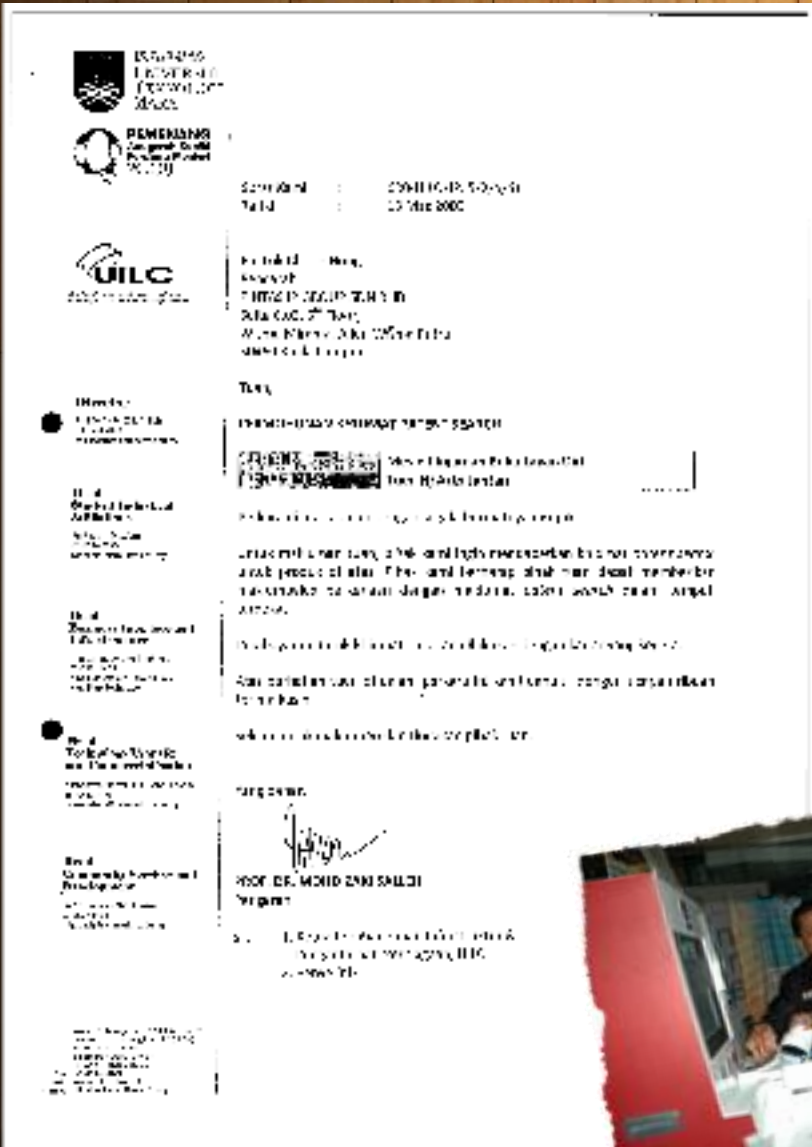
- ✓ Browser-based Borrow, Return and Renew functions
- ✓ Web-based real-time online monitoring for IT Administrator
- ✓ Offline Circulation (if LMS supports it)
- ✓ Compatible with 3M Tattle Tape electromagnetic strips
- ✓ Integrated EM & RFID Reader unit
- ✓ Webcam image capture of each patron transaction
- ✓ Barcode support for books
- ✓ Barcode and Smartcard support for Patron Cards
- ✓ Prints paper receipt as well as transmits e-receipt via email
- ✓ 17-inch LCD touchscreen

CONCLUSIONS

This machine has an impact on libraries in providing loan facilities to the user's that has a large student enrollment.

This machine can increase the productivity of staff who manage the services more effectively.

The machine can be used by all institutions of higher learning library, colleges and public libraries.