

The Malaysian **Surveyor**

THE PROFESSIONAL JOURNAL OF ROYAL INSTITUTION OF SURVEYORS MALAYSIA

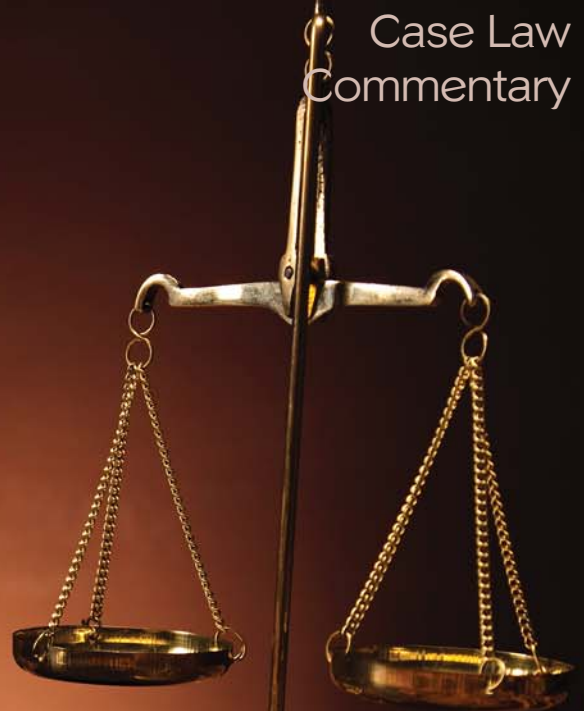
Legal Issues in Surveying

Parliamentary Updates
Ekstrak Teks Perbahasan
Bajet 2014

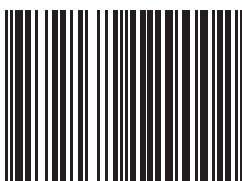
Peer Review
Case Law
Commentary

Interview

With RISM President
Session 2013/14



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Educational Loan Awards for 2013/2014

Royal Institution of Surveyors Malaysia invites application from Malaysia Citizens for Educational Loans to pursue full-time courses at local universities.

Universities

University of Malaya
University of Technology Malaysia
University of Technology MARA
University of Science Malaysia
International Islamic University of Malaysia
University Tun Hussein Onn Malaysia

Field of Study

Land Surveying
Quantity Surveying
Building Surveying
Property Management / Estate Management

Eligibility

- Candidates must have obtained an offer for admission for full time studies to any of the universities in any of the field specified above.
- Candidates must not have received any scholarship or financial assistance from the Government or any other organization.
- Candidates must have obtained at least CGPA of 3.20 to be short listed to call for an interview.

Special Incentive

- Degree course candidates who obtained in their studies with CGPA 3.75 and above, the student having to first apply for the conversion of the loan to scholarship for consideration and approval by General Council.
- Diploma course candidates are not eligible to apply for conversion of their loan to scholarship.

Value of Loan

Degree: Up to RM7,000 per annum
Diploma: Up to RM5,000 per annum

Guarantors

Candidates shall obtain the consent of two acceptable guarantors who must provide personal guarantee for repayment of the loan.

Repayment of Loan

Loan amount must be repaid with a period of not less than 36 months after the recipient has graduated.

How to apply

The application form, may be obtained from the RISM Secretariat or downloaded from RISM website:
<http://www.rism.org.my>.

All application must be sent to:

The Chairman

Scholarship and Education Fund Committee

Royal Institution of Surveyors Malaysia
3rd Floor, Bangunan Juruukur, 64-66, Jalan 52/4, 46200 Petaling Jaya

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September 2013



This issue features four write-ups on law relating to surveying. The first article discusses the implications of signatures and the law relating to signatures. Very often a surveying professional registered with a regulatory board will take cognizance of the fact that the signature put down on a report, plan or drawing often signifies professional responsibilities and duties in ensuring the right value, figure, advice, or recommendations are made after due professional considerations and deliberations.

The second article is a case commentary on the recently decided Federal Court's decision of *Pembinaan Perwira Harta Sdn Bhd v. Letrikon Jaya Bina Sdn Bhd* [2013] 2 CLJ 437. This case has affirmed several Common Law positions in respect of omission of work, including limiting the employer's or the architect's power to omit the entire contractor's work. To update our knowledge on current development in law affecting surveying, obviously more case commentaries are welcome from members who could provide insight into the decided court cases.

The third write-up is an extract of YB Senator Dato' Abdul Rahim Abdul Rahman's speech in Dewan Negara which debated on the need to regulate the property management profession in the management of high-rise properties in Malaysia. Supporting facts, figures and points from the various stakeholders on property management are propounded in the debate. An extract not to be missed by any surveyors!

The fourth write-up is a book review on town and country planning law in Malaysia which the reviewer has recommended as a must for all undergraduates undertaking built environment degree courses. To-date the book is the most comprehensive textbook on the law of town and country planning in Peninsular Malaysia.

The Editorial Board has also conducted an exclusive interview with Sr P. Tangga Peragasam, the President of the Royal Institution of Surveyors Malaysia for the Session 2013/14. The President has also led a RISM Technical Trip to Portugal and Spain. A report on the trip by the Hon. Secretary General is in p44-51.

There is an article on the building maintenance entitled, "Measuring the Performance Levels of High-Rise Private Office Buildings Maintenance" and another article on building conservation practices for old timber buildings in Malaysia.

The Editorial Board had worked laboriously to provide the most recent and up to date information in this issue for the benefits of RISM members.

Wishing all readers and members of RISM a Merry Christmas and Happy New Year!



Professor Sr Dr. Ting Kien Hwa
Editor

ANNOUNCEMENT

JULY 2014 PROFESSIONAL EXAMINATIONS

(DIRECT FINAL/FINAL, INTERMEDIATE, FIRST AND FOUNDATION EXAMINATIONS)

Applications to sit for the above examinations are now open and application forms can be obtained from the RISM Secretariat. The application form should be submitted to the RISM Secretariat **not later than January 31, 2014 together with the examination fees.**

A penalty fee is payable if you submit your application between February 1, 2014 and March 31, 2014 after which no application will be accepted. The rules and syllabuses of the Professional Examination and past years question papers are available for sale at the RISM Secretariat.

The examination fees are as follows:-

1. Foundation Exam – RM30.00 per subject
2. First Exam – RM50.00 per subject
3. Intermediate Exam – RM100.00 per subject
4. Final/Direct Final Exam – RM150.00 per subject

INTERVIEW WITH SR P. TANGGA PERAGASAM

PRESIDENT SESSION 2013/14



Brief Background of Sr P. Tangga Peragasam

Sr P. Tangga Peragasam started his valuation career in Dewan Bandaraya Kuala Lumpur in 1972 as a trainee valuer. He completed his Royal Institution of Chartered Surveyors (RICS) examinations in 1976 and left DBKL to join Institut Teknologi Mara (ITM) as a lecturer in 1978. Around 1979, he left ITM and joined the practice of M/S Jordan Lee & Jaafar in Seremban. In 1998, he returned to Kuala Lumpur and was appointed Managing Director of the company, a position he still holds until today. Sr P. Tangga Peragasam is a Fellow of the Royal Institution of Surveyors Malaysia (RISM) and the Royal Institution of Chartered Surveyors (U.K).

Q. Why did you choose a career as a surveyor and how long have you been with the industry?

I had wanted to be an engineer as I was working as a GCS clerk in the Drainage & Irrigation Department and was directly involved with the work of engineers as professionals. Following this and as I could not go for full time studies, I was very taken up by an advertisement calling for trainee valuers (doing the RICS examinations externally). I went for the interview at Dewan Bandaraya Kuala Lumpur (DBKL) and was lucky to be selected.

Q. What do you know about the early formation of RISM?

My early involvement was only through attending some seminars organised by ISM and signing up to sit for the ISM examinations, for which purpose I became a student member around 1974.

Q. As the incoming president, what do you hope to achieve during your tenure?

My targets for the RISM for my tenure are to improve the membership by at least 30 per cent. In addition the administration at the secretariat could also be streamlined so that RISM is able to meet the requirements and needs of the membership in line with its status as a Royal Institution.

It must be noted that competition is not new and every successful surveying firm has faced this before and managed to create its own niche market.

Q. In what areas do you feel that ISM can further improve on?

The areas I am looking into are finance and sustainability. I would like to see a situation where the membership subscriptions are able to fund the administration of the RISM. In line with this, the membership base has to improve substantially.

Q. How do you plan to improve the profile of RISM/surveyors?

Our long-term target is to have a more prominent building with better and more conducive facilities. The building should be prominent so as to enhance public image and recognition of which members would be proud of and at the same happy with the facilities. The short-term target is to improve our efficiency and participation in the various avenues and similar NGOs so that we can play our role in a more effective manner so that our presence, together with that of our membership, is felt and seen by the society. Our surveyors, a lot of whom are doing quite well, should make their presence felt.

Q. With the many international and national surveying organisations, what do you consider the prime focus for RISM?

Our goal is to provide our membership with the necessary service and facilities so that they are able to benefit professionally as well provide an avenue to contribute our services to fellow members and society at large. RISM should be able to do this so that we can then become the preferred surveying organisation.

Q. How would surveying firms remain relevant in this competitive market?

Firms and individuals have to stay relevant by being up to date professionally, by being able to add value to their service and by being knowledgeable, which would enable them to solve clients' needs with professionalism and integrity as well as providing the best possible solutions or alternatives to clients' needs and problems. It must be noted that competition is not new and every successful surveying firm has faced this before and managed to create its own niche market. This competitive market should not be any different. We all have to change if we want to survive.



Surveyors should move forward and fight head on against unfair or unprofessional competition.

Q. Are there any regulatory impediments to the industry and/or profession that you feel should be reviewed?

Surveyors should move forward and fight head-on against unfair or unprofessional competition. The areas are many ranging, from illegal agents to the opening up of the professions. What we should have to look out for is the problem relating to opening up of the service industry. Without proper safeguards, we would be treading on dangerous waters, particularly from the angle of liability and enforcement. To bring the culprits to book will be very difficult, particularly if they are mobile over the region. It is hard enough enforcing action against our own Malaysians in instances of misdeeds, what if they are foreigners? The only regulatory impediment I can think of is the poor or selective enforcement of rules and regulations, which is a problem for the law-abiding Malaysian.



Q. Are there any messages that you would like to convey to your members?

More members should come forward to participate in our activities, especially if they feel that RISM is not doing enough. Though we have some very staunch and hardworking members, particularly in the council, committees, boards, etc., I feel more members can exert their influence and help in the running of the RISM. The more active participation could help to take a load off the shoulders of some of our very active and committed members. In this, I would also like to see more Surveyors joining the RISM. Our members have to reach out to them.

Q. Is there anyone that you look up to and model yourself after?

Our past presidents have done very well for the RISM and it is in its present position because of all their contributions and efforts from the active members. I also like the work being done (as well as the sacrifice) by some of the presidents of other institutions, some of whom I have come to know very well in the course of my involvement with the RISM over the last few years.

Q. What is your advice to young surveyors?

For young surveyors, my advice is for them to work hard and improve themselves professionally so that they can make the profession proud. Remember, knowledge is power and the best time in one's life to accumulate knowledge and experience is when one is young. In the meantime, they should offer their services to the RISM and our other professional bodies in whatever small way they can, adding more responsibility as they progress in life. The more they give the more they will receive in life. ■

Remember, knowledge is power and the best time in one's life to accumulate knowledge and experience is when one is young.



Have You Signed?



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This article discusses basic principles and applications of the law relating to signatures used for documents, including on the form of the signature and on the function which that signature performs. The basic legal function of a signature is to provide evidence of the identity of the signatory and the contents of the said document.

Introduction

ALMOST ALL STATUTES (ACTS, ENACTMENTS, regulations, rules, etc.) require a physical object to be signed, and such physical object is in the form of a document. This article will focus on the most important matter, which is "signature." Statutory provisions requiring signatures as a means of authenticating a document appear to be in the majority, at least of the provisions whose purpose can be ascertained'.

The Malaysian courts are prepared, in the case of documents, to accept signatures made in any manner that provides evidence of the identity of the person who signed the said document, and that the said person approves of and adopts the contents of the said document. There are a substantial number of instances where Malaysian statutes requires a signature, not to mention built environment and/or construction industry perspectives, such as Companies Act 1965, Contract Act 1950, Oaths and Affirmations Act 1949, Statutory Declaration Act 1960, Quantity Surveyors Act 1967, Registration of Engineers Act 1967, National Registration Act 1959,

Town and Country Planning Act 1976, Street, Drainage and Building Act 1974 (and including Uniform Building By-laws 1984), Local Government Act 1976, Architects Act 1967, Environmental Quality Act 1974, National Land Code 1965, Road Transport Act 1984, Criminal Procedure Code, Courts of Judicature Act 1964, Immigration Act 1959/1963 and many more.

What Is A “Signature?”

Signature, generally is the act of signing one's name to something, or, the name of a person written with his or her own hand². In other words, signature also means the signing of a written document with one's own hand³. The definition of “signature” is also found in Stroud’s English Judicial Dictionary⁴:

“Speaking generally, a signature is the writing, or otherwise affixing, a person’s name, or a mark to represent his name, by himself or by his authority ... with the intention of authenticating a document as being that of, or as binding on, the person whose name or mark is so written or affixed.”

Another type of signature that exists which is independent of one's language is the digital signature and electronic signature. The internet and other forms of telecommunication have created the need to transact legally-binding agreements and other documents electronically. Almost all countries, including Malaysia, have passed statutes that recognize the validity of "digital signatures." According to section 2 of Digital Signature Act 1997⁵, “digital signature” means a transformation of a message⁶ using an asymmetric cryptosystem⁷ such that a person having the initial message and the signer’s public key can accurately determine:

- (a) whether the transformation was created using the private key⁸ that corresponds to the signer’s public key⁹; and
- (b) whether the message has been altered since the transformation was made.

What To Sign?

It must be noted that, “signature” and the act of signing must be related and in connection with “document”¹⁰.

Section 3 of Interpretation Act 1948 and 1967 defines “document” as any matter expressed or described upon any substance by means of letters, figures or marks, or by more than one of those means, intended to be used or which may be used for the purpose of recording that matter. The legal concept of document is so wide, including photographs of tombstones and houses¹¹, account books¹² and drawings and plans¹³. Justice Darling in *R v. Daye*¹⁴ emphasised that the concept of a document includes comprising any written thing capable of being evidence.

How To Sign?

According to section 3 of Interpretation Acts 1948 and 1967, “sign” includes the making of a mark or the affixing of a thumbprint. Therefore, a signature can be affixed in a number of different ways. It can be hand written, printed, stamped, typewritten, engraved or photographed. This allows, for example, a business to issue its payroll checks with the signature of its financial officer stamped rather than handwritten¹⁵.

*In the Estate of (Deceased) Murison v. Cook and Or.*¹⁶ the testator in a holographic will¹⁷ signed “your loving mother,” was held as a valid signature.

1 Reed, C. “What is a Signature?” JILT 2000 (3). http://www2.warwick.ac.uk/fac/soc/law/elj/jilt/2000_3/reed/ (2 June 2013).

2 <http://www.merriam-webster.com/dictionary/signature> (6 Jun 2013).

3 <http://legal-dictionary.thefreedictionary.com/signature> (7 June 2013)

4 Burke, J. & P Allsop (Eds.). 1951-1953. Stroud’s English Judicial Dictionary. 3rd ed. vol. 4, London: Sweet & Maxwell Limited. p. 2783.

5 Act 562. Long Title & Preamble: An act to make provision for, and to regulate the use of, digital signatures and to provide for matters connected therewith.

6 “message” means a digital representation of information – section 2.

7 Asymmetric cryptography or public-key cryptography is cryptography in which a pair of keys is used to encrypt and decrypt a message so that it arrives securely: <http://searchsecurity.techtarget.com/definition/asymmetric-cryptography> (8 June 2013).

8 “private key” means the key of a key pair used to create a digital signature – section 2.

9 “public key” means the key of a key pair used to verify a digital signature – section 2.

10 Or a more detailed analysis of the concept of ‘document’ see Chapter 1, Reed, C., 1996. Digital Information Law: electronic documents and requirements of form. London: Centre for Commercial Law Studies. Any discrete set of digital information will be treated as a document provided it performs the essential function of conveying information - see Grant and another v. Southwestern and County Properties Ltd and another [1975] Ch 185.

11 *Lyell v. Kennedy* (No 3) (1884) 27 Ch D 1.

12 *Hill v. R.* [1945] KB 329.

13 *Hayes v. Brown* [1920] 1 KB 250; *J. H. Tucker & Co., Ltd. v. Board Of Trade* [1955] 2 All ER 522.

14 [1908] 2 KB 333

15 <http://legal-dictionary.thefreedictionary.com/signature> (8 June 2013)

16 [1960] 1 All ER 689.

17 A holographic will is a will and testament that has been entirely handwritten and signed by the testator.

It must be emphasised that the act of "signing" also includes an act of "writing." As we know, writing is language in a textual medium through the use of a set of signs or symbols (known as a writing system).¹⁸ Section 3 Interpretation Act 1948 and 1967 defines "writing" or "written" as typewriting, printing, lithography, photography, electronic storage or transmission or any other method of recording information or fixing information in a form capable of being preserved. However, for the purposes under Digital Signature Act 1997, "writing" or "written" includes any handwriting, typewriting, printing, electronic storage or transmission or any other method of recording information or fixing information in a form capable of being preserved.

In *Bennett v. Brumfitt*¹⁹, it was held that there is no distinction in principle between using a pen or pencil and using a stamp where the impression is put upon the document. In *Jenkins v. Gaisford*²⁰, it was held that as signing may be by making a mark, and it can make no difference whether the mark is made by a pen, or some other instrument, therefore a signature impressed with a stamp satisfies the statute. Therefore, an illiterate person can place a thumbprint²¹ on legal documents in lieu of a written signature and it is still considered as his/her "signature."

In *Baker v. Dening*²², it was held that the making of a mark by a devisor is a sufficient signing, and that it is not necessary to prove that he could not write his name at the time. It was conceded there, that where a party is unable to write, the affixing of his mark is a sufficient signature; that where a party cannot write, his mark is, in fact, his only signature; and that, therefore, the case may fall within the equity of the statute. A signature in pencil is sufficient: *Lucas v James*²³ and *Re Adams*²⁴.

The decision of *Goodman v. J. Eban Ltd.*²⁵ gave clear direction that there was no requirement for a signature to be in the form of the name of a natural person, and thus, that when

signing on behalf of an organisation, it is sufficient to sign in the name of the organisation²⁶. Furthermore, the signature does not need to take the form of handwriting, so that it is permissible to affix the signature to the document mechanically by such means as a rubber stamp²⁷, printing²⁸ or typewriting.²⁹

In *Jenkins v. Gaisford & Thring, In the Goods of Jenkins*³⁰, the court held that it is sufficient to constitute a valid signature if the name of the signatory is placed on the document by a third party, acting under authority from the signatory.

As a reminder, in *United Dominions Trust Ltd v Western*³¹, the English Court of Appeals held that where a signatory signed a form in blank, he/she was under a duty of care to the other contracting party to ensure that the completed document represented his/her true intention. Any person signing a document containing such blanks shall envisage that it will be completed, and he/she will be bound so long as the words inserted fell within the scope of what he/she could reasonably have expected.

We shall take note that, according to the Court of Appeals of Arizona (USA) in *Young v. Rose*³², the question over whether e-mails constituted an electronic signature was a factual issue for the trial court to resolve.

Witness To A Signature

For out intent and purposes, a witness is a person who is present at the signing of a legal document³³ (e.g. will, contract, oath, etc.). He or she signs the document to indicate that he or she personally saw the signing and the document was authentic. The said witness signs the document to indicate that he/she personally saw the signing (by the relevant party/parties, the principal) and the document was authentic. Some documents need or must be witnessed, e.g. contract documents.

18 Daniels, P.T. "The Study of Writing Systems", in Daniels, P.T. & Bright, W. (Editors). 2010. The World's Writing Systems. 2nd. Edition. Oxford: Oxford University Press, p. 3

19 (1867) L.R. 3 C.P. 28

20 3 Swab. & Tr. 93.

21 Usually the thumbprint signature touch pad is intended to deter counterfeit and fraud. The Thumbprint signature can be used by law enforcement agencies in their investigations: See Massachusetts Bankers Association <http://www.massbankers.org/content.aspx?id=11258> (9 June 2013).

22 8 A. & E. 94.

23 7 Ha. 410.

24 LR2P & D

25 [1954] 1 QB 550.

26 See also *Bartletts de Reya (A Firm) v. Byrne* (1983) The Times 14 January, 127 SJ 69, Court of Appeal (Civil Division)(UK).

27 *Beauvais v. Green* 22 TLR 816; *Bennett v. Brumfitt* (1867) L.R. 3 C.P. 30; *British Estate Investment Society, Ltd. v. Jackson* (H.M. Inspector of Taxes) [1956] TR 397, 37 Tax Cas 79, 35 ATC 413, 50 R&IT 33, High Court of Justice (Chancery Division); *Lazarus Estates, Ltd. v. Beasley* [1956] 1 QB 702; *London County Council v. Vitamins, Ltd., London County Council v. Agricultural Food Products, Ltd.* [1955] 2 QB 218

28 *Brydges v. Dix* (1891) 7 TLR 215; *France v. Dutton*, [1891] 2 Q.B. 208.

29 *Newborne v. Sensolid (Great Britain), Ltd.* [1954] 1 QB 45.

30 (1863) 3 Sw. & Tr. 93.

31 [1976] QB 513.

32 286 P.3d 518 (Ariz. Ct. App. 2012).

33 Evidence Act 1950, including section 68, "If a document is required by law to be attested, it shall not be used as evidence until one attesting witness at least has been called for the purpose of proving its execution, if there is an attesting witness alive and subject to the process of the court and capable of giving evidence".

Conclusion

From discussions above, it clearly shows that the act of "signing" implicates several interpretations and applications. No matter what is a "signature," what contains in a "signature" and the purpose of the said signature, we must take note of its serious effects, applications and implications, especially to the doer. ▣

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Case Commentary:

The Employer's or The Architect's Power to Omit the Contractor's Works

A Commentary Based on the Recently Decided Federal Court's Decision of *Pembinaan Perwira Harta Sdn Bhd V. Letrikon Jaya Bina Sdn Bhd* [2013] 2 CLJ 437



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Introduction

IT IS COMMON IN THE STANDARD CONDITIONS OF the construction contracts in Malaysia to include the power of the employer or the architect to order the contractor's work to be omitted with a consequential adjustment of the contract price. Such power is usually found in the variation clause of the various standard contract forms such as Clause 11.0 of the PAM 2006 Standard Form of Building Contract ("PAM 2006 Form") and Clause 24.0 of the PWD Form 203 (Rev. 1/2010) ("PWD 203/2010 Form"). Particularly, the power to omit is found in clause 11.1 (a) of PAM 2006 Form and clause 24.2(a) of PWD 203/2010 Form:-

PAM 2006 Form

"11.1 Definition of Variation

The term "Variation" means the alteration or modification of the design, quality or quantity of the Works including:-

11.1(a) the addition, **omission** or substitution of any work."

PWD 203/2010 Form

"24.2 The term 'Variation' means a change in the Contract Document which necessitates the alteration or modification of the design, quality or quantity of the Works as described by or referred to therein and affects the Contract Sum, including:

(a) the addition, **omission** or substitution of any work;"

(with emphasis added)

The recently decided Federal Court's decision of *Pembinaan Perwira Harta Sdn Bhd v. Letrikon Jaya Bina Sdn Bhd* [2013] 2 CLJ 437 affirmed several Common Law positions in respect of omission of work, including limiting the employer's or the architect's power to omit the entire contractor's work.

Facts of the case

The Appellant was engaged by Syarikat Perumahan Negara Berhad-Lembaga Tabung Angkatan Tentera Joint Venture as the main contractor for an army housing project in Kuala Lumpur ("the Project"). By a Letter of Award dated 12 March 2004 ("the Letter of Award"), the Appellant appointed the Respondent as the sub-contractor to carry out and complete the mechanical and electrical works of the Project ("the Subcontract"). The Respondent could not perform the work under the Subcontract due to the reason that the piling work on the Project remained unfinished. The Appellant also ceased to be the main contractor in December 2004 due to difficulties on the Project. The Appellant then invoked clause 19 of the conditions of the Letter of Award to omit wholly the remaining work awarded to the Respondent under the Subcontract. The said clause 19 is as follows:-

"We reserve the right to omit wholly or in part of the works from the Sub-contract. The omissions of works prescribed may be deducted from the Sub-contract sum. No claim whatsoever will be entertained for such omissions."

Consequently, the Respondent filed a suit against the Appellant, alleging that the Appellant was not entitled to do as such.

The Decisions by the High Court and the Court of Appeal

The decision by the High Court was in favour of the Respondent that the said omission clause could not be relied upon by the Appellant to omit the entire remaining work under the Subcontract, as by doing so will amount to terminating the Subcontract without any default by the Respondent and this would be absurd. The High Court's decision was later confirmed by the Court of Appeal on similar grounds. The Court of Appeal also held that such omission clause could not be interpreted literally.

The Decision by the Federal Court

The Appellant was granted leave to appeal against the Court of Appeal's decision on six questions of law, which can be succinctly summarised as whether the employer can lawfully invoke the omission clause to omit the entire work under the contract that effectively resulted in the termination of the contract.

The Federal Court's decision was in favour of the Respondent. In dismissing the Appellant's appeal, the Federal Court affirmed several English Common Law positions in respect of omission of work and the same were discussed as follows:-

(a) An omission clause could not be invoked to omit the entire contractor's work

It was held by the Federal Court that an omission clause, which is commonly found in a variation clause, could not be invoked to omit the entire contractor's work. The Federal Court observed that a variation clause gives power to make adjustments to the work but not a power to cancel the entire contract work. The English case of *Trustees of the Stratfield Saye Estate v. AHL Construction Ltd* [2004] EWHC 3286 (TCC) decided by Justice Jackson was referred to by the Federal Court in arriving at this position:-

"46. Provisions entitling an owner to vary the work have therefore to be construed carefully so as not to deprive the contractor of its contractual right to the opportunity to complete the works and realise such profit as may then be made. They are not in the same category as exemption clauses. They have been common for centuries and do not need to be construed narrowly. In developed forms they now offer contractors opportunities to participate actively in the success of the project and to enhance their returns (for example, by way of value engineering or the application of concepts such as partnering).

47. However, the cases do show that reasonably clear words are needed in order to remove work from the contractor simply to have it done by somebody else, whether because the prospect of having it completed by the contractor will be more expensive for the employer than having it done by somebody else, although there can well be other

reasons such as timing and confidence in the original contractor. The basic bargain struck between the employer and the contractor has to be honoured and an employer who finds that it has entered into what he might regard as a bad bargain is not allowed to escape from it by the use of the omissions clause so as to enable it then to try and get a better bargain by having the work done by somebody else at a lower cost once the contractor is out of the way (or at the same time if the contract permits others to work alongside the contractor)."

(emphasis added)

(b) A variation clause must be exercised with good faith

It was held by the Federal Court that it is a question of interpretation of the contract as to the extent and scope of the permissible exercise of power of a particular clause. A variation clause cannot be exercised unreasonably in the absence of good faith. The New South Wales Supreme Court's case of *Sacon Constructions Pty Ltd v. Kezarne Pty Ltd* [1997] NSWSC 474 was cited to support this proposition.

(c) A variation clause cannot be utilised to omit works to be given to another contractor

Further to the above, the Federal Court also affirmed the legal position that a variation clause cannot be utilised to omit work to be given to others. This position is similar to the Common Law position (see for example, *Amec Building Ltd v Cadmus Investments Co Ltd* [1996] 51 Con LR 105, where it was held that the architect was not entitled to omit the work by a variation order if the purpose was to give this work to another contractor).

The impact of the Federal Court's decision of *Pembinaan Perwira Harta* on the interpretation of variation clause in the various standard conditions of construction contract

It is submitted that a variation clause, although literally allows for the omission of the entire work under contract, is subject to the limitations imposed by the Federal Court's decision of *Pembinaan Perwira Harta* discussed above.

However, the variation clause could be amended to contract out of these legal limitations by providing clearly the employer's or the architect's power to omit the entire work and to allow part or the whole of the omitted work to be carried out by another party. For example, the reformulation of Clause 22.2 of the PAM 2006 Form for the agreed liquidated damages was an attempt to circumvent the application of the various judicial decisions interpreting Section 75 of the Contracts Act 1950 pertaining to the issue of liquidated damages; nevertheless, the effectiveness of such attempt to contract out is yet to be tested in the Malaysian Courts (Please note that in *Johor Coastal Development Sdn Bhd v. Constrajaya Sdn Bhd* [2009] 4 CLJ 569, the Federal Court did not answer directly the question of whether the parties to a contract are entitled to contract out of Section 75 of the Contracts Act 1950, as there was no clear provision in the contract which provided so). ▣

Ekstrak Teks Perbahasan Bajet 2014

Isu Pengurusan Hartanah



YB Senator Dato' Abdul Rahim Abdul Rahman
Dewan Negara
9 December 2013

DI DALAM PEMBINAAN TEMPAT TINGGAL UNTUK rakyat sudah pasti banyak unit-unit kediaman ini terdiri dari unit-unit strata di dalam bangunan-bangunan yang tinggi, istimewa pula di Bandar-bandar besar. Saya sekali lagi ingin membawa masalah pengurusan unit-unit strata ini.

Pada 19hb Disember 2012, rang undang-undang Pengurusan Strata 2012 telah diluluskan oleh Dewan yang mulia ini. Di dalam perbahasan semasa rang undang-undang ini dibentangkan soalan pendaftaran pengurus-pengurus harta telah dibangkit.

Saya sekali lagi meminta YB Menteri Perumahan dan Kerajaan Tempatan dengan kuasa yang diperuntukkan dalam Akta Pengurusan Strata 2012, supaya mengambil kira pandangan dari badan-badan professional seperti Pertubuhan Juruukur diRaja Malaysia, Malaysian Institute of Professional Property Managers, Persatuan Penilai dan Pengurus Harta Swasta Malaysia dan Persatuan Pembeli Rumah Kebangsaan yang semuanya menyuarakan "Regulation of property managers is the way forward" dengan izin.

Saya ingin menghuraikan sebab-sebab mengapa pengurusan harta perlu dikawal:

1. Pada akhir 2011 negara mempunyai 13,023 projek perumahan strata mengandungi 1,367,721 unit strata. Bilangan penghuni ialah 4.1 juta iaitu 15.1% jumlah penduduk. Angka terkini mencecah 15,000 bermakna bilangan penghuni telah mencecah ke angka 5 juta. Jika kita hendak mensejahterakan kehidupan rakyat seperti yang disarankan oleh YAB Menteri Kewangan dalam Teras Bajet Yang Kelima, kepentingan 5 juta rakyat inilah yang patut kita jaga, bukannya segelintir kumpulan yang mendesak untuk kepentingan diri mereka yang menganggap pengurusan harta adalah semata-mata satu jenis perniagaan yang tidak payah di kawalselia.

2. Sebanyak 40 laporan polis telah dibuat terhadap pengurus-pengurus harta yang tidak berdaftar dan 55.2% punca kegagalan ialah kurang pengetahuan dan pengalaman kakitangan syarikat pengurusan harta dan organisasi yang tidak professional. Setakat ini 20 syarikat pengurusan harta yang tidak berdaftar telah diarahkan untuk berhenti daripada menjalankan kerja-kerja pengurusan bangunan. Setakat yang diketahui tidak ada satu pun laporan polis dibuat terhadap pengurusan harta yang berdaftar. Mengapa? Kerana syarikat-syarikat ini mempunyai kakitangan professional, di kawalselia oleh satu Lembaga dibawah Kementerian Kewangan mengikut cara-cara yang ditetapkan dalam buku "Malaysia Property Management Standards" dengan izin yang telah dikeluarkan oleh Lembaga.
3. Diantara bantahan yang dibangkit oleh kumpulan yang tidak bersetuju supaya pengurus bangunan didaftar ialah kononnya pengurusan harta adalah dimonopoli oleh penilai atau valuers. Syarikat-syarikat penilai yang dimaksudkan ialah perunding hartanah dimana kakitangan-kakitangan mereka kebanyakannya mempunyai Ijazah Sarjana Muda (Pengurusan Hartanah) dan mempelajari matapelajaran penilaian, pengurusan hartanah dan agensi hartanah. Mereka boleh dan layak mengamalkan satu atau ketiga-tiga bidang sekali gus.

Lagi pula Lembaga Penilaian, Pentaksir dan Agen Hartanah yang pada masa ini ditugas untuk kawalselia profesion ini sedang mengambil tindakan membuka peluang kepada sesiapa sahaja yang layak dan berpengalaman untuk didaftar sebagai Pengurus Harta. Bahkan saya difahamkan bahawa pemindaan Akta Lembaga Penilaian, Pentaksir dan Agen Hartanah telahpun dilulus oleh Jabatan Peguam Negara, dimana diantara lain Lembaga akan memberi peluang didalam masa 12 bulan untuk syarikat-syarikat atau individu yang menjalankan tugas sebagai pengurus harta untuk mendaftar. Dalam proses pendaftaran ini, pegawai dari Kementerian Kewangan, Kementerian Perumahan dan Kerajaan Tempatan serta Kementerian Wilayah Persekutuan dan Kesejahteraan Bandar boleh menyertai sebagai Ahli Lembaga.

4. Cadangan untuk mengenakan 'bank guarantee' terhadap pengurus harta sebanyak RM50,000 sebagai 'performance bond' adalah tidak mencukupi kerana pengurusan bangunan bukan setakat mencuci tandas atau menukar bulb, tetapi mestilah mempunyai kepakaran dalam pengurusan kewangan, insuran, pentadbiran dan undang-undang pengurusan, menjaga dan membaiki alat-alat seperti air-conditioning, lif dan eskalator,

masalah keselamatan dan pengurusan semasa kecemasan serta undang-undang bersangkutpaut dengan penyewaan ruang kediaman, perniagaan dan perindustrian. Kutipan "service charge" berjumlah berjuta-juta ringgit boleh disalahgunakan oleh pengurus-pengurus harta yang tidak bertanggungjawab dan tidak dikawalselia. Untuk pengetahuan Dewan yang mulia ini setiap pengurus harta yang berdaftar dikehendaki untuk mengambil "professional indemnity insurance coverage" dengan izin sebanyak sekurang-kurangnya RM5 juta.

5. Lagi satu sebab yang disuarakan ialah negara tidak mempunyai Pengurus Harta Berdaftar yang mencukupi. Ini tidak benar sama sekali. Untuk pengetahuan Dewan yang mulia ini Negara kita mempunyai 13,000 – 14,000 skim pembangunan berstrata. Kita sekarang mempunyai hampir 1,000 pengurus harta berdaftar dan hampir 500 syarikat pengurusan harta berdaftar dan 7,000 – 8,000 graduan BSc (Pengurusan Harta). Oleh sebab tidak semestinya tiap-tiap pekerja dalam syarikat pengurus harta didaftarkan dan satu-satu firma boleh mengurus diantara 20 hingga 50 skim, soal kekurangan firma atau pengurus harta berdaftar tidak timbul. Takkan kalau kita hendak bina 13,000 unit rumah kita kena pakai 13,000 Arkitek. Tiga hingga lima firma Arkitek pun telah mencukupi.

Selain daripada itu setiap tahun lebih daripada 400 graduan kelulusan BSc. (Pengurusan Harta) daripada empat universiti awam iaitu Universiti Malaya (UM), Universiti Teknologi MARA (UiTM), Universiti Teknologi Malaysia (UTM) dan Universiti Tun Hussein Onn Malaysia (UTHM). Jadi soal bilangan Pengurus Harta berdaftar tidaklah timbul langsung dan tidak boleh diberi sebagai alasan pada masa sekarang atau masa hadapan. Bahkan apa yang patut kerajaan memikirkan ialah selepas membelanja berjuta-juta ringgit untuk mengadakan kursus serta Ijazah Pengurusan Harta, apakah akan terjadi kepada mereka ini untuk mendapat pekerjaan di masa hadapan.

Dengan huraian ini adalah diharapkan Kementerian Perumahan dan Kerajaan Tempatan akan memberi pertimbangan sewajarnya. Ada juga yang telah mencadang supaya satu Lembaga baru ditubuhkan dibawah Kementerian Perumahan untuk mengawal selia pengurusan harta stata; saya fikir penubuhan satu Lembaga baru tidak perlu kerana ianya akan melibatkan perbelanjaan tambahan oleh kerajaan dan bercanggah dengan Akta 242 yang sedia ada. Apa yang boleh kita fikirkan ialah untuk menambah atau melihat kembali komposisi ahli-ahli Lembaga yang sedia ada untuk diwakili oleh Kementerian-kementerian, ahli-ahli professional dan kesatuan-kesatuan berkenaan termasuk wakil dari Institusi Pengajian Tinggi. ■

Measuring the Performance Levels of High-Rise Private Office Buildings Maintenance Management



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Maintenance management is an essential aspect in determining the performance and quality of properties such as office buildings. The fundamental issues related to techniques and approaches concerned are generally taken lightly by the practitioners, which lead to inefficiency of maintenance management practice in the market today. This paper aims to determine the current standard and performance of maintenance management systems by applying the study to high-rise private office buildings. These objectives are to be achieved by evaluating and analysing perceptions of the end users from five high-rise office buildings in Klang Valley by using a mixed method combination of both quantitative and qualitative data. Research findings signify that the performance of high-rise office buildings are generally rated as average by the end users and results from interviews with the maintenance managers denote the detailed systems applied. There is a positive relationship between the maintenance management systems and performance of maintenance management. This paper provides important research, which uncovered the scenario in the industry and the key perceptions by the building end users. This research is anticipated to be significantly beneficial and can be further used as a piece of information specifying on high-rise, private office buildings.

1. Introduction

MAINTENANCE MANAGEMENT OR OPERATIONS management has been defined as a function that transforms input, including people, capital, energy, materials and technology, into outputs, such as goods and services [14]. Coetzee [5] defines it as an activity that aims to optimise the availability and reliability of production equipment and maintain its operability at an acceptable cost level. Subsequently, Certo [4] has labelled operations management as a systematic direction and control of operation processes. These definitions have highlighted maintenance management as a systematic design used by

the people that operate the organisations to control the overall operation processes in transforming the inputs into goods and services.

Bernard et al. [3] reported that the "Deferred Maintenance Concept" that was well known 10 years earlier was still ongoing in the maintenance department. The deferred maintenance concept, which is basically consists of postponing works and accumulating overdue maintenance works, has entailed enormous amounts of money in order to be expanded. He also claimed that facilities were aging and constantly being renovated in piecemeal fashion, which meant that the actions were taken at different times or ways,

There is an increasing concern that the maintenance management that has been unprofessionally applied by the maintenance managers with no research has so far outlined the critical factors and deliberation on such impractical practices.



rather than carefully planned from the beginning. Bernard et al. [3] also added that many renovations were limited in scope due to funding restraints and many times resulted in cosmetic change with few or no infrastructure improvements. This fragmentation could further lead to inefficiency of mechanical systems, customer complaints due to dissatisfaction with their facility or space environmental conditions, and eventually higher utility bills and maintenance costs.

Meanwhile, Hinks [9] related a maintenance management performance scenario from his interviews with the facility managers to find their agreed set of indicators. The managers were uninterested in considering any facets of maintenance management performance below an aggregated level of indicator for maintenance. The author claimed that the business managers did not consider any management details, as they relied more on reactive actions based on clients' or users' complaints.

This indicates that maintenance management is still being practiced with improper procedure by the maintenance managers, which subsequently caused negative impact on the facilities and the services provided. It can be seen that the managers prefer carrying out reactive maintenance works rather than proactive works, and at times, do not consider clients' satisfaction, and also the performance of services. There is an increasing concern that the maintenance management that has been unprofessionally applied by the

maintenance managers with no research has so far outlined the critical factors and deliberation on such impractical practices.

While Gelders et al. [8] suggested that there are four (4) measurements of benchmarking to be looked at, such as financial (shareholder's views), customers, internal processes (the long- and short-term means to achieve financial and customer objectives), and learning and growth (capability to improve and create value). In this scope, customer groups that comprise of either clients or building occupants can be also be known as end users. It is undeniably true that end users' perceptions and satisfaction level are able to encourage the maintenance managers to choose the right channel and implementation to upgrade building performance.

Therefore, maintenance management is conclusively proven to be an essential facet of a property's performance. Efficient maintenance management will produce a systematic and excellent maintenance management, which increases the operation's productivity and performance, whereas improper conduct decreases the performance level and affects the life cycle of a property. Evaluation on the end users' response can lead to the building performance analysis, which will later help to identify the gaps that are existing between the service provided and satisfaction level. Therefore, measurement is needed that can be evaluated in order to maintain an impressive standard of performance. In addition,

benchmarking is suggested as one highly influential tool to identify actual and current performance of a practice to suit the best practices available in the market.

2. Maintenance Management: Roles & Current Scenario

In emphasising the importance of maintenance management in the property industry today, various literature concerning maintenance management and end users' perceptions and satisfaction key factors are reviewed. The significance of maintenance and its position in the world's diverse industries can be seen in progressive developments of manufacturing, refineries, mining and building. Egbu [7] signified the role of maintenance as the major driver of economic growth, whereby it generates 45-60 per cent of fixed capital formation in many countries, and it also generates 5-15 per cent of Gross Domestic Product (GDP). The role of maintenance in modern manufacturing is becoming ever more important with companies adopting maintenance as a profit-generating business element [11].

While in refineries, the maintenance and operations departments are very large and each department consists of up to 30 per cent of the total staffing [6]. A study by the Swedish mining industry shows that the cost of maintenance in a highly mechanised mine can be 40-60 per cent of the operating cost [5]. Facilities and maintenance management also contributes from 5 to 10 per cent of employment in individual countries where it supplies approximately 111 million people. That constitutes the majority of the labour force, which is 75 per cent in developing countries [7]. The role is particularly effective in developing countries due to the rapid and large-scale urbanisation that requires large scale facilities and maintenance management.

Wordsworth [17] reports that building maintenance accounts for more than half the building industry's total output, and for more than two thirds of the contracts let. Subsequently, the role of maintenance manager continues to expand, as more demands are made by users regarding the economic and functional efficiency of the buildings where they live and work. Maintenance provides critical support for this heavy and capital-intensive industry by keeping machinery and equipment in a safe operating condition [13].

Tsang [16] opined that maintenance works as an important support function in business with significant investment in physical assets and that it plays an important role in achieving organisational goals.

Table 1 shows that maintenance sector in Malaysian industry is unstable and constantly experiencing increasing maintenance failures and building defects. This has indirectly shown the deficiency in the maintenance system practiced in Malaysia.

According to Egbu [7], buildings in overall contribute 33 per cent to CO2 emissions, which has a substantial impact on the environment. Legislation and stakeholder concern increasingly require facility managers to reduce CO2 emissions. In this respect, the management of buildings needs to be emphasised and systematically controlled. The government and office buildings managers need to recognise this and plan for a better eco-friendly management. In 2006, the government allocated about one trillion Ringgit towards maintaining public building facilities [7]. However, in the Malaysian context, the government is yet to implement any guidelines for maintenance management and also the performance measurement of the system applied [1]. Therefore, maintenance agents or companies from both public and private sectors have no systematic guidelines to

Table 1. Chronology of the Building Defects Occurrence.

Year	Chronology Of The Occurrence Of Building Defects
2005	Collapsed ceiling at the Parliament House, Jalan Duta, Kuala Lumpur
2006	Fungus defects on wall at the Hospital Sultanah Aminah, Johor Bahru
2007	Defects at the Navy Recruit Training Centre (PULAREK), Johor
2007	Floods from seventh floor down to second floor of the Immigration Department, Putrajaya
2007	Collapse of plaster ceiling at the Entrepreneur and Co-operative Development Ministry, Putrajaya
2007	Collapse of ceiling at the new court complex at Jalan Duta, Kuala Lumpur
2007	Collapse of ceiling at the Parliament House, Jalan Duta, Kuala Lumpur
2007	Floods caused by leaking pipes, roof and wiring problems at the new court complex at Jalan Duta, Kuala Lumpur
2007	Collapse of ceiling at the Hospital Sultan Abdul Halim, Sg. Petani, Kedah

be followed and no specific compliance to be adhered to in order to deliver for the best [12].

3. Performance Measurement

Several frameworks have been developed for measuring performance over the years. Until 1980, performance measurement was based on mostly financial measures [15]. According to Kaplan and Norton [10], the approach at that time looked into four perspectives that focus on financial aspects, customers, internal processes and innovation and learning. Subsequently, various researchers have developed frameworks considering non-financial measurements and intangible assets to achieve competitive advantages [10].

A performance measurement system was developed by the author for research methodology purposes by incorporating the common maintenance management systems applied into it (Figure 1). Based on the literature reviewed, the performance or maintenance indicators are identified complete with the performance indicators, respectively. The functional indicator, for instance, outlines the management service delivery as if is a significant aspect. In this scope, the research assesses the performance of the service based on characteristics, such as reliability in which the assurance or confidence is delivered by the managers; responsiveness as to whether positive or negative response is given; and also timeliness, which emphasises the promptness of response or action taken.

The significance of maintenance and its position in the world's diverse industries can be seen in progressive developments of manufacturing, refineries, mining and building.

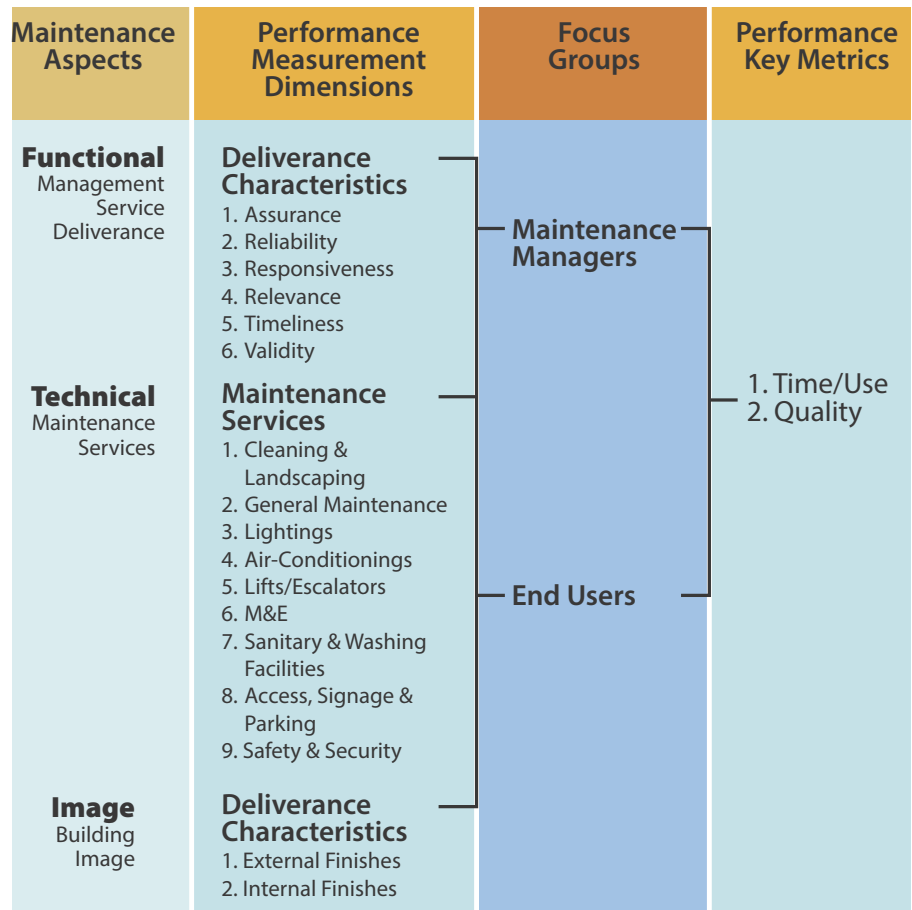


Figure 1: Performance Measurement System Design

As for the technical indicator, building maintenance with a detailed list of the maintenance dimensions are identified with reference to the literature review and basic services provided generally by office building managers, such as cleaning, landscaping, general maintenance, lightings, air-conditioning, lift or escalators, mechanical and electrical (M&E), sanitary and plumbing, access,

signage and parking. These maintenance services are regarded as the backbone of maintenance management of an office building. This is in accordance with opinion from Egbu [7], which explains that the importance of building services to the success of an organisation has never been greater and continues to grow. Alternatively, for image indicators, we should focus on the quality of external and internal finishes of the building.

The three maintenance indicators, which are functional-management service, technical-building maintenance and image-building image with respective dimensions, are to be measured with both focus groups, which are maintenance managers and end users. Different performance key factors are designed for the focus groups, such as time, quality and costs. These are targeted as the benchmarks or key factors to measure the level of performance for maintenance managers' scope, while

only time and quality factors are designated for end users, as the cost factor is most likely unsuitable to be measured for this group.

All elements in this system are overall interrelated and play important roles in sustaining the overall performance of maintenance management. These elements also meet the characteristics defined by Al-Sultan and Duffuaa [2] as they are believed to be relevant, interpretable, valid, time effective and easily implemented.

4. Significance of Customers' Opinions

A fundamental premise to the service concept is the notion of satisfying the customers' needs. A satisfied customer can enhance a service and the firm's bottom line in multiple ways. Increased customer satisfaction generates positive reviews and brings in new customers to the firm. There are many studies that highlight the importance of customer satisfaction for a firm's success and how customer satisfaction can be measured. However, most of these studies are limited to the area of business-to-consumer marketing and not for the maintenance services provided.

Therefore, this study is designed to explore customer satisfaction as a function of end users' perceptions about the maintenance services, and then relate the

A fundamental premise to the service concept is the notion of satisfying the customers' needs. A satisfied customer can enhance a service and the firm's bottom line in multiple ways.

importance of these perceptions to the performance level of the maintenance services provided. This is designed around customers, or in this research more accurately referred as end users, to give the most accurate results and perceptions of the services delivered to them.

According to Spires [15], there is a clear trend towards customers demanding industry specialised systems. The pressures and influences on suppliers to accommodate this demand are vast, but unless a supplier is of sufficient size to afford the continual improvement required for product development, they will struggle to achieve profitability and long-term stability becomes less likely.

As a result, smaller companies will either become niche specialists, or operate only within the asset and maintenance management market, form strategic alliances with one or more of the bigger companies, or quite simply go out of business. However, even for large companies, such development costs are a major expense, and to supply a unique system for each customer is not practical. The solution is products that are modular and off the shelf, but also highly configurable to suit each customer's requirements [15].

Through customer demands we will see a rationalisation of suppliers of such solutions, and companies operating in this sector today may not necessarily survive in their existing form tomorrow. Product offerings will also change and evolve into modular, industry-standard systems, which through extreme flexibility will allow enough bespoke capability to satisfy individual customer requirements, while techniques such as Reliability Centred Maintenance (RCM) will gain acceptance as more firms strive to achieve "best practice" [17].

Finally, there are also wider complications for the whole of industry. According to Spires [15], existing evidence has identified that the most successful implementations of asset and maintenance management solutions are in companies that embrace the concept of "best practice" as a total company culture. As a result, more and more companies will look to establish overall "best business practice" which indirectly benefits the industry in general.

QS JUB UTARA SDN. BHD. (224397-P)

BQSM Permit No. : 1993/FC00007

Chartered Quantity Surveyors	: Juru Ukur Bahan Bertauliah
Construction Cost Consultant	: Penasihat Ekonomi Pembinaan
Project Managers	: Pengurus Projek

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Correlation between Performance of Maintenance Management and Maintenance Management Systems Applied

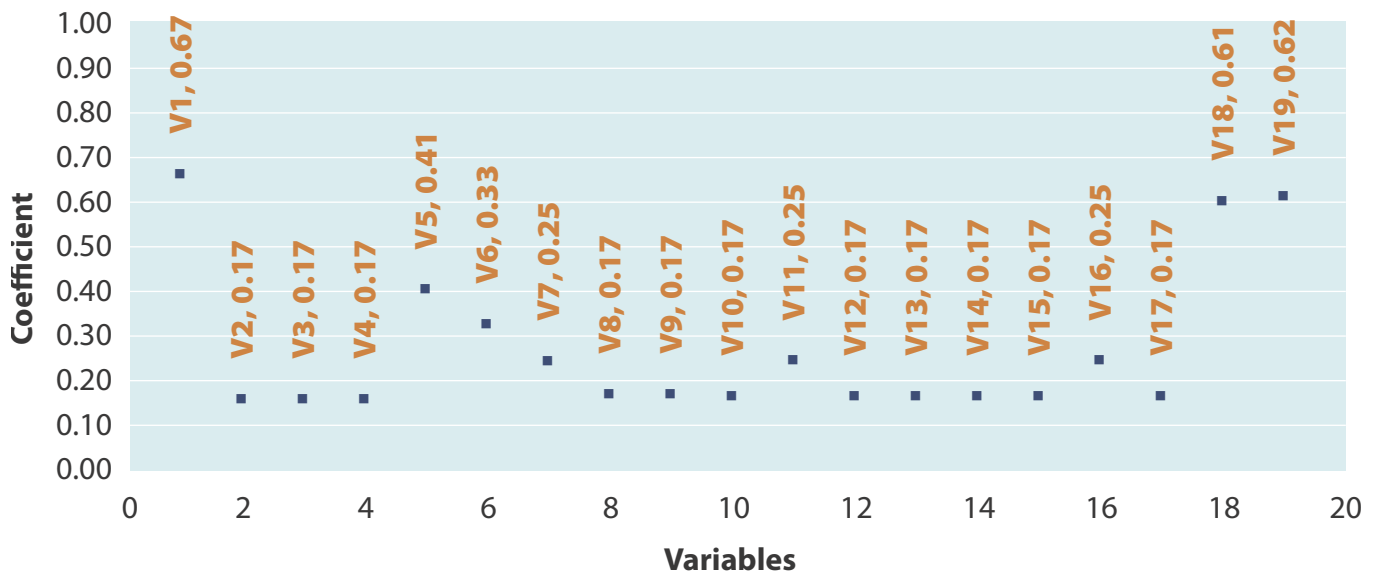


Figure 2: Performance of building image

5. Research Methodology

The research adopted mixed methods of both quantitative and qualitative approaches. Five (5) high-rise office buildings in the vicinity of Kuala Lumpur were chosen for the case studies, whereby the important focus groups involved are the maintenance managers and end users, respectively. Multiple data collection techniques are used in the data collection process that is the combination of both quantitative and qualitative methods, which includes focused interviews, case studies and observation. Evidently, the case study's data collection technique is appropriate to achieve the approach of our study, which is to research and analyse the management systems and end users' perceptions from five (5) different office buildings.

Interviews will be conducted specifically of the maintenance managers of five (5) chosen high-rise office buildings. Maintenance managers are enquired on information pertaining to the building's background, maintenance services provided, systems used, manpower and subcontractors, as well as problems and improvements that have been completed or are in progress for the building. The questions were prepared based on the semi-structured and open-ended ad hoc conversations. Results of the interviews are necessary for the research evaluation on the systems applied by the maintenance managers and, subsequently, for relationship identifications between the main two variables.

Observation is also one vital step to fulfil the objective of this research, as it will record the patterns of certain scenarios or behaviours that occur in specific settings.

Observations were conducted during site visit to the chosen case study areas and also while doing the interviews. They are based on direct observations that include participant and non-participant observation, and more recently, photography and video.

Questionnaires and surveys capture information through the input of responses to a research instrument containing questions that used the 252 sets of questionnaires distributed to the five (5) office buildings, respectively. The researcher personally distributed the questionnaires to the respondents and opted for follow up phone surveys for the late respondents. Questionnaires were distributed from June 2008 and collected in late August for the next step, which was the data analysis. Sets of questionnaires with structured and semi-structured/open-ended questions were distributed to the respective building end users so as to discover regularities among groups of maintenance management by comparison of answers to the same set of questions. The analysis of data from the questionnaire responses provided precise data from which the tables and graphs were produced.

6. Discussions & Findings: Relationship Between Maintenance Management System and Performance of Office Buildings Maintenance Management

Based on Figure 2, there are three maintenance elements that record medium correlation, which are Tangibles, Internal Image and External Image with respective coefficients of 0.67, 0.61 and 0.62. Assurance ($r=0.41$, $p>0.05$) and Cleaning ($r=0.33$, $p>0.05$) signify low correlation between their levels of performance and

systems. Meanwhile, the other 14 maintenance elements that are also the variables record very low correlations for the respective correlations between 0.01 and 0.30. Overall, it can be concluded that there is a minimal impact of correlation between the maintenance management performance and systems applied.

7. Recommendations

It is strongly advised that maintenance managers value the important roles of end users in evaluating the performance of maintenance services with great attention given to their needs and requirements. Consultations with the end users should be a mechanism to establish a proactive management process. Maintenance managers must also consider implementing a continuous benchmarking or assessments on the services provided and subsequently focus on any critical service elements identified. A thorough analysis on the implementation of all maintenance services and respective sub-contractors helps to identify the weaknesses and criteria which need to be improved.

In addition, it is highly recommended that a maintenance management guideline be provided to standardise the practice of office building maintenance management. In relation to this, a statutory act on the compliance of

maintenance management system criteria and regulations should be established to improve the maintenance management performance and also to avoid any mismanagement, which could result in corruptions and abuse of power.

Future research on the maintenance scope is most encouraged, specifically on the performance level of maintenance management on a larger scale, the implications of maintenance management failure, cost analysis of maintenance management, performance measurement assessment on all classes of residential housing and public buildings, and a proposal on maintenance management statutory acts.

8. Conclusion

This study has provided an overview of maintenance management of high-rise office buildings, particularly on the development of maintenance management systems, and also performance measurement systems. Investigations on the maintenance management system and performance of maintenance management, along with the relationship between them, were accomplished. The findings suggest that, in general, the common maintenance management systems applied to office buildings is comprised of three major aspects, which are functional, technical and image. Important service elements such as service characteristics, building services and building image encompass the three major aspects, respectively. This study has also found that generally all five office buildings chosen have an average maintenance management performance as rated by respective end users. Findings also signify that, in general, the background of the respondents has a significant impact on the performance of the maintenance management system. The most significant finding from the study is that there is a positive relationship between the maintenance management systems and performance of maintenance management, especially in several elements of service characteristics and building services. In addition, it is also noted that maintenance managers have a similar perception in the important ranking of maintenance management service elements with a fractionally difference of ranking order.

This survey has shown that benchmarking or assessment on the performance of maintenance management is very important, as it enables the maintenance managers to comprehend the strengths, weaknesses and also significance of the service provided, as well as both tangible and intangible values of the building. Indirectly,



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maintenance managers can identify any probable threats or risks of their services. Concurrently, the establishment of maintenance management performance level is beneficial for the maintenance managers to implement immediate actions to improve the performance. It also serves as a signal that a major transformation is highly required to enhance the quality of performance. This positive relationship also ascertains that the implementation standard of maintenance management systems determines the performance of a maintenance management system. At the same time, the difference shown in the priorities of maintenance management service elements signifies a strong emphasis on users' needs and the requirements needed from maintenance managers.

This study has achieved its aim through a valid performance measurement design. The high value of Alpha's Cronbach validates that the variables used for the survey are reliable and the performance measurement design can be considered as a robust instrument to measure maintenance management performance.

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Rangka Kerja Pembaikan Masjid Kayu Lama Di Malaysia



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Secara umumnya, kertas kerja ini merupakan ringkasan proses dan peringkat kerja pembaikan dalam amalan pemuliharaan bangunan yang dilakukan terhadap bangunan kayu lama. Pendekatan rangka kerja ini dijalankan terhadap bangunan masjid kayu lama. Kertas kerja ini mengandungi pengenalan kepada pemuliharaan secara umum, definisi dan kepentingannya, dan menggariskan prinsip-prinsip yang menjadi landasan untuk kerja pembaikan kayu. Metodologi kajian adalah lebih kepada kajian eksplorasi dan penelitian terhadap literatur yang mana gabungan tersebut telah membentuk rangka kerja yang dihasilkan.

1.0 Pengenalan

SEBAGAIMANA BANGUNAN BERSEJARAH yang lain, masjid merupakan salah satu penyumbang kepada kepelbagaian corak seni bina di Malaysia. Masjid lama dengan reka bentuk tradisional dikenali sebagai salah satu elemen kepada harta budaya yang harus dipulihara terutama sekali dalam mengekalkan kesinambungan seni bina tempatan. Sungguhpun banyak masjid-masjid baru dibina, sumbangan masjid-masjid lama ini tidak harus dilupakan ibarat pepatah tiada yang baru jika tiada yang lama, kerana kepentingannya dapat dilihat melalu isudutnya yang tersendiri.

Di Malaysia masih lagi terdapat masjid-masjid kayu lama yang menampilkan keunikan dan kesenian seni binanya yang tersendiri. Ada yang masih digunakan malah ada yang ditinggalkan kosong. Masjid-masjid lama ini ada yang telah mengalami transformasi bahan binaan iaitu samada penukaran dan penambahan bahan binaan baru terhadap reka bentuk asalnya. Tidak juga dinafikan, ada masjid-masjid lama ini terbiar usang dan rosak serta memerlukan penjagaan dan pembaikan khusus bagi memanjangkan penggunaannya. Mungkin ia tidak sesuai atau diperlukan sebagai masjid utama dalam suatu kawasan, namun ianya masih berguna sebagai tempat untuk aktiviti komuniti setempat.

Kerja-kerja pembaikan adalah salah satu perkara yang diperlukan dalam objektif untuk memanjangkan penggunaan bangunan ini. Pembaikan yang dijalankan seharusnya tidak menghilangkan nilai sejarah yang ingin dipulihara. Ini turut dinyatakan oleh Robert (1998) bahawa sebarang kerja pemuliharaan tidak menghilangkan kepentingan budaya yang ada pada bangunan tersebut. Bagi memenuhi perkara ini, adalah penting untuk memahami bagaimana suatu kerosakan bangunan itu terjadi (Peter, 2003). kerana dengan itu barulah kemahiran dalam kerja pemuliharaan dapat ditingkatkan bagi memanjangkan jangka

hayat suatu harta budaya untuk generasi seterusnya (Bernard, 1979). Sebarang kerja pembaikan tidak akan dilakukan selagi pemahaman terhadap sejarah bangunan tersebut tidak dicapai, dan ini termasuklah kerja pembaikan dan pengubahan yang pernah dilakukan sebelumnya dan sejarah penggunaannya (Robert 1998). Kecacatan bangunan perlu dilihat secara menyeluruh dan kegagalan dalam mengenal pasti kecacatan bangunan boleh menyebabkan pemilihan kerja pembaikan yang salah (Barry, 2001) dan (Bill. R, 1981).

Secara amnya kerja pembaikan yang betul dan tepat mengikut kehendak pemuliharaan adalah berkait rapat dengan proses kajian kerosakan dan perlulah mempunyai pengetahuan yang kuat terhadap sifat bahan (Bill. R, 1981), (Barry, 2001) dan perancangan terhadap langkah terbaik bagi mengawal kerosakan. Selain dari itu, sebarang bentuk kerja pemuliharaan dan pembaikan haruslah berlandaskan prinsip asas pembaikan bagi mengekalkan ciri keaslian yang ingin dipulihara. Dengan gabungan ini sekali gus dapat membantu untuk membentuk pendekatan perancangan penyelenggaraan yang lebih baik (Bernard, 2000) dan (Robert, 1998).

Sungguhpun sesetengah bangunan lama ini telah pun menjalani proses kerja pemuliharaan, namun masih terdapat kerja-kerja pembaikan yang dilihat kurang memenuhi prinsip kerja pemuliharaan bangunan yang sepatutnya diamalkan. Ini menyebabkan suatu bangunan itu tidak dapat mengekalkan keaslian yang sebenar seperti yang digariskan dalam objektif pemuliharaan bangunan. Antara masalah lazim yang dikesan adalah seperti dari sudut dokumentasi kerja pemuliharaan, kekeliruan terhadap pendekatan yang boleh diguna pakai dan cara kerja pembaikan yang dibolehkan dalam amalan pemuliharaan bangunan. Pembentukan rangka kerja pembaikan ini dan beberapa prinsip asas pembaikan yang

dihuraikan diharapkan dapat memperkemas kefahaman berhubung kerja-kerja pembaikan dalam amalan pemuliharaan.

2.0 Definisi dan kepentingan pemuliharaan bangunan masjid lama

Pemuliharaan merupakan aktiviti atau tindakan untuk memanjangkan hayat sesuatu benda. Ia mengandungi dua aktiviti iaitu pulih dan pelihara; dan merupakan penjagaan terhadap sesuatu daripada musnah atau diubah tanpa perancangan yang teliti (Siti Norlizaiha et. al, 2010). Maksud pemuliharaan khususnya apabila digunakan dalam bidang alam bina juga meliputi aktiviti untuk mencegah pereputan, yang mengandungi semua perbuatan untuk memanjangkan hayat suatu budaya dan warisan semula jadi (Bernard, 2000).

Kepentingan pemuliharaan bangunan telah dikenal pasti membawa banyak kebaikan dalam pelbagai sektor dan komuniti. Sering kali kepentingan pemuliharaan ini dilihat kepada sumbangannya dalam penceritaan sejarah. Menurut Robert P. (1994), bangunan merupakan warisan yang terkandung nilai yang tersurat dan tersirat; malah menurut Aylin (2008), bangunan warisan adalah bahagian yang penting dalam alam bina dan kepentingannya diukur dari sudut yang tersendiri. Antara kepentingan pemuliharaan bangunan khususnya bangunan keagamaan seperti masjid antaranya adalah:

1. Mengekalkan kesinambungan seni bina tempatan

Setiap bangunan bersejarah itu mempunyai keunikannya yang tersendiri dan ini dapat dilihat dari rupa seni binanya, bahan binaan, tempat peletakkannya dan corak budaya penempatannya (cultural landscape). Malah, tidak lengkap suatu yang dipanggil sebagai alam binaan tanpa bangunan warisan ini (Aylin, 2008). Kepentingan dari sudut seni bina ini juga dilihat dapat dijadikan sebagai satu kayu ukuran bagi ketamadunan bangsa dengan merujuk kepada kehalusan seni pertukangan dan teknologi pembinaan pada masa dahulu (Kamarul, et al. (2007). Masjid-masjid tradisional ini ada antaranya menampilkan kesenian pertukangan yang tinggi yang menggambarkan era kegemilangan kesenian tamadun Melayu. Dari rupa atau gaya seni bina ini juga, seseorang dapat mengenali dari mana asal-usul mereka, pengaruh atau kesan suatu jajahan dan menjadi lebih menghargai dengan warisan yang menjadi tinggalan di negeranya.

2. Medium pendidikan kepada generasi baru

Kepentingan pemuliharaan ini dilihat dari sudut pendidikan di mana ia adalah salah satu medium dan bukti yang dapat digunakan khususnya kepada para pelajar, pendidik dan pengkaji sejarah dalam usaha untuk menjalankan kajian dan penyelidikan yang berkaitan dengan bangunan warisan. Semangat nasionalisme juga diperoleh dan dipertingkatkan melalui pembentukan minda terhadap generasi muda kerana mereka akan lebih menghargai dan peka kepada perkembangan sejarah negara melalui pengamatan dan penghayatan terhadap peninggalan bangunan warisan.

3. Sebagai medium pembangunan pelancongan

Kepentingan mengekal dan memelihara bangunan lama di dalam bandar pada masa kini boleh dianggap sebagai salah satu industri yang menyumbang kepada ekonomi sebuah negara. Menurut Aylin (2008), selain berfungsi sebagai medium untuk mempromosikan identiti bandar dan negara, bangunan-bangunan warisan ini adalah elemen ketara dalam merangsangkan ekonomi melalui aktiviti pelancongan. Kepelbagaian budaya serta keunikan seni bina tempatan dapat diperkenalkan melalui pelancongan warisan tidak kira sama ada kepada pelancong domestik mahupun antarabangsa, sekali gus dapat menjana ekonomi dalam industri ini.

4. Menyeimbangkan integrasi pembangunan

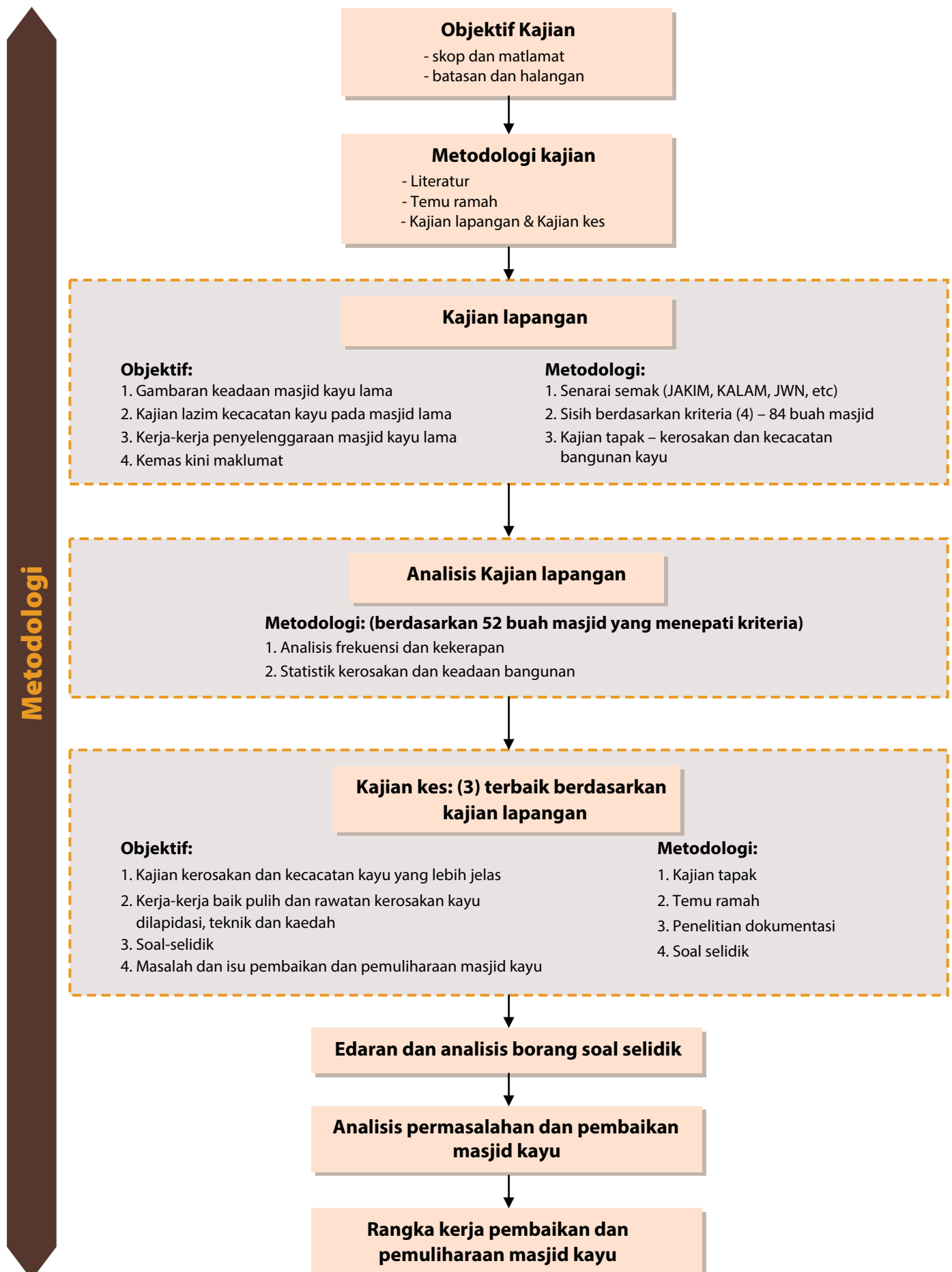
Kepentingan pemuliharaan dari sudut ini dilihat sebagai perancangan pembangunan dan pemuliharaan dalam suatu kawasan supaya kedua-duanya mendapat manfaat bersama. Ia suatu bentuk pengurusan sumber dan objektifnya adalah untuk memastikan penggunaan sumber sedia ada adalah berterusan. Menurut Aylin (2008), secara praktikalnya ia membantu dari segi persekitaran dan ekonomi dengan menggunakan apa yang ada dari mensia-siakan sumber yang tersedia untuk digunakan. Ini dilihat melalui penggunaan semula dan meningkatkan taraf sesebuah bangunan yang dirasakan dapat memanjangkan usia penggunaannya seterusnya memberikan pulangan ekonomi kepada negara.

5. Kepentingan nostalgia

Kaitan antara bangunan-bangunan lama yang bersejarah dengan kisah nostalgia tidak dapat disangkal. Kepentingan nostalgia dapat mengaitkan tentang sesuatu peristiwa penting yang pernah berlaku suatu masa dahulu terhadap individu atau dalam masyarakat. Bangunan warisan dapat membangkitkan perasaan nostalgia terhadap peristiwa yang pernah berlaku dahulu dan antara sebab mengapa seseorang itu memilih untuk melawat bandar atau tempat bersejarah (Aylin, 2008). Proses pembinaan masjid lama misalnya, mempunyai kisahnya tersendiri, bermula dari bagaimana mendapatkan sumber, tukang-tukang, dan aktiviti gotong-royong penduduk setempat yang mana semua ini merupakan nostalgia yang berharga bagi sesetengah individu dan masyarakat.

3.0 Metodologi Penyelidikan

Dua kaedah yang digunakan bagi mendapatkan maklumat yang diperlukan iaitu melalui eksplorasi atau kajian kes dan penyelidikan literatur. Satu kajian lapangan telah dijalankan bagi mendapatkan gambaran sebenar atau senario berhubung pemuliharaan bangunan khususnya pada masjid-masjid kayu lama, dan kajian lapangan berhubung kecacatan bangunan masjid kayu tradisional. Senarai masjid-masjid lama yang didapati dari pelbagai sumber diteliti, ditapis berdasarkan skop yang dikehendaki sebelum kajian lapangan kedua dibuat ke atas bangunan tersebut. Analisis kerosakan kemudiannya dihasilkan dan ini memberi gambaran tentang apa yang boleh dibentuk dan dilakukan bagi mengurangkan dan menghalang kerosakan berulang apabila kerja pembaikan dijalankan kelak. Pembentukan rangka kerja ini secara asasnya boleh dirumuskan seperti dalam gambar rajah 1.



Gambar rajah 1: Metodologi penyelidikan kajian kes.

Jadual 1: Prinsip asas pemuliharaan masjid kayu lama

	Prinsip kerja	Justifikasi
1.	Sebarang gangguan yang dikenakan pada bangunan kayu haruslah seminima yang mungkin. Kekalkan seberapa banyak keadaan yang asal.	a) Piagam Burra artikel 3.1 b) Piagam New Zealand artikel 4ii (1992) c) ICOMOS: principle of the preservation of historic timber structure (1999), artikel 6, 7
2.	Kerja-kerja meroboh adalah dilarang namun dalam keadaan tertentu, kerja-kerja meroboh sebahagian kecil mungkin bersesuaian sebagai sebahagian daripada pemuliharaan.	a) Piagam Burra, artikel 15.3 b) ICOMOS: principle of the preservation of historic timber structure (1999), artikel 2
3.	Sebarang kerja-kerja baru dibolehkan selagi ia tidak mengganggu, merosakkan atau mengaburi ciri signifikan bangunan; dan haruslah boleh dibezakan dan kelihatan harmoni dengan yang lama.	a) Piagam Burra artikel 22.1, 22.2 b) ICOMOS: principle of the preservation of historic timber structure (1999), artikel 10.
4.	Penggantian struktur baru perlulah direkodkan dan dilabel/ tag menggunakan kod yang sistematik sebagai rujukan untuk keperluan yang akan datang.	a) ICOMOS: principle of the preservation of historic timber structure (1999), artikel 11
5.	Penggunaan cara tradisional adalah lebih diutamakan, namun dalam keadaan tertentu, penggunaan teknik moden dibolehkan jika teknik yang lama dapat mendatangkan kesan buruk pada bangunan dan haruslah terbukti berkesan menangani masalah kerosakan.	a) Piagam Burra, artikel 4.1 dan 4.2 b) ICOMOS: principle of the preservation of historic timber structure (1999), artikel 4, 9, 13
6.	Sebarang penggunaan teknik pembaikan moden, haruslah tidak menjejaskan ciri signifikan pada bahagian kayu yang dipulihara.	a) Piagam Burra, artikel 15.1 b) ICOMOS: principle of the preservation of historic timber structure (1999), artikel 10,
7.	Cari, buang atau hapuskan punca kerosakan kayu. Kaji bahagian yang diserang kelembapan kerana ini mungkin disebabkan oleh reka bentuk yang salah.	a) ICOMOS: principle of the preservation of historic timber structure (1999), artikel 2
8.	Menjalankan kajian saintifik dan ujian makmal untuk mengenal pasti kandungan dan sifat bahan serta tahap kerosakan kayu.	a) Piagam Burra, artikel 28.1 dan 28.2 b) ICOMOS: principle of the preservation of historic timber structure (1999), artikel 2
9.	Setiap struktur kayu perlulah diberi dilindungi dengan bahan pengawet terutamanya pada bahagian yang dipotong untuk sambungan. Bahan pengawet perlulah dari jenis yang selamat untuk penghuni dan alam sekitar.	a) ICOMOS: principle of the preservation of historic timber structure (1999), artikel 14
10.	Setiap peringkat kerja pemuliharaan perlu didokumentasikan. Proses dokumentasi perlu mempunyai laporan kerja, gambar foto, lakaran teknik dan lukisan CAD yang penting sebagai rujukan yang akan datang	a) Piagam Burra, artikel 31 dan 32, artikel 27.2
11.	Selepas kerja-kerja pembaikan, bangunan perlulah sentiasa dijaga dan dijalankan kerja-kerja penyelenggaraan yang bersesuaian dan mengekalkan fungsinya seperti yang dikehendaki.	a) Piagam Burra, artikel 16, b) ICOMOS: principle of the preservation of historic timber structure (1999), artikel 3

4.0 Prinsip dan Kerja-kerja pembaikan dan pemuliharaan kayu

Dalam mana-mana kerja bangunan, penggunaan teknik yang betul dapat memastikan suatu kerja itu dilakukan dengan tepat. Pemilihan teknik yang bersesuaian dalam pemuliharaan bangunan, berserta mengaplikasikan prinsip asas pemuliharaan adalah penting bagi menjayakan suatu kerja pemuliharaan. Umumnya, tiada teknik khusus telah didokumenkan bagi pembaikan masjid-masjid lama. Ini adalah kerana, tidak semua kes-kes pemuliharaan itu sama malah pemilihan teknik bergantung pada beberapa perkara seperti kos, jenis pemuliharaan, keadaan dan tahap kerosakan serta sumber yang ada. Umumnya, teknik bagi membaiki masjid-masjid lama khususnya kayu telah menggunakan cara pembaikan bagi bangunan kayu lama.

Kerja-kerja pemuliharaan amat menitik beratkan pengekaln keaslian suatu harta budaya tersebut. Dalam memenuhi kriteria ini, beberapa prinsip asas telah dibangunkan bagi memastikan gangguan atau kerja-

Pemuliharaan merupakan aktiviti atau tindakan untuk memanjangkan hayat sesuatu benda. Ia mengandungi dua aktiviti iaitu pulih dan pelihara; dan merupakan penjagaan terhadap sesuatu daripada musnah atau diubah tanpa perancangan yang teliti...

kerja yang dijalankan dilakukan sebaik mungkin dan ini tidak semestinya tetap kerana ia bergantung pada keadaan-keadaan tertentu. Sebanyak 11 prinsip kerja yang dirumuskan dan ini adalah berpandukan artikel piagam dan badan professional antarabangsa dalam penjagaan warisan. Prinsip asas tersebut adalah seperti dalam jadual 1.

Untuk kaedah atau teknik bagi kerja-kerja restorasi kayu ini boleh dibahagikan kepada beberapa jenis dan lazimnya terdapat 4 teknik umum

yang digunakan dan tidak semestinya keempat-empat teknik digunapakai dalam suatu kerja pembaikan. Teknik tersebut adalah penggantian, reinforcement mekanikal, pengukuhan dengan pengisitepuan (consolidation by impregnation) dan gabungan pengukuhan dengan reinforcement (consolidation and reinforcement) (Martin E, 1999; Brian 2000 & John Ashurt. 1989). Jadual 2 menghuraikan secara ringkas kaedah pemuliharaan kayu dan pemilihan kaedah ini bergantung pada kesesuaian dan batasan penggunaannya.

Pemilihan teknik yang bersesuaian dalam pemuliharaan bangunan, berserta mengaplikasikan prinsip asas pemuliharaan adalah penting bagi menjayakan suatu kerja pemuliharaan

Jadual 2: Kaedah pemuliharaan kayu (diubah suai dari Suhana, 2013)

1. Penggantian Penuh dan Separa

Merupakan teknik dengan hanya membuang bahagian kayu yang rosak dan digantikan dengan kayu yang baru. Penggantian kayu ini dilakukan samada separa atau sepenuhnya, bergantung kepada tahap kerosakan yang dialami. Penggantian separa ini akan memerlukan beberapa kaedah pemasangan dan sokongan yang betul bagi memastikan suatu struktur itu kembali berfungsi seperti yang dikehendaki. Kedua-dua penggantian ini perlulah melihat kepada beberapa aspek yang ditekankan dalam pemuliharaan bangunan seperti kesesuaian kayu baru (jenis, sepsis, kualiti, warna dan arah ira) bagi memastikan penggantian bahan baru ini harmoni dengan keadaan yang asalnya, sebagaimana menepati ciri-ciri minimum yang dinyatakan dalam prinsip pemuliharaan.

2. Sistem Mekanikal Reinforcement

Bahagian kayu yang rosak akan digantikan dengan kayu baru dan dicantum pada bahagian kayu yang masih elok. Umumnya ia dikenali dengan penggunaan sistem penyambungan 'bolt and nut', dowel (penetap), pegs (pacang) yang diperbuat daripada sama ada dari kayu, besi atau 'fibre glass reinforced plastik' untuk menguatkan bahagian struktur kayu tersebut. Secara umumnya, teknik ini lebih kepada mengukuhkan struktur kayu lama terutamanya jika penggunaan kayu lama ini diragui kekuatan pada sudut yang tertentu.

3. Pengukuhan dengan Pengisitepuan

Penggunaan teknik ini adalah dengan menggunakan suntikan 'synthetic resin' bagi mengisi ruang-ruang yang repu untuk meneguhkan struktur yang rosak. Penggunaan 'synthetic resin' ini juga boleh digunakan dengan 'filler' bagi menyatukan kayu ketika terdapatnya ruang-ruang pemisah (gap) yang lazimnya disapu pada kerosakan di permukaan kayu.

4. Pengukuhan dan Reinforcement

Lazimnya kaedah ini dikenali sebagai Sistem WER (Wood Epoxy Reinforcement) Kaedah ini menggunakan gabungan 'synthetic resin' dan keluli reinforcement atau rod plastic bergentian kaca (rod fiber glass plastic) untuk mengembalikan struktur kayu lama dan membolehkannya untuk menanggung beban semula. Penggunaan kaedah ini adalah dengan membuang bahagian yang mengalami kerosakan dan pereputan teruk dan reinforcement dipasang serta disambungkan kepada bahagian kayu lama yang masih elok. Penggunaan sistem ini diaplikasikan apabila kayu berada dalam tahap keusangan yang serius dan menggantikannya dengan kaedah lain akan menjejaskan konsep pemeliharannya.

5. Kaedah Pembuangan Lapisan Cat

Proses pembuangan cat lama bagi mengembalikan warna cat yang asal dapat dilakukan dengan pelbagai cara dan setiap satunya mempunyai kelebihan dan kekurangannya tersendiri. Terdapat tiga cara yang lazimnya digunakan bagi membuang lapisan cat iaitu dengan penggunaan cecair penghilang cat (paint remover), teknik haba dan penggunaan alat penghalus (sander) (Suhana & A Ghafar, 2011).

6. Pengawetan kayu dan Pengawalan Serangan Serangga

Sebarang kerja pembaikan yang telah dijalankan perlulah menggunakan kayu yang telah diawet atau secara semula jadinya tahan terhadap agen kerosakan dan pereputannya. Terdapat banyak kaedah pengawetan dan pengawalan serangga perosak dan pemilihan teknik dan jenis ini perlulah selamat kepada pengguna dan juga kepada persekitarannya. Bahagian kayu yang dipotong perlu dilindungi dengan bahan pelindung atau pengawet, dan sebaiknya diaplikasikan sebelum ianya dipasang atau didirikan. Pengawalan serangga antara keperluan lainnya khususnya bagi mengelakkan serangan serangga yang berulang. Anai-anai sebagai contohnya perlu dihindar dan pelbagai teknik boleh digunakan selagi ia tidak membahayakan kepada pengguna dan persekitaran.

Adalah ditekankan dalam setiap peringkat kerja pemuliharaan, kerja-kerja dokumentasi perlu dijalankan seiring dengan kemajuan kerja.

Adalah ditekankan dalam setiap peringkat kerja pemuliharaan, kerja-kerja dokumentasi perlu dijalankan seiring dengan kemajuan kerja. Proses kerja dokumentasi ini dilakukan melalui beberapa kaedah seperti pengambilan gambar foto, dengan lakaran kerja, dan laporan bertulis. Setiap dokumen-dokumen ini perlu diproses dan disimpan dengan kaedah penyimpanan yang berkesan bagi memudahkan rujukan pada masa akan datang. Laporan berbentuk artikel adalah antara contoh pendekatan yang boleh digunakan bagi memberi rujukan khususnya kepada masyarakat umum. Telah didapati, beberapa masalah yang dikesan dalam bidang pemuliharaan di Malaysia adalah dari sudut dokumentasi dan capaian rujukan yang terhad akibat pengurusan maklumat yang kurang cekap.

5.0 Rangka Kerja Pembaikan Bangunan Kayu

Tiga aspek penting dalam kerja pembaikan iaitu dokumentasi, penyelidikan dan aplikasi teknik adalah perkara yang perlu diberi penekanan dalam mana-mana kerja pembaikan kayu. Dokumentasi penting bagi penyimpanan rekod dan rujukan lanjutan, manakala penyelidikan yang meliputi kerja-kerja diagnosis kerosakan khusus bagi memastikan pemilihan teknik adalah bersesuaian dengan keadaan kerosakan. Aplikasi teknik pula perlulah bersesuaian dan tidak memusnahkan ciri-ciri signifikan yang terdapat pada suatu elemen ber kayu.

Proses kerja pemuliharaan terbahagi kepada 5 peringkat iaitu kerja awalan, penyiasatan bangunan, penyediaan dokumen tender, kerja-kerja pemuliharaan bangunan, dan pengurusan warisan (rujuk gambar rajah 2). Dalam kertas kerja ini, perbincangan menekankan dalam peringkat kerja pemuliharaan.

Peringkat keempat merupakan peringkat kerja-kerja pemuliharaan yang mana ia memerlukan penggunaan pekerja yang mahir, faham dengan konsep pemuliharaan dan mampu memenuhi kehendak atau cara kerja

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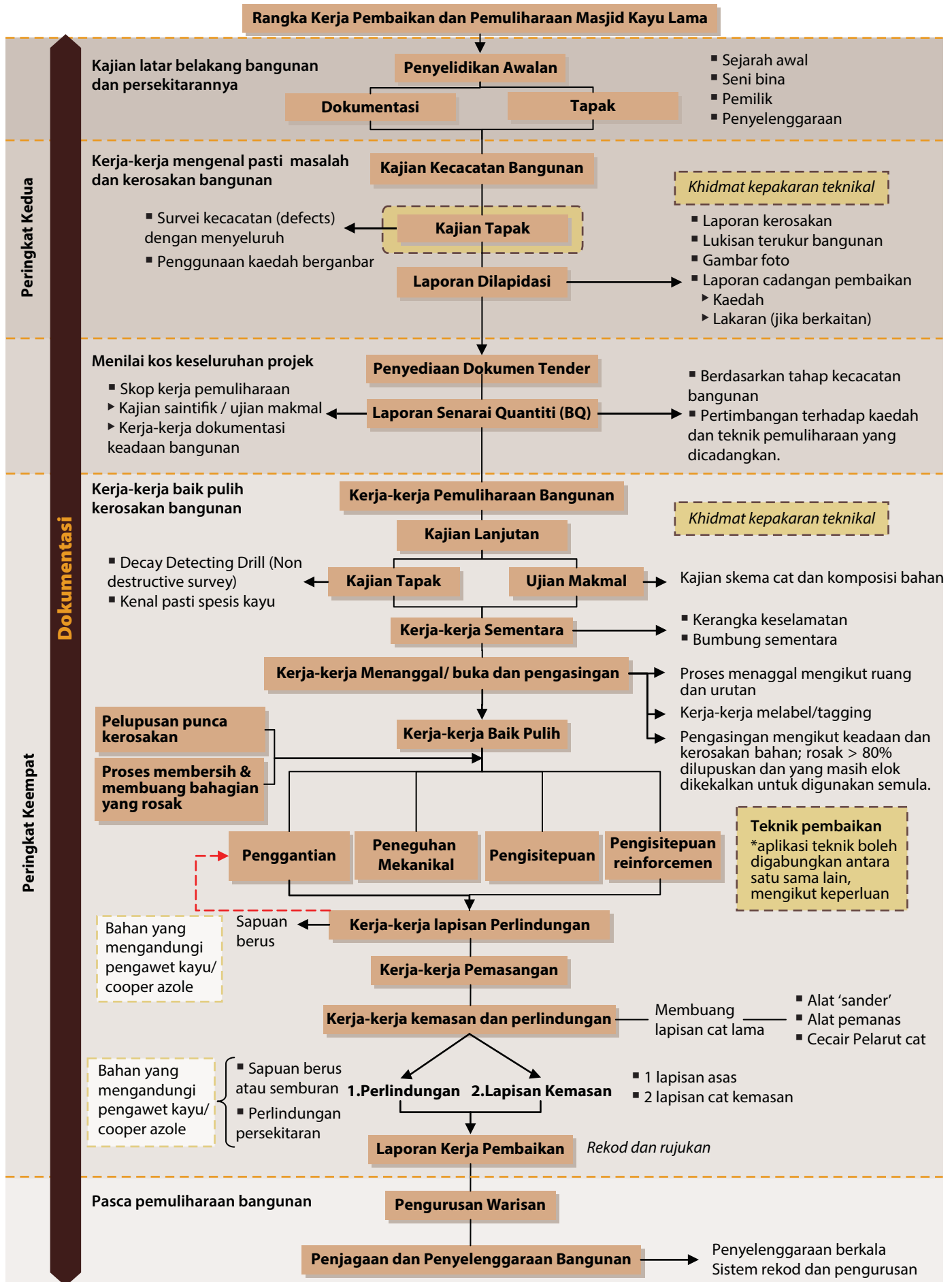
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Gambar rajah 2: Rangka kerja pembaikan dan pemuliharaan masjid kayu tradisional.

pemuliharaan bangunan. Di samping itu, ia memerlukan kepakaran dan kemahiran teknikal dalam menjalankan kerja-kerja pembaikan. Terdahulunya peringkat ini memerlukan kerja-kerja penyiasatan lanjutan bagi membolehkan masalah kecacatan bangunan seperti yang dilaporkan dalam laporan dilapadasi. Ujian-ujian seperti *decay detecting drill* adalah bagi mengenal pasti tahap kerosakan dan pereputan dalam struktur kayu yang rosak. Ini kerana suatu struktur kayu yang diserang anai-anai tidak semestinya rosak pada bahagian yang dapat dilihat dan ujian ini bagi mendapat maklumat sejauh mana pereputan itu berlaku dan sekaligus mengurangkan masalah lanjutan kemudiannya.

Dua jenis ujian yang lazimnya dijalankan iaitu ujian tapak dan makmal dan ujian-ujian ini adalah untuk mendapatkan maklumat umum berkenaan bahan yang pernah digunakan dahulu, dan ini dilakukan apabila ketiadaan sumber maklumat yang sahih untuk dijadikan rujukan. Ujian spesies kayu dan ujian skima warna cat, tidak semestinya perlu dilakukan di makmal kerana khidmat saintifik ini boleh digunakan di tapak melainkan jika memerlukan perincian yang lebih teknikal seperti untuk mendapatkan komposisi bahan.

Kerja-kerja penyiasatan kerosakan membolehkan bahagian kayu yang rosak dikenalpasti untuk langkah pembaikannya. Bagi kayu-kayu yang masih

Dalam mengembalikan fungsi suatu bangunan lama yang bersejarah, pembaikan antara langkah atau pendekatan lazim yang digunakan dan ia seharusnya mengikut amalan dan prinsip pemuliharaan yang telah digariskan.

elok, langkah pencegahan lazimnya digunakan. Sebelum pembaikan, punca kerosakan perlu dihapuskan terlebih dahulu. Bahagian atau segmen kayu yang rosak dibuang dan proses pembuangan perlu dilakukan pada jarak yang selamat untuk kerja-kerja penggantian. Kayu yang reput perlu dipastikan sejauh mana akibat reputnya dan jarak pemotongan hendaklah cukup dan tidak mengandungi kesan serangan tersebut. Pemilihan teknik pembaikan adalah bergantung kepada keadaan kayu, ciri signifikan yang terdapat pada kayu, kos pemuliharaan yang telah dikenalpasti dan adanya kemahiran teknikal yang ditawarkan. Tidak semestinya dalam suatu projek pemuliharaan menggunakan satu teknik sahaja dan suatu struktur kayu itu boleh mengandungi kesemua teknik mengikut keperluan yang dipersetujui.

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Setelah dibaiki, kerja-kerja pemasangan perlulah dilakukan mengikut aturan berdasarkan rekod kod dari kerja-kerja melabel. Berdasarkan prinsip dan konsep pengembalian semula, sebarang kerja pengalihan perlu dikembalikan pada kedudukan asalnya. Adalah penting, sebelum sebarang kerja pemasangan, bahagian-bahagian tersebut dilindungi dengan bahan pengawet kayu. Hal ini dapat mencegah kecacatan kayu yang terhasil akibat serangan serangga dan sarang lembapan pada lokasi-lokasi struktur yang bercantum. Untuk kerja kemas, pemilihan bahan perlulah melihat kepada faktor perlindungan kepada bahan binaan dan lapisan kemas yang dikehendaki. Perlindungan adalah penting dan ini boleh dilakukan terus pada permukaan kayu dan juga pada persekitaran bangunan. Manakala bagi lapisan kemas, penggunaan teknik dan kaedah perlu betul bagi mengelakkan kerosakan estetik. Permukaan kayu mesti dibersihkan dahulu dengan menggunakan kaedah yang sesuai dengan permukaan kayu.

Setiap peringkat kerja perlu didokumentasikan, dan ini dilakukan pada sebelum, semasa dan selepas kerja-kerja pemuliharaan bangunan melalui gambar foto, lakaran dan laporan kemajuan. Semua laporan kerja-kerja pemuliharaan perlu disimpan oleh pemilik bangunan atau agensi yang berkaitan sebagai fungsi rujukan untuk peringkat seterusnya.

6.0 Kesimpulan

Kepentingan pemuliharaan bangunan tidak dinafikan membawa banyak kebaikan kepada masyarakat dan juga negara, dan ini jelas dapat dilihat menerusi sumbangannya kepada bidang pelancongan warisan, pendidikan dan penyelidikan. Dalam mengembalikan fungsi suatu bangunan lama yang bersejarah, pembaikan antara langkah atau pendekatan lazim yang digunakan dan ia seharusnya mengikut amalan dan prinsip pemuliharaan yang telah digariskan. Prinsip-prinsip ini merupakan panduan asas bagi sebarang kerja yang diaplikasikan pada suatu bangunan lama bersesuaian dalam mengekalkan nilai sejarah yang ingin dipulihara. Sebagaimana projek pembangunan lain, pemuliharaan bangunan juga mempunyai peringkat-peringkatnya dan dengan pembentukan rangka kerja ini ia mempermudah pemahaman proses kerja yang terlibat yang menjadi sebahagian daripada proses pendokumentasian kerja. Ia bertindak sebagai panduan asas bagi mana-mana kerja pembaikan bangunan kayu dan memberi maklumat berkenaan teknik yang boleh digunapakai dalam memanjangkan suatu harta warisan berkayu. Peringkat kerja penting seperti kajian dan diagnosis kerosakan perlu ditekankan dalam mana-mana kerja pemuliharaan agar sebarang kerja pembaikan dijalankan sebaiknya berdasarkan keadaan dan kerosakan bangunan yang dialami. ■

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Fighting Stress with **Power Napping**



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January 2014 is coming and it's the time for a New Year's resolution as always. January will be a busy month for most people. Parents and kids from school to college ages are adjusting to new schedules, which generally keep us busier. The days are becoming shorter again, and leisure time is dwindling. It gets easier to become too busy without realising it, and that's when stress management can become more challenging. The time comes when we keep on asking ourselves; what have we done in 2013 to relieve most of the stresses that we faced? What about power napping? How about fighting stress with power napping as a New Year's resolution?

A power nap as a stress reliever

WHILE SMALL CHILDREN TYPICALLY TAKE naps in the afternoon, our culture generally frowns upon mid-day sleep. Even for those who get enough sleep, many people experience a natural increase in drowsiness in the afternoon, about eight hours after waking up, especially after a heavy lunch. Having a short mid-day nap can actually make you more alert and improve cognitive functioning. Mid-day sleep, or a "power nap," means more patience, less stress, better reaction time, increased learning, more efficiency and better health.

Studies have shown that 20 minutes of sleep in the afternoon provides more rest than 20 minutes more of sleep in the morning. Many experts advise to keep the nap between 15 and 30 minutes, as sleeping longer gets you into deeper stages of sleep, from which it's more difficult to wake up. The body seems to be designed for this, as most people's bodies naturally become more tired in the afternoon, about eight hours after we wake up. When we are busy, our thoughts may be racing from identifying, monitoring, thinking and planning all the things we need to get done. Taking a few minutes to quiet our minds may feel like the last thing we have time for.

The secrets of power naps

Longer naps can make it more difficult to fall asleep at night, especially if the sleep deficit is relatively small. However, research has shown that a one-hour nap has many more restorative effects than a 30-minute nap, including a much greater improvement in cognitive functioning. The key to taking a longer nap is to get a sense of how long your sleep cycles are, and try to wake up at the end of a sleep cycle. As there are pros and cons to each length of sleep, you may want to let your schedule decide: if you only have 15 minutes to spare, take them. But if you could work in an hour nap, you may do well to complete a whole sleep cycle, even if it means less sleep at night. If you only have five minutes to spare, just close your eyes. Even a brief rest has the benefit of reducing stress and helping you relax a little, which can give you more energy to complete the tasks of your day. So to combat fatigue and stay on top of things at work and at home, try to make power naps a regular part of your routine. Set your alarm for a short snooze. Daytime naps can also be one way to treat sleep deprivation. What your brain needs is to realise the incredible benefits from 15 to 20 minutes of napping. All you need to do is to reset your system and get a burst of alertness and increase motor performance, and stave off sleepiness for an energy boost.

The length of the nap and the type of sleep can assist with brain-boosting benefits. A 20-minute power nap is good for alertness and motor learning skills, such as responding to daily paper work and reading meeting minutes. Whether it's a 20-minute nap or more, it will certainly boost the memory and enhance creativity. If the napping goes to an hour, decision-making skills

could be boosted. If the napping goes to 90 minutes, as is normally termed as rapid eye movement or REM sleep, the brain is more prepared to solve creative problems.

Nap versus coffee

Always a sensitive issue, coffee is said to be a good recharger. But many never realise that a power nap can boost the memory, cognitive skills and creativity and bring back the energy level without leaning on caffeine. Caffeine can decrease memory performance, as too much coffee can make you feel more wired and prone to make more mistakes and become unfocussed. It affects the quality of sleep in general, both nap and night sleep, and gives you only short energy boosts as opposed to the true powerful and lasting energy you can get from the combination of quality sleep and regular napping. With regular napping, stress may be reduced and it can even decrease the risk of heart disease.

... a brief rest has the benefit of reducing stress and helping you relax a little, which can give you more energy to complete the tasks of your day.



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Anyone who needs to maintain a clear mind can benefit from taking a power nap. Power naps are one of the best-kept secrets of successful people.

Napping tips

Maintaining the napping pattern is vital in reducing stress. The following could be some of the effective tips.

Be consistent. Keep a regular nap schedule, but the best time for a short doze is at midday. Prime napping time falls in the middle of the day, between 1 and 3 p.m. Some may take it before lunch, but most will wait until right after lunch, as this is the time when digestion compounds with the time of the day. Don't delay the nap, as napping after 4 or 6 p.m. might degrade the night sleep or reduce the sleep quality. Make it quick. Set the alarm for 20 or 30 minutes or even less, as any more than this could cause you to slip into a deep sleep that will leave you feeling groggy rather than refreshed. Do not more than 30 to 40 minutes or you might enter deep sleep and create what is called sleep inertia. Train the mind that the rest is within boundaries and get the most benefits in a very short amount of time. After the alarm goes off, spend another minute or two breathing deeply and doing some light stretching. At this point, full awareness should return and you should be ready to jump back into your day feeling better than ever.

Go dark. The lighting should be as low as possible or possibly dark, and the area should be quiet, though some say that relaxing music might be helpful. Blocking out light helps you fall asleep faster. Make sure the mobile phone is set to silent mode, as you do not want any sound notice to disturb your sleep, and more importantly, you need to be sure that no one can reach you during this time so that you can be focused on one thing: your relaxation.

Stay warm and comfortable. In order to reap all the benefits of a power nap, it's important to be comfortable: choose a proper place where you can lie down or at least recline to facilitate relaxation. Use a blanket to put over you

or at least below the knees because the body temperature drops while you snooze. Wearing socks could be a good alternative. Try to quiet the mind, avoiding intrusive thoughts but not fighting the thoughts that do occur to you. The trick is not to focus on whatever comes into the mind, but allow it to come and let it go by taking deep, slow breaths to help you relax. It is up to you to fine-tune your nap environment in order for you to find the perfect restorative sleep.

Time to start power napping

Anyone who needs to maintain a clear mind can benefit from taking a power nap. Power naps are one of the best-kept secrets of successful people. A 30-minute or shorter nap can refresh and leave you with increased energy and improved productivity. Power naps rarely involve dreaming but are more of a meditative state that allows the mind to process information and start fresh. Many studies have concluded that power napping improves heart function, hormonal maintenance and cell repair. Power naps also help to improve memory. Those who nap enjoy productivity boosts, lower stress levels, improved learning ability and better overall moods. A short nap will allow a person to concentrate better and more efficiently process information. It could be a turning point for a better year.

So, let's start power napping! ▣

W.M.A. Wan Hussin is a professor at the School of Civil Engineering, Universiti Sains Malaysia. He conducts several courses on stress management and delivers public lectures and brain storming sessions on management issues for various organisations. He is currently a Licensed Land Surveyor under Act 458 (Revised 1991), Member of the Association of Authorised Land Surveyors (MAALS) Malaysia, Fellow of the Royal Institution of Surveyors Malaysia (FRISM), a Malaysian Speaking Professional (MSP) of the Malaysian Association of Professional Speakers, a Certified Professional Utility Locator (CPUL) and can be reached at wmabwh@gmail.com.

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The “War for Talent”

SINCE MCKINSEY COINED THE TERM IN 1997¹, THEY have argued strongly that effective Talent Management (TM) is a driver of value creation in organisations. This has launched a spate of TM practices in consulting companies, as well as a multi-billion dollar industry for software vendors like Oracle, SAP and IBM. Enterprises have responded by launching major TM initiatives in their organisations, and recent global surveys suggest that managing talent is now a major issue for CEOs in OECD countries.

It is a compelling argument: Manage the recruitment, performance, compensation and development of talented individuals, and you will be rewarded by superior value creation in your organisation. Indeed, McKinsey² and others³

suggest that enterprises should focus on those practices that differentiate highly talented people and establish programs to reward and develop them as “high potential” (HIPO) employees.

However, my argument is that this may not be driving value creation the way we believe it is - particularly in the complex organisations of our modern era. Indeed, in some cases it may well be destroying value and limiting the natural adaptive qualities that we seek for organisations to thrive in changing environments. **And a lot of this is due to the high levels of complexity that we find in our organisations.**

What is the impact of complexity?

As our organisations have evolved through successive waves of technology since the industrial revolution⁴, the levels of

1 Steven Hankin, McKinsey & Company, 1997

2 The War for Talent, McKinsey & Company, April 2001

3 See: Future Trends in Leadership Development, Centre for Creative Leadership, December 2011; The Future of Talent Management, Oracle White Paper, June 2012

4 The Sixth Wave, Moody and Nogrady, Random House, 2010, Sydney

complexity within these organisations have increased. Complexity may be described as the increasing interdependency and interaction between the various parts within a system. This is due, in part, to the explosion of information and communication within and between organisations.

Snowden's groundbreaking work on complexity⁵ suggests that, as complexity increases in organisations, "best practice" becomes less effective because of the uncertainty and unpredictability of complex systems.

As we move into complex situations, Snowden argues that the system (the organisation) develops "emergent" properties - new capabilities to deal with the changing environment. Simply put, it means that complex systems work out unique ways to ADAPT to their changing environment, without direct intervention or control from above (senior leaders). This is a well established property of complex systems⁶.

More importantly, these systems do not respond favourably to the conventional practices of management and leadership. Indeed, direct interventions can actually disturb the interconnectedness and interdependence, and thereby inhibit the system's ability to adapt!

Three common errors in Talent Management

Using complexity theory to understand our modern organisations, we can identify three common errors made by leaders as they use Talent Management to create value:

1. Developing individuals in an attempt to develop the organisation


Working on the individual parts of a system does not improve the functioning of the whole. Because the organisation is a system, the parts of the system (although important) are not as critical as the way they FIT together. What really improves the system as a whole is working on the interactions between the parts. Organisational systems are not improved by tinkering with the parts (individuals), but by working on their interactions. This is generally called organisational development.

2. Empowering individuals in an attempt to enhance the effectiveness of the organisation

Because individuals work within the system and interact with other members of the system, it is not the empowerment of the individual that yields best results for organisational effectiveness. Self management must be team-based. So, we need to focus on empowering the team

The team's output (effectiveness) is enhanced when the whole team is able to develop emergent properties and

Because the organisation is a system, the parts of the system (although important) are not as critical as the way they FIT together.



adapt to the changing environment. Again, this is a focus on the system, rather than on the individual.

3. Viewing a functional department as a team within a complex organisation

A functional department is a grouping of functional specialists - eg an accounting or marketing department. Because business processes work across the business (ie accounting staff have to coordinate with marketing, sales and production staff), the functional department has to be coordinated horizontally. As a consequence, the accounting department is really a group of people working in parallel - they are not a team.

A team is a number of people who work for and with each other, and coordination occurs laterally, amongst peers. In general, they interact with one another with a focus on responding to their environment. Emergence and adaptation (to the changing environment) occurs as a result of the interdependent interactions within a team, not a group.

So how can we create value in our complex organisations?

Talent Management, with its focus on recruiting, developing and rewarding the individual, may actually be hindering the creation of value in organisations by disturbing the emergence and adaptation processes within teams. At best, it is not facilitating improved interactions within the organisation and thereby limiting the emergence of adaptive capabilities. At worst, it is hindering and even disturbing these interactions, and destroying the natural adaptive capabilities within complex organisations.

Accordingly, we can identify three approaches that can create value in complex organisations – approaches that enhance the emergence of adaptive processes:

1. Focus on developing the organisation rather than its individual talent

While the focus of TM is on the recruitment, development and reward of talented individuals in the organisation,

⁵ A Leader's Framework for Decision Making, Snowden and Boone, Harvard Business Review, November 2007

⁶ See Leadership in the age of complexity, Wheatley and Frieze, 2010; Organise for complexity, Betacodex Network Associates, White Paper, June 2012; Simulation and Planning in High Autonomy Systems, Joslyn and Rocha, Tucson, 2000

complex organisations are likely to respond more positively to a focus on the whole system – ie the way the various elements interact and are aligned to the business model.

Problem solving and adaptation in complex systems is about the quality of the communication and interaction between the elements. Clearly, we need to begin by having the appropriate quality of people on board, but value creation is enhanced more by enhancing their interactions than by “picking winners” and developing the individual skills of a few. And this improved interaction improves teamwork and improves the retention of valuable staff.

2. Operate as a “host” rather than seeking to directly control

Leaders should accept that no one can be fully in control in a complex system. They should invite people to participate in

problem solving processes and trust in their natural creative abilities. The leader as host provides conditions and processes for people to work together and interact. And they show support for their people doing this.

Complex systems will almost always display emergent properties – ie they will develop higher-level capabilities than those they were initially designed for. This is the natural adaptation process within complex systems, and the leader’s role should be to keep bureaucracy at bay and to provide air-cover from other leaders who may wish to seize back control.

3. Actively drive emergence and adaptation

In addition to getting out of the way and allowing the organisation to operate, there are specific ways in which leaders can drive emergence and adaptation. These include:

- ▶ Facilitating and encouraging a regular process whereby teams explore and define their identity: A “who we are” and “why are we here” session is an important process for teams to improve the quality of their interactions and to build their adaptive capability
- ▶ Facilitating interactions that spark some creative tension between team members: The tension might come about as a result of a resource constraint, a tight time deadline, or a stretching target. These external pressures and conflicts of interest promote the exploration of new solutions and approaches – the very stuff that spawns innovation and adaptation.

Leading our complex organisations

I have argued that, in complex systems, the attempt to enhance organisational value by focusing on the development of individuals may be too narrowly focused. And let’s remember, most organisations that include people in a knowledge-based environment, are complex.

While complicated systems such as a wrist watch can be controlled and their behaviour predicted, complex systems are somewhat unpredictable, and have higher levels of error and uncertainty. Rather than simply accepting this as some form of failure, we should recognise that these very properties also allow for emergence and adaptation – the very characteristics we seek in uncertain and challenging environments.

So while we continue to heed the development needs of our talented high-performers, let’s not forget that we also need to develop the system as a whole and to facilitate the processes of emergence and adaptation. ■

Norman Chorn is a strategist and organisation design consultant. He works with executives and organisations to develop future strategy and organisational capability. Norman, together with six colleagues, has recently formed an innovative new consulting group, called futurebuilders. Our aim is to design and build better future for you and your organisation. And we do so in a very different way - by taking you on a journey that enables you to develop your own insights and solve your own problems. He can be contacted at norman.chorn@centstrat.com.

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Book Review

Malaysian Town and Country Planning

Law and Procedure

Ainul Jaria binti Maidin, 2012, 845 pages,
The Malaysian Current Law Journal Sdn. Bhd., Ampang, Selangor
ISBN 978-967-0379-00-5

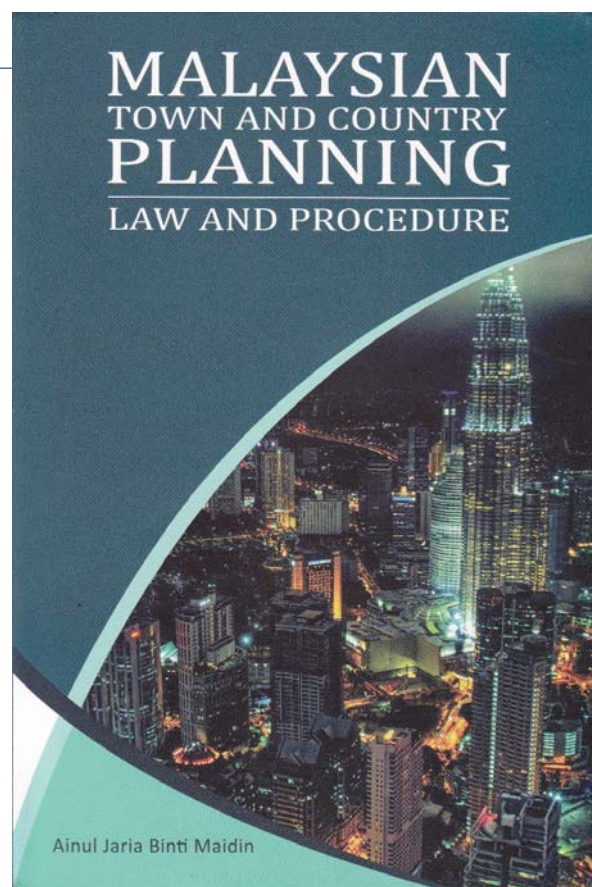


Reviewed by Ting Kien Hwa
Universiti Teknologi MARA, Malaysia

THERE ARE SEVERAL TEXTBOOKS ON MALAYSIAN town and country planning. This book is the most comprehensive to-date. This can be indirectly inferred from the thickness of this book which is almost two inches thick.

There are fifteen chapters in this book:

- Chapter 1** Historical background system
- Chapter 2** Policy and legal framework regulating town and country planning
- Chapter 3** Organisation of planning administrative authorities
- Chapter 4** Statutory land use planning system in Malaysia: Administrative and legislative framework
- Chapter 5** Development control
- Chapter 6** Application for planning permission
- Chapter 7** Processing of planning applications
- Chapter 8** Environmental impact assessment
- Chapter 9** Building control system
- Chapter 10** Enforcement of development control
- Chapter 11** Dispute resolution
- Chapter 12** Tree preservation order
- Chapter 13** Remedies for adverse planning decisions
- Chapter 14** Planning and environmental protection
- Chapter 15** Islamic principles on sustainable land use planning and development



I am happy finally to find a book on local Malaysian town and country planning law which provides explanations on the various aspects of development control in a local context.

At the end of the fifteen chapters is a section for Appendices taking up 130 pages that covers the procedures of one-stop centre, samples of UBBL statutory forms, checklist for planning permission, building plan approval procedures, selected sections of Local Government Act 1976, Street Drainage and Building Act 1974, Town Boards Enactment CAP 137 etc.

I am happy finally to find a book on local Malaysian town and country planning law which provides explanations on the various aspects of development control in a local context. Unlike previously we have to rely on planning law books from the UK.

I find the inclusion of Environmental Impact Assessment in Chapter 8 and Building Control System in Chapter 9 add to the comprehensiveness of this book. It helps the reader to be able to refer to these useful related topics within a book instead of having to refer to another source.

I also find the inclusion of the latest local planning law cases within the various chapters very useful and added immensely to the academic aspect of this book.

However I find the arrangements of certain topics and chapters in the book less satisfactory. Chapter 8 on environmental impact assessment (EIA) should come before Chapter 5 on Development Control. This is because projects that fall within the prescribed activities of the Environmental Quality Act 1974 will be required to carry out an EIA before applying for planning permissions.

It is odd to find Sources of Malaysian Law comes under Section 2.6 Land Development and Property Construction Legislation. Obviously, it will be better to have a separate chapter for Sources of Malaysian Law.

I also find less appropriate to have discussions on the "reimbursements for carrying out demolition works and compensation for revocation of planning permission or approval of building plan and compensation for modification to planning permission or approval of building plan and its appeal" under Section 7.8 Duration of Planning Permission. It will be a better arrangement to have these topics given a separate heading of its own.

The discussion on the Federal Territory (Planning) Act 1982 is improperly put under Section 2.6 Land Development and Property Construction Legislation. I find the explanations and discussions on the Federal Territory (Planning) Act 1982 inadequate which takes up only seven pages (from page 82 to page 88). The planning law, regulations, policies, and

However, due to its comprehensiveness, this book will certainly appeal to town planning undergraduates and postgraduates, practicing planners...

planning principles propounded under Federal Territory (Planning) Act 1982 deserve to be expounded in a chapter of its own. The town planning law and procedures of the national capital of the nation is no less important or insignificant compared to the Town and Country Planning Act 1972.

The list of references are too few, taking up only two pages and some of the references are outdated for example the planning law books by Heap (1991) and Telling and Duxbury (1993).

However, due to its comprehensiveness, this book will certainly appeal to town planning undergraduates and postgraduates, practicing planners, lawyers, surveyors, valuers, property consultants, architects and property developers. Overall I find the book easy to read and the comprehensive index helps me to find the relevant topics on town and country planning law easily. ■



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23rd National Real Estate Convention

THE 23RD NATIONAL REAL ESTATE CONVENTION (NREC) was successfully held on 24 October 2013 at the Hilton Hotel in Petaling Jaya. It was officiated by Sr Nordin Daharom who represented the President of the Board of Valuers, Appraisers and Estate Agents Malaysia. This convention was jointly organised by the Royal Institution of Surveyors Malaysia (RISM) and the Association of Valuers, Property Manager, Estate Agents and Property Consultants in the Private Sector Malaysia (PEPS).





This year's theme was "Real Estate Realities – 2014 and Beyond", which gave an insight into some of the problems facing the real estate industry.

The prominent speakers consisted of Mr. Sulaiman Akhmad Mohd Saheh who represented YB Senator Dato' Sr Abdul Rahim Rahman of Rahim & Co Chartered Surveyors, YBhg. Dato' Mutalib Alias from PR1MA, Mr. Andrew Wong from the BAR Council, Dr. Yeah Kim Leng from RAM Holdings Bhd, Sr Ho Chin Soon from Ho Chin Soon Research, Mr. Siva Shanker, President of Malaysian Institute of Estate Agents, Professor Sr Dr. Ting Kien Hwa, Head, Centre of Real Estate Research, UiTM and Sr Christopher Boyd, Executive Chairman of CB Richard Ellis (Malaysia) Sdn Bhd. Topics covered almost all the important issues related to the real estate industry, especially in forecasting the outlook of the real estate market for 2014 and onwards. ■



RISM Activities



2013 RISM Technical Trip To Portugal And Spain



Dato' Sr Lau Wai Seang
DSPN, DJN, BCN, FRISM, MBA (Real Estate)
Hon. Secretary General

THE PRESIDENT, SR P. TANGGA PERAGASAM, FRISM, LED THE 2013 RISM TECHNICAL TRIP TO Portugal and Spain. It was participated by a total of 32 RISM members and another 15 family members. Sharing of experiences and exchanges of opinions occurred in several forums and visits.

Lisbon, Portugal



At Lisbon, the RISM members had a dialogue with the Portuguese RICS and then proceeded for a technical visit to the famous *Parque das Nacoes* (Park of the Nation).



Dialogue with RICS

31 October 2013, Thursday, Lutecia Hotel, Lisbon, Portugal

Ms. Eulalia provided some basis statistics on the surveying profession in Portugal. In RICS Portugal 75% of their 40,000 members are valuers. Active members are around 27,000. There are hardly any quantity surveyors in RICS and the land surveyors are not registered with RICS. Valuation and other professional fees are low.

Ms. Marta started the morning presentation by giving an overview of the Portuguese commercial property market. This market is facing a challenging time and is not expected to improve in the very near future.

The property market is not well-developed. However, there is recently more interest due to defaults in property loan transactions. The most developed of the property market relates to the office and shopping/retail property sub-sectors.

The Portuguese property market continues to suffer from the 2009 - 2010 economic down-turn. There are generally less selling activities now but still there have been good foreign participations, to the tune of 1.5 mil sm space. Hence there are many distressed properties.

The office sub-sector offers 4.5 mil sm of space and the vacancy is around 570,000 sm at the third quarter of 2013. The most sought after area is *Parque das Nacoes*; however the vacancy here stands at 14.5%. There are good tenants, amongst which are foreign investors. The shopping centres mostly are well-designed. Incoming supply is facing a wait-and-see situation.

Depending on locations, the average rent ranged from 8.5 Euro to 16.00 Euro psm per month at the middle of 2013.

On the shopping/retail side, there is also an absence of good lessee law in Portugal. Lease law protects tenants hence high street market is difficult. Lisbon Street is the location of high end commercial market, offering 120,000 sm of space.

Presenters:

Ms. Eulalia Pensado
RICS Regional Manager
Lisboa, Portugal

Ms. Marta Costa
Director of Analysis &
Research
Cushman & Wakefield
Lisboa, Portugal

Mr. Jorge Bota (MRICS)
Managing Director
b.PRIME
Lisboa, Portugal

Mr. Jose Covas (MRICS)
RICS Head of Valuation
(Urbanization)
Lisboa, Portugal

At mid-2013, prime shopping centres are rented from 70.00 Euro to 87.50 Euro psm per month, high street shops averaged 35.00 Euro psm per month and retail parks fell to 8.5 Euro psm per month.

The Logistic Market in Portugal is better developed than the other European markets though it is not too modernised.

Cushman & Wakefield, Portugal has a quarterly publication entitled Marketbeat.

Mr. George, a Boutique Valuer, continued by telling the delegation that the real estate investment in Portugal is small compared to other European markets. It focuses on shopping centres. Good players include investors from the Netherlands.

The past few years risks had been higher, an aftermath of the Lehman Brothers Holdings Inc. created global financial crisis in 2008 which affected all European markets. There was no sub-prime crisis in Portugal but the economy suffered due to interrelated impacts.

Currently prices of property are about 20% - 25% lower than 4 years back. The IMF and the European Commission are the main financiers.

The present 17% unemployment rate affects the demand in the residential market. Rent is low but is expected to increase as some German investment fund is coming in. There are Chinese coming into the property market too. Other investors are from Angola and Brazil.

The prime shopping outlet in Portugal is Colombo City, offering 144,000 sm of commercial space. Averagely the rent is 75.00 Euro psm per month.

For the first time since 2010, the prime yield rate from the office and shopping sectors had contracted to 8% and 7% respectively.

Mr. Jose concluded the morning's presentation by telling the delegation that RICS Portugal is involved mostly in Hedge Fund valuation. Presently most are small investors due to the current recession. Consultancy services for strategic alliance are also referred to RICS.

The PDM [*Planos Directores Municipais* (Municipal Master Plans)] Law defines the land-use in urban area. This is a 10-year plan. It is now under review. This plan involves land-use planning on three levels, viz Country, District and Local, whereby the Local plan is quarterly reviewed. Generally it takes one year to obtain a planning approval. This is an easy process but is highly bureaucratic resulting in retardation of investments. Applications largely involved refurbishment projects which are easier to do.

Ownerships are on perpetual lease and some sewage cost, yearly tax and transaction tax are the main property costs.

Presenter:

Mr. Carlos Barbosa
Project Director
Parque Expo
Lisboa, Portugal



*Technical Visit to Parque das Nacoes
31 October 2013, Thursday, Lisbon, Portugal*

This Technical Visit started with a briefing by **Mr. Carlos** from the developer and property manager of *Parque das Nacoes*.

Parque das Nacoes is a 5 km-wide, 50 hectares linear new township on the east-end of Lisbon, fronting the Tagus River.

The developer of *Parque das Nacoes*, Parque Expo, is a Portuguese government agency established in 1992. Developments were largely completed in 1998, in conjunction with the 1998 Lisbon World Exposition.

Before the redevelopment of this *Parque das Nacoes* site, most developments were small residential units supporting the industrial activities here, with some commercial presence. The redevelopment of this area involved the resettlement of the residents to the north and south of the project. These residential owners are allowed to live in these new apartments but upon death their property reverts to the developer. However, the industrial and commercial properties were purchased by the developer. All the original developments were torn down, the original brown field was cleaned and now stands a planned township consisting mainly of commercial developments

Presently, there is 5 mil ms of office space, of which 50% is occupied by hotels. There is also a train/bus/taxi terminal called the Orient Station. The commercial:residential ratio is 7:3 with 70%

of the residential development located at the north and south of the development. Many international organisations have set-up offices here.

The residential apartments sold are managed by the owners. Commercial properties were sold as vacant sites and buildings and structures are constructed by the purchasers.

This whole development is green and boasts of lush parks, fountains and long and protected walkways. It also has large pavilions, convention and exhibition spaces, themed after the oceans. This development possesses a marina and cable car services along its eastern river front. Two main parallel roads running in north south alignment traversed this township. The Vasco da Gama Bridge on its northern end straddles across the Tagus River.

Mr. Carlos then showed the audience a scaled model of *Parque das Nacoes*. Thereafter the delegation was taken for a tour of this beautiful *Parque das Nacoes*.

Madrid, Spain



The RISM members made a Courtesy Call to the Ambassador of Malaysia to Spain when they were in Madrid, Spain.

*Courtesy Call to the Ambassador of Malaysia
5 November 2013, Tuesday, Malaysian Embassy, Madrid, Spain*



Presenter:

**HE Dato' Ilankovan
Kolandavelu**
Ambassador of Malaysia
Spain

The RISM delegation was hosted by the Ambassador of Malaysia to Spain, **HE Dato' Ilankovan Kolandavelu**, who had been posted from Katmandu to Spain some two years back. He is supported by 4 Malaysian staff only.

The delegation was told that UN had supported Spain for 20 over years. Spain has a 50 million population and has the 4th largest economy in Europe. Currently the economic situation of Spain is not good. In term of trade relationship with Malaysia, Spain is the 9th biggest investor. Currently Spain has a steel industry in Iskandar Malaysia. This RM2.0 bil industrial project obtained fast-track approval from the Malaysian government.

EU has been in recession since 2008, Spain included. So Spain had been encouraged to do business in Malaysia. Spain has vast experience in developing infrastructures, evident from its airports, 15,000 km of rail, roads and highways. It was recently awarded the tender of rail in Mecca-Medina. There are also many environmental-friendly companies in Spain, in the business of bio-diesel and solar energy. Malaysia recognises these and wants to exploit this expertise of Spain. However, Spaniards are not good marketers, so the Malaysian Embassy networks with them on small group basis.

Nordics and North Europeans were buying the Spanish properties when time was good. Presently only 45% of the house purchasers are in employment. The housing sector therefore suffered. About a million completed houses are under NPL. Another half million of houses under various stages of development are also under NPL, which prompted the Spanish government to decide to demolish them. The Spanish government also embarks on a second home policy. Chinese and Russians are coming in droves to capitalise on this home ownership policy.

The labour law favours labourers. So wages are high and it is difficult to sack workers. The government is now fine-tuning this law to be investment-friendly. Japanese motor investors are seen coming back.

The unemployment stands at 26% but there is strong family support, hence softening the hardships arising from unemployment. Black economy is about 20%. Personal tax is high.

Education in Spain is almost free to all. However, the student must be able to speak Spanish.

Barcelona, Spain

The last leg of the Technical Trip brought the delegation to two technical visits, namely to the *Universitat Politècnica de Catalunya* (UPC BarcelonaTech) and the public transport operator of Barcelona and its surrounding region, the *Transport Metropolitans de Barcelona* (TMB).



*Technical Visit to Universitat Politècnica de Catalunya
(Catalunya Polytechnic University)
7 November 2013, Thursday, UPC BarcelonaTech, Barcelona, Spain*

The briefing was given by 3 presenters from *Universitat Politècnica de Catalunya* (UPC BarcelonaTech). The Hon. Consul General of Malaysia, Datuk Manuel A. Condeminas, accompanied the RISM delegation to this visit.

UPC BarcelonaTech has an impressive achievement evident from the statistics presented.

Prof. Pedro Diez started by telling the delegation that UPC BarcelonaTech is a technical university offering courses in engineering, architecture and applied sciences. This University does not offer courses on social sciences.

Under Education:

In a 2012 - 2013 education survey, UPC BarcelonaTech ranked within the top 200 universities in the world in Engineering. It was the top Spanish university in 2012 for Engineering especially in the research field.

Presently this university offers 68 undergraduate degree courses, 65 master programmes of which 26 are fully Engineering courses. It has 33,889 undergraduates, master and PhD students and another 2,828 students under internship.

Under Research, Transfers and Innovation:

UPC BarcelonaTech has 1,886 researchers and lecturers. It also has 2,378 research papers to its credit, making it the largest university in Spain in term of the number of research papers produced.

Presenters:

Prof. Pedro Diez
Vice-Rector for
International Policy
UPC BarcelonaTech

Prof. Laia Haurie
EPSEB
Director of International
Relationship
UPC BarcelonaTech

Prof. Rogelio Lopez
EPSEB
Head of Study
Geomatics & Surveying
Engineering Programme
UPC BarcelonaTech

Accompanied by:

**Datuk Manuel A.
Condeminas**
Hon. Consul General of
Malaysia

Transfers of researches from this university to society (commercial, research centres and laboratory uses) totalled 129 entities. This university also has been given European grants, i.e. 6 types of starting grant awards and 8 types of advanced grant awards.

Under Internationalisation:

UPC BarcelonaTech has signed 375 MOUs with international universities. Under these MOUs, 77% of the students are outside EU. It also has a Cluster University Programme whereby it networks with 11 universities. Currently, it has undertaken strategic projects with the University of Tongji, China. The Cluster University Programme allows other clustered network university to have campuses in UPC BarcelonaTech. Other forms of internationalisation are in energy system initiatives with companies.

Prof. Laia, (*Escola Politecnica Superior d'Edificacio de Baecelona - EPSEB*) expanded by informing the delegates that UPC BarcelonaTech also offers degree courses in Civil Engineering, Maritime Engineering, Mechanical Engineering, Heritage Architecture and Geomatics and Surveying Engineering. The Building Engineering degree is also recognised by the UK Association of Building Engineers (ABE). The university also has a Master Programme in Building Construction.

From the Internationalisation aspect, Europe, Latin-American and Taiwan (Republic of China) are sending students to UPC BarcelonaTech.

However, graduates have difficulties in securing jobs overseas. The current economic down-turn in Spain is making it difficult for graduates to secure jobs internally too.

(RISM informed her that graduates from UPC BarcelonaTech may apply to RISM for Associate Membership to expose themselves to job opportunities in Malaysia).

Prof. Rogelio told the delegation that the Geomatics and Surveying Engineering Programme headed by him started in 2010 – 2011. It is a 4-year course, requiring 240 credits where 6 credits may be obtained from internship. It has established a good reputation and graduates easily secure work in cartographic institutions and the government sector.

Presenter:

Mr. Michael Pellot Garcia
Director de Relacions
Internacionals,
Transport Metropolitans
de Barcelona

Mr. Michael Pellot gave a very insightful briefing to the delegation on the operations of the Barcelona transport operation.

Barcelona is very densely populated so public transport is important. The City of Barcelona is 101.4 sq. km.



*Technical Visit to Transport Metropolitans de Barcelona (TMB)
7 November 2013, Thursday, TMB Office, Barcelona, Spain*

TMB is the main transport operator of Barcelona. Its services transfer 2 million passengers per day over the City of Barcelona as well as 11 counties and townships located in the Metropolitan Area of Barcelona and Metropolitan Region of Barcelona. The inhabitants of these areas totalled 9.1 million people and the totalled coverage is 3,974.4 sq. km.

TMB's transports include leisure transport (tourist buses), trams, the cable cars of Montjuic and the funicular rail of Montjuic.

TMB has under its wing companies for bus, metro bus and taxi. The owner of TMB is AMB (*Area Metropolitana de Barcelona*). AMB in turned is owned by a consortium where 25% of which is owned by the City Hall of Barcelona.

The fare system is integrated with other operators. On an average day, the mobility comprise of 16% occupational passengers, 41% personal usage passengers and 43% are passengers going back home. This is a shrinking market as only 18% of mobility involves public transports.

Some basic statistics of TMB as at December 2012:

Trains and funicular rail

- 8 lines, 102.6 km length, 100% air-con coaches, 141 stations, 11.5 years average age of trains out of 35 years of maximum age. These trains are refurbished when there are 20 years old. Each passenger travels an average of 5.10 km per trip.

Buses

- Buses run either on natural-gas, bio-diesel, diesel or are hybrid buses. Currently there are a total of 1,072 fleets, of which 1,065 are air-con buses. The average age is 7.3 years out of 12 years maximum. There are 102 lines totalling 890.03 km and 2,591 stops. Each passenger travels an average of 2.90 km per trip.

Leisure transports

- These include tourist buses, cable cars and old trams. The tourist buses are open-air double-decker buses running 3 routes with 6 interchanges in the City of Barcelona. It started operation in 1987. The cable cars of Montjuic totalled 58 units of 8-passenger per car. The distance is a span of 749 m and its services was reopened in 2007. The emblematic Blue Tram service of Tibidabo started operation in 1901. It has 7 historical vehicles, climbing an altitude of 93 m over a distance of 1,276 m.

TMB carried out a study on its current services and found out that there are many redundant routes. Good interconnectivity from city centre to outskirts is also highly sought to increase patronage. Hence a new bus network was developed recently consisting of:

- Local and Feeder networks,
- Conventional Radial network, i.e. existing network to be maintained, and
- To add an Orthogonal and Diagonal Grid network, i.e. the new network.

This hybrid transport model will provide passengers only 4 to 8 minutes of waiting time, short transfer distance of 400 m where only 1 transfer point is required. There will be digital information and ticket stations are at roadsides and bus lanes will be increased. This model was implemented in 2012 and is expected to be completed by 2014 over 4 phases.

Due to its vast experience in transport operation, TMB is able to offer consultancy services. Among the countries that have been provided active consultations are South America, North Africa and Western Europe. ■

LIST OF NEW MEMBERS

September 2013

QUANTITY SURVEYING

FELLOW

Sr Lim Eng Kok
Trett Consulting (M) S/B, KL

Sr Mohamad Faiz b Awang @ Abd Rahman
JUBM S/B, PJ

Sr Nur Aziz b Abu Bakar
JUBM S/B, PJ

Sr Syed Mahadzir b Syed Ahmad
JUBM S/B, PJ

Sr Teoh Tek Chong, Justin
Langdon & Seah S/B, PJ

MEMBER

Sr Alice AK John Gending
Pasukan Projek Sabah

Sr Ch'ng Siew Lee
Aeropad S/B, Sabah

Sr Chine Wai Ting
PM Link Pte. Ltd., Singapore

Sr Lau Lai Siong
Ng Kai Seng & Associates, Subang Jaya

Sr Wong Leh Chong
JUB Sekutu S/B, KL

Sr Zuhaida bt Khalid
Kementerian Kemajuan Luar Bandar & Wilayah, Putrajaya

GRADUATE

Hong Viven
KPK QS (Sem.) S/B, KL

Kung Yen Chung
Takada Construction S/B, Sabah

Mohd Faiz b Arshad
IM Jurukur Bahan, Batu Caves

Noraini Mohd Khalid
Sime Darby Property Bhd, Subang Jaya

Tan Phaik Chin
Exterior Solutions S/B, KL

Wan Norazlan b Wan Din
Perunding Jati, Alor Setar

Wong Mun Yee
KPK QS (Sem.) S/B, KL

Yap Lee Hong
Northcroft Lim Perunding S/B, PJ

PROBATIONER

Annie Woon
Prominent Alliance Services, Kuching

Bong Kishan
Econcos Consultants S/B, KL

Loi Shiow Khim
KPK QS (Sem.) S/B, KL

Loo Jian Tern
Q & C Jurukur Perunding, KL

Wong Toh Ho
Langdon & Seah S/B, PJ

STUDENT

Nurameera Najwa bt Mohd Asri

Nur Taufiqah Haziqah bt Abu Bakar

PROPERTY MANAGEMENT, VALUATION AND ESTATE AGENCY SURVEYING

FELLOW

Sr Che Had b Dhali
IM Global Property Consultants S/B, Kedah

MEMBER

Sr Din b Hassan
Abraj Management S/B, KL

Sr Hamizar b Toha
Worldwide Holdings Bhd, Shah Alam

Sr Izham b Abdul Aziz
Rahim & Co, Ipoh

Sr Izham b Din
Rahim & Co, Kedah

Sr Man Pooi Yin Charlene
Solid Real Estate Consultants S/B, PJ

Sr Mohd Nazri Jaafar
UTM Skudai

Sr b Manap
Faber Development

Sr Shahrol Amin b Shahidan
Intra Harta Consultants S/B, Teluk Intan

Sr Sulaiman Akhmady Mohd Saheh
Rahim & Co, KL

GRADUATE

Au Yong Wah Yip
CBD Properties S/B

PROBATIONER

Low Joo Xin

Michelle Sinsua
Allfit Fitness Club, Kota Kinabalu
Rafidah Begum bt Mohammad Aslam

Tan Huay Vern
VPC Alliance (PG) S/B

ASSOCIATE MEMBERS

Olanrele, Olaopin

STUDENT

Lu Jia Xin

GEOMATIC AND LAND SURVEYING

FELLOW

Sr Hj Johari Wahab
AJ Surveys

Sr John Elvis Koh
JUPEM

MEMBER

Sr Noraidah Keling
JUPEM Pulau Pinang

GRADUATE

Ishak b Razali
Maju Geohydro S/B, KL

STUDENT

Ahmad Tarmizi Mohd Azmi

Annur Izzati Wadiah Zulkifli

Haslinda Zulfadzli

Iffah Su'aidah Ismail

Intan Farah Johanis Che Bakar

Intan Nur Amira Hamid

Khairul Anwar Khalid

Maisarah Mazlan

Maria Mohamed Bokhari

Mohamed Syafiq Fahmi Mat Junoh

Mohd Aizat Mohd Amran

Muhammad Munir Abdul Rahman

Muhammad Nur Md Yusof

Nan Asas bt Long Ibrahim

Nina Atifah Othman

Noor Hidayah Omar

Nor Aishah Mat Yazid

Nur Iawanny Mohd Ridzuan

Nur Khairun Ayuni Jusoh Sukri

Nurul Amirah Kamarudin

Nurul Ayuni Mustaffa

Siti Fatimah Sidek

Siti Norizan bt Wil

Suhaila Mustapha

Tuan Adnan Tuan Yusof

Zulaikha Ruzuan

BUILDING SURVEYING

GRADUATE

Hasnizan Aksah
UiTM Shah Alam



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