THE LACK OF PROFIT-AND-LOSS SHARING FINANCING IN INDONESIA'S ISLAMIC BANKS REVISITED

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ABSTRACT

The lack of profit and loss sharing (PLS) financing is a global phenomenon affecting Islamic banks worldwide. This paper, using the Analytic Network Process (ANP) method, analyses problems faced by Indonesia's Islamic banks. The preliminary step, to comprehend the envisaged problem fully and to develop an appropriate ANP network, is to decompose the problem through questionnaires and in-depth interviews with scholars and practitioners of Islamic banking. The next step is to evaluate and measure the model using pair-wise comparisons and then to synthesise these to find solutions. The root of the problem has two aspects: Islamic bank internalities, which include upper management, human resources and technical aspects; and externalities, which include society, the authorities, and customers. The results show that internal problems have shifted from human resources (their lack of quality and quantity and their aversion to risk) to technical aspects (information technology [IT] and standard operating procedures [SOP]) as well as to upper management (commitment). External problems have increased slightly; they range from inaction by government administrative departments to inadequate commitment and support from the legislatures and, as well, there is too little trust and understanding by the public at large. The policies to be instituted by regulators have broadened to include not only directed, market-driven policies, but also professionalism. Moreover, the operational strategies for market development that should be implemented include service improvement programs as well as socialisation and communication programs that would address the most acute internal and external weaknesses of Islamic banking and finance in Indonesia.

Keywords: *ANP, Islamic banking, Profit-and-loss sharing*
JEL classification: C140, G210, G280

I. INTRODUCTION

After the establishment of Bank Muamalat Indonesia in 1992, Islamic banking began to develop in Indonesia. Gradually increasing their presence in the banking industry, Islamic banks have served members of the public who require financial or banking services that are in line with the teachings of Islam, especially the prohibition of *riba* (usury), of *gharar* (speculation or gambling), of *maysir* (uncertainty and deceit), of unfairness in transactions, and the obligation to invest in and to finance ethical and halal businesses according to shariah law.

The development of Islamic banking became more significant after the

government and Bank Indonesia (the central bank of Indonesia) committed to expand Islamic banking more vigorously with supporting policies; particularly since the amendment of Banking Regulation 10 of 1998. The various policies not only related to office expansion and operation to improve the supply side, but also to increase public understanding and consciousness of Islamic banking to improve the demand side. When conventional banks were permitted to open Islamic branches, the growth of Islamic banking mushroomed.

In 2000, there were two Islamic banks and three Islamic branches of conventional banks and these had only 65 offices and a 0.17 per cent share of total assets. Notwithstanding, at the end of 2009 there were six Islamic banks, 25 Islamic business units and 139 Islamic rural banks with a total of 1223 offices and, in conventional banks, 1929 counters had been set up to guide customers who wanted Islamic banking. The share of total assets has now reached 2.60 per cent or IDR66.1 trillion with a 33 per cent annual growth rate.

The expansion of Islamic banking in Indonesia is also evidenced by the volume of deposits collected and financing extended. In 2000, deposits totalled IDR1.03 trillion and financing extended amounted to IDR1.27 trillion, with a 123.3 per cent FDR (financing to deposit ratio). By the end of 2009, deposits were growing by 42

per cent annually, reaching IDR52.3 trillion. Financing grew by 23 per cent per year and reached IDR46.9 trillion, with a 90 per cent FDR. Such a strong FDR is a significant achievement compared with Islamic banks in other countries and it was far beyond the loan to deposit ratio (LDR) of conventional banks in Indonesia, which achieved 73 percent.

Nevertheless, by the end of 2009, the financing portfolio comprised 14.07 percent *musharakah*[1] (join venture partnership), 22.21 per cent *mudharabah*[2] (trustee partnership), 55.95 per cent *murabahah*[3] and 7.78 per cent other modes of financing. The portfolio was dominated by conventional financing (63.7 per cent), particularly *murabahah*. Meanwhile, the share of profit-and-loss sharing (PLS) financing (mudharabah and musharakah) was only 36.3 per cent, even though PLS financing is not only the essence of Islamic financing, but also a more appropri-

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[1] *Musharakah* is a mode of financing based on join venture partnership in which both the bank and its customer-client contribute to entrepreneurship and capital. Profits are shared in the pre-agreed ratio, while losses are shared in proportion to their capital contributions.

[2] *Mudharabah* is a mode of financing based on trustee partnership for a specific venture in which the bank provides capital finance and the customer-entrepreneur provides managerial and professional skills to operate the business project. Profits are shared in the pre-agreed ratio, while losses are entirely absorbed by the bank.

[3] *Murabahah* is a mode of financing based on trade in which the bank sell the goods ordered by the customer at cost plus a margin, and the payment is deferred to a future date and is made in installments.

ate mode of financing to catalyse the real sector, stabilise the financial system, and curb inflation because it can encourage direct interaction and risk sharing between investors and entrepreneurs.

Most Islamic scholars and Islamic economists are also agreed that Islamic banks share the main principle of PLS. Therefore, PLS financing must be placed at the forefront and dominate non-PLS financing. Nevertheless, a number of other scholars have opined that the tendency to opt for non-PLS financing was normal in the early stages of an Islamic bank's development because of the various initial constraints faced.

Above and beyond this debate, the phenomenon of low rates of PLS financing is an important subject to discuss. Various problems and their solutions must be identified in order to expand the share of PLS financing. Moreover, low PLS financing tends to have been a multi-dimensional problem for a long time and there is no sign of improvement. The domination of non-PLS financing encourages the public to perceive Islamic banking as almost identical to conventional banking. This perception could spur reputation risk for Islamic banks, sparking cynicism by the public that Islamic banking is just a rebranding and that the mind-set of the bankers remains conventional. The problem of low PLS financing becomes even more significant when we see it happening in other countries that have Islamic banks, especially in countries with a dual banking system, such as Egypt, Bangladesh, Pakistan, and Malaysia.

Low rates of PLS financing are clearly not the ideal. The Islamic banking industry, the government, and Bank Indonesia must continue to improve the system and its supporting infrastructure as well as finding new ways to promote PLS financing. The old adage that Rome was not built in a day seems apt in this context. Therefore, to improve PLS financing, we must begin as early as possible because ongoing industry development requires direction to ensure that it is on the right track. Therefore, the study of the lack of PLS financing in Indonesia's Islamic banks is in order.

The objectives of this study are to identify factors that influence low rates of PLS financing in Indonesia's Islamic banking industry and to find other solutions, policies, and strategies to counter those low rates. Moreover, the results of this study can be used as input and feedback by related stakeholders, such as the Islamic banking industry, investors, entrepreneurs, Bank Indonesia, and the government, to enable them to take appropriate policy actions.

This study applies Analytic Network Process (ANP) methods. The ANP is used in this study because it can structure complex multi-criteria problems with dependence and feedback to model the real problems as closely as

possible. ANP can also capture qualitative data from experts' and practitioners' perceptions about the lack of PLS financing in Indonesian Islamic banks.

The ANP is conducted in three steps. First, we used questionnaires and conducted in-depth interviews with scholars, experts, practitioners, customers, and regulators of Islamic banking to comprehend fully the problems and to identify factors causing low proportion of (PLS) financing in Islamic banks. Second, the results from the preliminary stage are used to develop an appropriate ANP network and to design relevant questionnaires to glean the necessary data from Islamic banking experts and practitioners. Third, ANP analysis is applied to rank other solutions and policy strategies in order to formulate optimal policy recommendations.

II. LITERATURE REVIEW

Islamic banking has been around for more than 30 years. However, it remains widely unknown in the Western world of finance and has only recently been introduced in a few Western countries, such as the UK and Germany and also Singapore. An Islamic bank is a financial institution that operates to expedite economic activities in the real sector through business activities (such as investment and trade) that comply with shariah law pursuant to the teachings of Islam that relate to dealings or transactions between a bank and

its customers in funding or financing business or other activities. Funding by Islamic banks can be through investment deposits (mudharabah or PLS investment accounts), investment savings (mudharabah or PLS saving accounts), savings deposits (wadiah saving accounts), and cheque account deposits (wadiah cheque or trading accounts). The funds accumulated are then invested in the business community through the respective bank's own investment (trade financing) or collaborative investment with a third party (investment financing). When the bank earns a profit, this profit is shared with its funding partners (depositors). Therefore, the main mode of finance used by Islamic bank for funding and financing is essentially profit-and-loss sharing or PLS.

2.1 The Importance of Profit-and-Loss Sharing

Profit-and-loss sharing (PLS) is a mode of financing that is essential to Islamic financial institutions, including Islamic banks, to free the system from dealing with *riba* or interest. As mentioned by Sakti (2007), interest (riba) systems, fiat money, fractional reserve banking systems, money as a commodity and the permissibility of speculation in conventional economies, all cause the creation of money (paper money and bank money) and a concentration of money in the monetary sector seeking higher returns with less or no risk. Consequently, money for investment,

which should be channelled to the real sector for productive purposes, mostly flows to the monetary sector and impedes growth and even reduces the size of the real sector. The creation of money without adding value causes inflation and, in the end, the goal of economic growth will be impeded. Meanwhile, in an Islamic economy, the zakah system, PLS system and the prohibition of speculation will accelerate investment activities in the real sector for productive purposes, which will ensure the equitable distribution of wealth and income as well as growth. The improvement in productivity, employment, and opportunities to do business will accelerate economic growth and, thereby, social wellbeing will be achieved.

In a descriptive study, Ascarya and Sakti (2008) try to compare the interest system and the PLS system as a dual monetary policy rate. They conclude that the rate of PLS return, πe^*, can be used as a benchmark by the monetary authorities to determine the policy rate that can maximise social welfare and minimise inefficiency because the interest rate, r^*, which is equivalent to πe^* is the optimum interest rate that can minimise the gap or excess between demand for and supply of investments in a conventional economy, so that it will produce an investment level that can minimise the negative effects of exploitation, predation, and intimidation.

In a deductive study, Ascarya *et al.* (2008a) also try to compare the interest system in conventional economic and financial systems with the PLS system in Islamic economic and financial systems. They conclude that Islamic economic and financial systems based on PLS outperform conventional economic and financial systems that are based on interest because the Islamic economic and financial system, which is based on PLS, are considered fairer for both parties (the owner of capital and the borrower), not only in distributing risk, but also in distributing returns.

In an empirical study, Ryandono (2006) compares interest and profit-and-loss sharing (PLS) systems. He concludes that an interest (riba) system has negative relations with the economy and causes money turnover to become ineffective and inefficient at macro and micro levels, which subsequently will cause instability in the economy. An interest (riba) system can also impede investment and economic growth. Thus, it is difficult to synchronise the monetary sector and the real sector because the two have different interests and objectives in the economy that are difficult to reconcile. In contrast, a PLS system has positive relations with the economy and causes money turnover to become effective and efficient at macro and micro levels, which will lead to economic stability. A PLS system can also stimulate investment and economic growth.

Thus, it will synchronise the monetary and the real sector because the two sides have similar interests and objectives in the economy.

One other empirical study by Ascarya *et al.* (2008b) tries to compare demand for money and monetary stability under a dual monetary system. The results show that demand for money in an Islamic system is more stable in response to the shock of other variables than is the demand for money in a conventional system. Conventional demand for money shows the behaviour for transactions and investment, but Islamic demand for money shows the behaviour for transactions only. Moreover, a PLS system outperforms interest systems in terms of efficiency, fairness, and stability. Therefore, PLS returns can be used as an alternative to interest rates as a monetary policy instrument.

A recent empirical study by Ascarya (2009) tries to investigate the determinants of inflation under the dual monetary system in Indonesia. The results show that the main sources of inflation (78.1 per cent) in a conventional economic and financial system are interest rate (54.7 per cent) and fiat money (23.4 per cent). When these two main pillars of conventional economic and financial systems are replaced by PLS and a gold standard, they only affect inflation by 2.9 per cent and 0.5 per cent, respectively. This means that the implementation of a PLS system to replace an interest system will reduce by 51.8 per cent the sources of inflation in Indonesia.

The most recent empirical study by Ascarya and Yumanita (2009) tries to compare financial stability under conventional and Islamic financial systems. The results show that although its share is still small, Islamic banking had a positive effect on the Indonesian financial system as a whole in terms of financial stability. The study finds that an Islamic financial stability index (FSI) is more stable than FSI of a conventional system. Moreover, the Islamic FSI influences the stability of the conventional FSI for the better, but not the converse.

2.2 Previous Studies

The lack of PLS financing, or the domination of non-PLS financing, especially *murabahah*, in the portfolio of Islamic banking and financing is a global phenomenon, not just in Indonesia. Furthermore, it is not only found in new Islamic banks (still in the transitional stage), but also in established Islamic banks. Nevertheless, according to Chapra (2000), steps for improvement are in sight. For example, information from the International Association of Islamic Banks (IAIB) showed that the proportion of *murabahah*, which reached 90 per cent of total financing, declined to 40.3 per cent in 1996. Meanwhile, *mudharabah* and *musyarakah* financing increased to 7.2 per cent and 12.7 per cent, respectively. Nevertheless, PLS is still
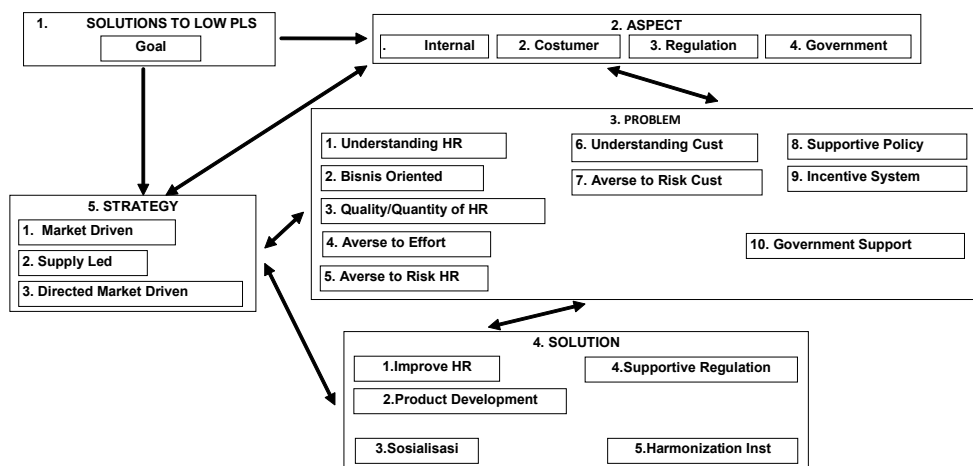
Figure 1. ANP Network of Low PLS Financing using Superdecisions software

marginal with a share of below 20 per cent of total financing. However, ten years after Chapra's statement, there has not been much improvement with PLS financing. The problem of low PLS financing is a multi-dimensional issue. Several experts have tried to identify the root of the problem, but it seems impossible to decompose.

This study revisits a previous study in 2004 (Ascarya and Yumanita, 2005; 2006). The problems affecting PLS banking were grouped into four: Islamic bank internalities, customers, regulations, and the government. The constituents of these clusters were grouped into problems, alternative solutions and development strategies. Internal problems for the Islamic banking industry include lack of understanding of Islamic banking fundamentals; emphasis on business or profit orientation (business-oriented); lack of good quality human resources;

Islamic banks' aversion to effort, and risk aversion.

Customer problems include poor understanding of Islamic banking fundamentals and customers' aversion to risk. Regulation problems include few incentives to stimulate PLS financing and lack of supportive regulations. The problems caused by government stem from the paucity of its commitment and support. Alternative solutions include improving the knowledge and understanding of Islamic banking fundamentals by the industry's human resources (internal); developing innovative, attractive, and simple products (internal); the socialisation of Islamic banking and its products (customer); supportive regulations and incentive systems (regulation), and harmonising responsibilities and relations of Dewan Syariah Nasional or National Shariah Board (DSN), Dewan Pengawas Syariah (DPS) (Shariah Supervisory

Board) and Bank Indonesia in order to create synergy (government).

Development strategies include market-driven strategies, that is, strategies to follow market conditions or demand so that the government or the regulator does not institute direct policies or regulations that intervene and disrupt the market policies and regulations that have the intention of stimulating market mechanisms to ensure a fair market; supply-led strategies that direct the market in line with the desired goals using policies and regulations, and directed market-driven strategies that follow the market and indirectly coax it in the desired direction.

The Analytic Network Process (ANP) network is shown in Figure 1. Holistically, the results show that the order of priority concurs with the experts' opinions on where the key problems lie concerning internal and regulatory aspects. Too few good quality and professional human resources, as well as a predisposition to risk aversion are at the core of the internal problems. With respect to the regulatory aspect, the lack of supportive policies is a major problem. Therefore, the solutions that should be given priority are to improve the knowledge and understanding of Islamic banking by the industry's human resources, and to promote supportive regulations and an incentive system. Moreover, a suitable policy strategy to resolve the current problem effectively would be to apply a directed market-driven strategy.

There have been only a few new studies recently on the lack of profit-and-loss sharing (PLS) financing. IFSB (2005) concludes that this is caused by credit risk, equity investment risk, market risk, liquidity risk, rate of return risk, and operational risk. Greuning and Iqbal's (2007) study finds that inherent risks, low appetite for risk, costs of monitoring monitoring, lack of transparency, depositors' risk aversion, as well as asymmetric information, are the causes of low rates of PLS financing. Moreover, Febianto and Kasri (2007) find that inadequate risk management is the main cause of the relative lack of PLS financing. Meanwhile, Kasri (2007) discusses displaced commercial risk as one of the causes of the lack.

III. METHOD

There is still a lack of PLS financing in Indonesia's Islamic banks after five years of development. Therefore, this study revisits the problem and takes into consideration the innovative developments as well as the changes that have occurred over the past five years. This study will also apply Analytic Network Process or ANP as its method. The elaboration of ANP can be read in a previous study by Ascarya and Yumanita (2006).

3.1 Analytic Network Process
a. Overview
Analytic Network Process (ANP) is a qualitative, non-parametric, and non-

Bayesian approach to decision making that uses a general framework without making assumptions. Saaty (1999), the inventor of Analytic Hierarchy Process (AHP), which has been evolved into ANP, defined ANP as a general theory of relative measurement used to derive a composite priority ratio from individual ratio scales that reflect relative measurement of interconnected elements within control criteria. Azis (2003) described ANP as a mathematical theory that allows one to deal systematically with dependence and feedback and that can capture and combine tangible and intangible factors by using ratio scales. To describe AHP and ANP simply, Azis (2003) makes an illustration as in Figure 2.

In an AHP network, there are levels of goals, criteria, sub-criteria and alternatives, with each level having its own elements. In an ANP network,

what is termed 'level' in AHP, is termed 'cluster' and may consist of criteria and alternatives which now are called 'nodes' (see Figure 2).

With the feedback, alternatives can depend on criteria, like in a hierarchy, but it can also depend on other criteria. Furthermore, those criteria can depend on alternatives and other criteria (see Figure 2). Meanwhile, feedback improves priorities, which are derived from judgment, and makes prediction more accurate. Therefore, the result of ANP is expected to be more stable. From the feedback network in Figure 2, it can be seen that the parent node or element and nodes to be compared can be in different clusters. For example, there is a direct link from parent node cluster C_4 to the other clusters (C_2 and C_3), which is called outer dependence. Meanwhile, the parent node and nodes to be compared lie within the
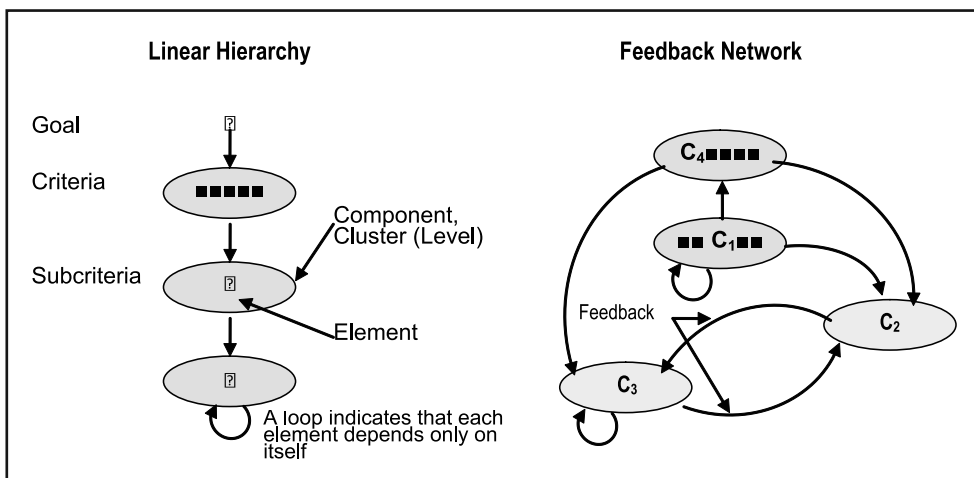
Source: Azis (2003)
Figure 2. AHP and ANP

same cluster, so that this cluster will be connected with itself and create a loop link. This is called inner dependence.

In a network, elements of the cluster can be a person (for example, an individual in Bank Indonesia) and elements in another cluster can be also a person (for example, a parliamentarian). Elements can influence other elements in the same cluster (inner dependence) and can also influence elements in other clusters (outer dependence) with respect to each criterion. The intended output of ANP is to discover the overall influence from all elements. Therefore, all criteria must be configured and set their priorities in a framework of a control hierarchy or network. After that, the comparison and synthesis is made to obtain the order of priority from these criteria. Then, we derive the influence from elements in the feedback system with respect to each criterion. Finally, the results of these influences are weighted according to the importance of the criteria, and then these are summed to get the overall influence from each element.

b. Seven Pillars

According to Saaty and Vargas (2001), the seven pillars of AHP (which are still valid in ANP) are ratio scales derived from reciprocal paired comparisons; paired comparisons, and the psychophysical origin of the fundamental scale used to make the comparisons; conditions for sensitivity of the eigenvector to changes in judgments; homogeneity and clustering to extend the scale from 1 to 9 to 1 to ∞; additive synthesis of priorities, leading to a vector of multilinear forms as applied within the decision structure of a hierarchy (AHP) or the more general feedback network (ANP) to reduce multidimensional measurements to a unidimensional normalised ratio scale that is, thus, an absolute 'dominance' scale, free of a measurement unit; allowing rank preservation (ideal mode) or allowing rank reversal (distributive mode); and group decision making using a mathematically justifiable way for synthesising individual judgments that allows the construction of a cardinal group decision compatible with the individual preferences.

Further elaborated mathematical and technical details can be read in Saaty (2005) and Saaty and Vargas (2001; 2006).

c. Axioms

Every theory is based on axioms. The simpler and the fewer the axioms, the more general and applicable the theory is. AHP has four (ANP has three) relatively simple axioms that carefully restrict the scope of a problem.

1) Reciprocation. This axiom requires that if $P_C (E_A,E_B)$ is a paired comparison of elements A and B with respect to their parent, element C, representing how many times more the element A

possesses a property than does element B, then $P_C (E_B, E_A) = 1/ P_C (E_A, E_B)$. For instance, if A is 4 times larger than B, then B is a quarter as large as A.

2) Homogeneity. This axiom states that the elements being compared should not differ by too much or else there will tend to be larger errors in judgement. The verbal scale of ANP ranges from one to nine, or about one order of magnitude.

3) Hierarchy. (not applicable to ANP). This axiom states that judgements about, or the priorities of, the elements in a hierarchy do not depend on lower level elements. This axiom requires the application of a hierarchical structure.

4) Expectation. This axiom states that individuals who have reasons for their beliefs should make sure that their ideas are adequately represented for the outcome to match these expectations.

Most practitioners of AHP–ANP feel that its axioms are simpler and more realistic than those of other decision theories. In addition, AHP–ANP is applicable to areas besides choice decisions (such as forecasting and resource allocation) and the ratio scale measures produced by AHP–ANP makes them more powerful than other theories that rely on ordinal or interval measures.

d. Basic Principles

There are three related basic principles of AHP–ANP: decomposition, comparative judgements, and hierarchic composition or synthesis of priorities (Saaty, 1996).

Decomposition. The principle of decomposition is applied to structure a complex problem into a hierarchy or network of clusters, sub-clusters, sub-sub-clusters, and so on. In other words, decomposition tries to model the problem into an AHP–ANP framework.

Comparative judgements. The principle of comparative judgements is applied to construct pairwise comparisons of all combinations of elements in a cluster with respect to the parent of the cluster. These pairwise comparisons are used to derive 'local' priorities of the elements in a cluster with respect to their parent.

Hierarchic composition or synthesis. The principle of hierarchic composition or synthesis is applied to multiply the local priorities of the elements in a cluster by the 'global' priority of the parent element, producing global priorities throughout the hierarchy or network and then adding the global priorities for the lowest level elements (usually the alternatives).

3.2 Stages of Research

This study comprises several stages: questionnaires and in-depth interviews

with experts and practitioners to enable comprehensive understanding of the problem; decomposition to identify, analyse, and structure the complexity of the problem into an appropriate ANP network; forming pair-wise questionnaires according to the ANP network; in-depth interviews with experts and practitioners to complete pair-wise questionnaires; synthesis and data processing using the ANP software, Superdecisions, and analysis of results and policy recommendations.

In the first step, questionnaires were sent via e-mail to 20 practitioners of Islamic banking in various Islamic banks and to 15 Islamic finance experts from various institutions, universities, and consulting firms. Follow-up was conducted through in-depth interviews to garner more detailed information. The most knowledgeable respondents (seven practitioners and seven experts) were chosen to be the respondents of the pair-wise questionnaire. Step two is elaborated over the next two sections, and steps five and six are elaborated thereafter.

To simplify the original rather complicated pair-wise questionnaires and to maintain consistency, a new modified pair-wise questionnaire are used (shown in Tabel 1). Meanwhile, the respondents were equipped with a show card describing the scale and the ANP network.

The modified pair-wise questionnaire will significantly reduce the time required for interviews with respondents and will provide consistent results. For example, the time taken to complete the entire pair-wise questionnaire of more than 1200 questions was less than two hours.

Tabel 1. Sample of Simplified Pair-wise Questionnaire

INTERNAL ASPECTS – POLICIES
Comparisons with respect to 'Internal' node in 'Policies' Cluster
With respect to internal 'aspects' compare these five 'policies' in terms of influence or importance:

ASPECT	SCALE								
	1	2	3	4	5	6	7	8	9
Directed Marketing Driven			x						
Fair Treatment	x								
Gradual and Sustainable		x							
Shariah Compliance				x					
Professionalism				x					

Source: Author compilation

IV. PROBLEM IDENTIFICATION

According to several experts' opinions, as well as questionnaires and in-depth interviews with local experts and practitioners, contemporary factors causing low PLS financing can still be viewed from internal and external points of view.[4] Internal aspects include upper management, human and technical resources, and external aspects include society, the authorities and customers. The subsequent clusters are grouped into problems, solutions, policies and strategies with the details as follows.

a. Internal Problems

Internal problems (IP) come from internal organisation. IP could be grouped into three: upper management (including boards of commissioners [BOC] and boards of directors [BOD]); human resources; and technical. Elements of each group are as follows.

1) Upper management (boards of commissioners and boards of directors) elements include (a) lack of understanding of Islamic economics, finance and banking fundamentals; (b) emphasis on business or profit orientation (business-oriented); (c) risk averse and risk transfer behaviour that leads to the inability to accept the possibility of loss; and (d) lack of commitment to improve the portfolio of PLS financing.

2) Human resources elements include (a) lack of knowledgeable and skilled human resources with expertise in Islamic banking and shariah law; (b) emphasis on business targets or profits (target-oriented); (c) risk averse and risk transfer behaviour leading to an inability to accept the possibility of loss; and (d) aversion to diversification because it is more complicated to deal with PLS financing than to deal with other modes of financing applied by Islamic banks.

3) Technical aspects elements include (a) less applicable than other modes of financing for working capital, small businesses or long-term projects; (b) higher risk than other modes of financing while Islamic banks are still unable to manage higher risk; (c) more complicated to structure and deal with PLS financing than to structure and deal with other modes of financing; and (d) Islamic banks have insufficient management tools to manage higher risk or to analyse and measure investment risk adhering to Islamic principles.

b. External Problems

External problems (EP) are from outside an organisation. EP could be

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[4] Chapra (2000), Iqbal and Llewellyn (2002), Dar and Presley (2000), Sarker (1999), Algaoud and Lewis (2001), Mulyawan (2001), Al-Jarhi (2002) and Parinduri (2003).

grouped into three; society, authority, and customers. Elements of each group are as follows.

1) Society elements include (a) multi-ethnic and multi-religious affiliations that have sensitised society to issues of ethnicity and religiosity (unity through diversity should be more important); (b) lack or loss of trust in society has introduced agency problems and asymmetric information that leads to moral hazard and adverse selections; (c) inaccurate perceptions of Islam and *riba* have made society ignorant of Islamic finance and banking; and (d) lack of understanding and knowledge of the fundamentals of Islamic economics, finance, and banking.

2) Authority elements include (a) lack of understanding of Islamic economic, finance, and banking fundamentals; (b) lack of political commitment, will, and courage to support the development of Islamic finance and banking; (c) lack of supporting infrastructure (hard and soft) in the development of Islamic finance and banking; and (d) lack of incentives and effort to promote PLS-based finance.

3) Customer elements include (a) lack of understanding and knowledge of the fundamentals of the Islamic economics, finance and banking; (b) customers (depositors and borrowers) are naturally risk averse because they are not accustomed to the possibility of loss but are accustomed to an interest rate system; (c) low demand for PLS financing because of its limited applicability and unpopularity; and (d) the majority of Islamic banks' customers are floating (not loyal) customers.

c. Internal Solutions

Internal solutions (IS) are alternative solutions to internal problems of PLS financing. IS could also be grouped into three; upper management (including boards of commissioners [BOC] and boards of directors [BOD]), human resources and technical. Elements of each group are as follows.

1) Upper management elements include (a) appropriate 'fit and proper tests' for BOC or BOD candidates; (b) management commitment to apply PLS financing as the main mode of financing; and (c) reward and punishment mechanisms to promote PLS financing.

2) Human resources elements include (a) thorough human resource selection processes; (b) improving the knowledge of Islamic banking and shariah law and the skills of human resources; and (c) incentive systems for Islamic bank officers to extend PLS-based financing.

3) Technical aspects elements include (a) simplification of standards and procedures in the application of

PLS-based financing; (b) development of innovative, attractive, yet simple, PLS-based products; and (c) development of information technology and standard operating procedures in the extension of PLS financing.

d. External Solutions

External solutions (ES) are alternative solutions to external problems of PLS financing. ES could also be grouped into three; society, authority, and customer. Elements of each group are as follows.

1) Society elements include (a) extensive and intensive socialisation of Islamic economic, finance and banking (IEFB) and PLS financing; (b) effective *da'wah* (outreach to the people) for IEFB and PLS financing; and (c) a systematic and comprehensive education system from elementary school to higher education;

2) Government or authority elements include (a) political commitment, will, and courage to support the development of IEFB and PLS financing; (b) government support for hard and soft infrastructure in the development of IEFB; and (c) supportive regulations to foster IEFB and PLS-based financing.

3) Customer elements include (a) education offered to customers and potential customers regarding PLS financing; (b) a systematic

and concerted national promotion program to nurture PLS financing; and (c) an incentive system to encourage customers to choose PLS-based financing.

e. Policies

Policies that can be followed to solve the problems of lack of PLS financing could include (1) directed market-driven policies; and policies that ensure (2) fair treatment; (3) gradual and sustainable growth; (4) shariah compliance and (5) professional standards.

f. Development Strategies

Development strategies are programs that can immediately be implemented for defined periods to solve the problems of lack of PLS financing. These could include (1) new image programs; (2) new mappings of market segmentation; (3) product development programs; (4) service improvement programs; and (5) socialisation and communication programs.

4.1 Conceptual Framework

Based on the identification of problems in section 3.2, the conceptual framework developed in this study is shown in Appendix 1. Therefore, the ANP network of the above conceptual framework can be seen in Figure 4.

Developing ANP Network usually is started with a goal cluster, which has one element (node) of the objective. Subsequently, because the problems (and the corresponding
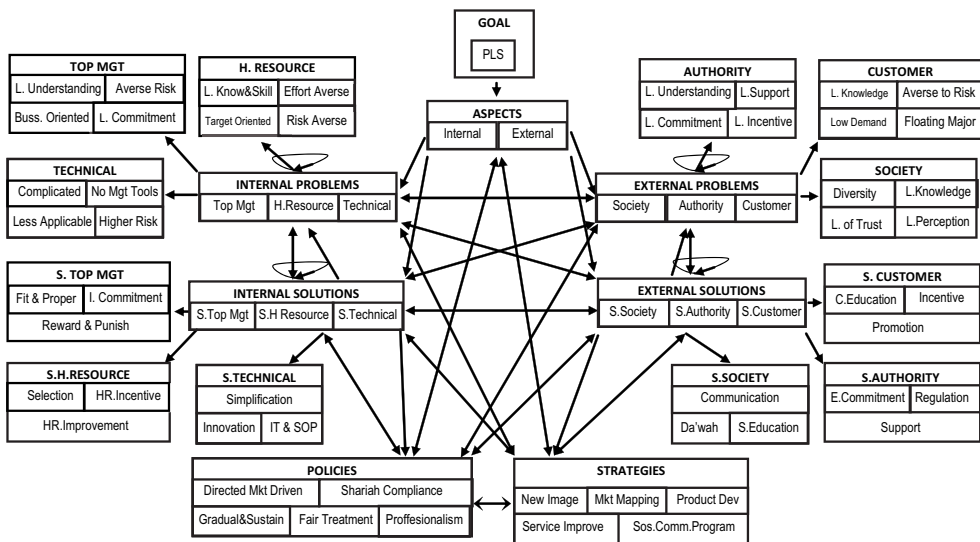
Source: Author compilation from Superdecisions software.
Figure 4. New ANP Network of Low PLS Financing

solutions) can be grouped into internal and external, the next four clusters are internal problems (IP), internal solutions (IS), external problems (EP), and external solutions (ES). IP and IS clusters have three elements each: (1) top management and solutions top management (representing problems and solutions in upper management); (2) human resources and solutions human resources (representing problems and solutions in human resources); and (3) technical and solutions technical (representing problems and solutions in technical aspects).

Meanwhile, EP and ES clusters also have three elements each: (1) society and solutions society (representing problems and solutions in society); (2) authority and solutions authority (representing problems and solutions

in authority); and (3) customer and solutions customer (representing problems and solutions in customer). To elaborate problems and solutions in each element, it is then elaborated in a corresponding cluster with a similar name, which each has the elements of problems and alternative solutions in that area, as mentioned in section 3.2. The last two clusters are policies and strategies, which include as their elements five alternative policy recommendations and five alternative strategic actions.

Having finished with clusters and their elements, the next steps are to draw relations among clusters, which can be a dependence relation (one-way arrow) or a dependence and feedback relation (two-way arrow). For example, IP cluster depends on aspects cluster.

Moreover, policies cluster depends on aspects cluster, but policies cluster also gives feedback to aspects cluster. For a more detailed explanation, see Saaty (2005).

V.   RESULTS AND ANALYSIS

Graphical results are presented in Appendix 2, complete results are presented in Appendix 3, and the summary results can be seen in Table 2. The problems for PLS financing can be divided almost evenly into internal (0.496) and external (0.504) problems, specifically into technical aspects (0.420) and authority (0.435). Internal problems have changed slightly from human resources in 2004 to technical aspects in 2009, and the external problems have expanded from merely a lack of supportive regulations in

2004 to inadequate commitment and support by the authorities in 2009. These developments show that over the past five years, the issues of human resources have had their priority lowered because of the additional five years' worth of experience and development. Many public and private universities have established faculties, departments or schools of Islamic economic, finance and banking (IEFB) studies. Moreover, numerous IEFB training institutions have also been established. Meanwhile, regulations have also become a lower priority because among other reasons, of the promulgation of the Islamic Banking Act, Sovereign Sukuk (Islamic Bonds) Act, an array of Bank Indonesia regulations and several international Islamic banking standards.

Table 2. Summary of Results

Aspects	Previous study		Current study	
	1st	2nd	1st	2nd
Internal problems	Lack of quality and quantity of human resource	Averse to risk	Technical: No management tools; higher risk	Top management: lack of commitment; business oriented
Internal solutions	Human resource improvement		Technical: IT and SOP	Top management: commitment
External problems	Regulation: lack of supportive regulations	Government: lack of support	Authority: lack of commitment; lack of support	Society: lack of trust; lack of perception
External solutions	Supportive regulations	Incentives	Authority: commitment	Society: communication; da'wah
Policies	Directed market driven		Directed market driven	Professionalism
Strategies	--	--	Service improvement	Socialisation and communication program

Source: Author compilation.

Internal technical problems that undermine an increase in the share of PLS financing arise from difficulties in developing and standardising PLS financing schemes for various purposes. Although most necessary fatwas and regulations are already in place, Islamic banks still face constraints to make them operational and applicable because among other reasons, lack of regulatory detail and technical problems that make them unable to develop appropriate and simple management tools (0.546) to extend PLS financing. Islamic banks also still perceive PLS financing as higher risk (0.232) compared with other modes of financing and they have not been successful in mitigating the additional risks.

Meanwhile, the external authorities have been a problem since the first study in 2004 because of ambivalence about the development of IEFB. Consequently, the development of IEFB in Indonesia has remained demand driven, and the relevant authorities have only responded when necessary. This condition has led to a lack of commitment (0.467) and a lack of support (0.277) from the authorities for the development of IEFB, especially in promoting PLS financing. For example, the types of sovereign sukuks issued by the Treasury Department are all ijarah *sukuk* (lease-based sukuk), not *mudharabah* or *musharakah sukuk* (PLS-based *sukuk*). Moreover, the Islamic monetary instru-

ments implemented by Bank Indonesia are also non-PLS based.

Another internal problem affects upper management (boards of commissioners and boards of directors) because of their lack of commitment (0.467) and their propensity for business matters (0.277). Consequently, the PLS financing is not a business priority. Notwithstanding, external problems are also attributable to society. The most acute problem of society in the implementation of PLS financing is a loss of trust (0.546), which is a prerequisite for business partnerships. Another important societal issue is the lack of perception (0.232); PLS financing is believed to be more expensive, less beneficial and riskier than other modes of financing.

The problems have shifted, ergo, the priority solutions have also changed. The top priority solution to resolve the internal technical problems is the development of information technology and standard operating procedures (0.637) for Islamic banks to standardise and simplify the process of PLS financing. As a result, all officials of Islamic banks are encouraged and motivated to offer PLS financing to their clients and customers. The top priority solution for problems concerning external authorities is their political will, political commitment and political courage (0.500) to develop Islamic economic, finance, and banking (IEFB) seriously, especially PLS-based finance. The next priority

solution to internal upper manage-ment problems is their commitment to apply PLS financing as the main mode of financing (0.540), while the solutions to external societal problems are communication (0.400) and *da'wah* (0.400).

The priority 'policies' to be taken by regulators have changed a little, but have expanded. Previously, the top priority policy was directed mar-ket-driven policy, but currently top priority policies are directed market-driven (0.218) and professionalism (0.218). Directed market-driven policy has reappeared in the current study as regulators have opted for it, but it has not been effective in promot-ing or expanding the share of PLS financing. Under this policy, Islamic banks are free to choose their modes of financing. Therefore, the simplest one is usually opted for, that is, trade financing (murabahah). As a result, without any intervention by the au-thorities, it will be difficult to convince Islamic banks to make PLS financing a priority. Moreover, professionalism has become a priority because it is necessary to extend PLS financing en-thusiastically.

Finally, more operational strategy clusters were added to the current study in order to answer some strate-gic operational problems. Among the five grand strategies of market deve-lopment, service improvement pro-grams (0.308) as well as socialisation and communication programs (0.236)

have emerged as the two most impor-tant to be implemented. These two programs mitigate the internal and external weaknesses of Islamic bank-ing and IEFB as a whole in Indonesia. Service has become a major deficiency of most Islamic banks in Indonesia and this needs to be seriously addres-sed immediately. Meanwhile, socialisa-tion and communication to the public, as well as to other potential institu-tional customers, government officials and other stakeholders, are crucial to educate them and attempt to reverse their negative mindsets and percep-tions of Islamic banks.

The empirical facts on the lack of PLS financing in Islamic banks confirm the more fundamental theory where the environment required for PLS to flourish is trust among people as economic actors (Chapra, 1985). Chapra went on to say that when trust among people has gone, many problems arise, such as moral hazard, adverse selection, cheating, fraud and other activities not in the best inter-ests of the banking industry. Islamic banks act as trustees for depositors' funds (using PLS modes of funding), and they should be very careful to in-vest these funds to generate profits; so that when arranging finance they prefer to use conventional modes of financing, rather than PLS modes of financing, especially when the manage-ment is assigned quantitative targets (such as return on assets, return on equity, growth). Furthermore, a PLS

system with risk-sharing behaviour is alien to most contemporary economic actors, they have been accustomed to conventional interest systems with risk shifting and risk avoiding behaviours.

VI. CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

Based on discussions regarding the lack of PLS financing from Indonesia's Islamic banks presented in this study, a number of important conclusions can be drawn:

1) The lack of PLS financing from Islamic banks has been a persistent global phenomenon since the first establishment of Islamic banking in the 1970s. Although this problem persists in Indonesia's Islamic banks, the data show that the use of PLS financing in Indonesia is among the highest compared with that of Islamic banks in other countries. However, this problem should be addressed appropriately because PLS financing provides greater benefits to the economy and society as a whole in terms of reducing inflation, stabilising the economy, catalysing real sector growth, reducing unemployment, promoting justice and equality, as well as improving the general welfare of society.

2) Countries with a dual financial system (where a conventional fi-nancial system coexists with an Islamic financial system), such as Pakistan, Malaysia, and Indonesia, face a more severe lack of PLS financing than do countries with just an Islamic financial system, such as Sudan. Such countries have better and more compre-hensive soft and hard infrastruc-ture to extend PLS modes of fi-nancing.

3) Compared with conventional banks, Islamic banks in Indone-sia are still new and have mini-mal experience. Therefore, the lack of PLS financing should be viewed in proportion by all stake-holders because this is only one of numbers of interconnected problems faced by Islamic banks. However, this problem should be given serious attention, espe-cially by the government and the Islamic banking authority, because it could adversely affect the repu-tation of the 'shariah' label that is associated with Islamic financial institutions.

4) Compared with the previous stu-dy, the difficulties with PLS finan-cing from Indonesia's Islamic banks have shifted slightly and increased. Internal problems have moved from those related to hu-man resources (lack of quality and quantity; risk aversion) to technical problems (to do with IT and SOP) and problems with up-per management (commitment).

External problems have expanded from one set of government-related problems (lack of supportive regulations; incentives) to a different set of government-related problems (lack of commitment; lack of support) and to problems related to society (lack of trust; lack of perception).

5) In line with the shift in issues and the additional problems found, the solutions have also been changed. The solution to internal technical problems is the development of information technology and standard operating procedures (0.637) for Islamic banks to standardise and simplify the process of PLS financing. The solution to upper management problems is their commitment to apply PLS financing as the main mode of financing (0.540). Meanwhile, the issues found with the authorities are their political will, political commitment, and political courage (0.500) to develop IEFB seriously, especially PLS-based finance. The solution to this is communications (0.400) and *da'wah* (0.400).

6) The problems relating to the policies instituted by the regulator have expanded to include not only directed market-driven policies (0.218), but also professionalism (0.218). Directed market-driven policy has reappeared in the current study because the regula-

tor has opted for market-driven policy, but it has not been effective in promoting or expanding the share of PLS financing.

7) The operational strategies for market development that should be adopted are service improvement programs (0.308) as well as socialisation and communication programs (0.236) in order to address the most acute internal and external weaknesses of Islamic banking and IEFB as a whole in Indonesia.

6.2 Recommendations

Based on the results of the current study and their relation to the previous study, some recommendations are that:

1) The government and the Islamic Banking Authority (Bank Indonesia) should take the lack of PLS financing in proportion, but seriously, in order to optimise the benefits of PLS-based finance in the nationwide financial system. This implies that PLS-based finance should not only be the principal mode of financing from Islamic banks, but also in the entire Islamic financial system and monetary system.

2) The government and the Islamic Banking Authority should apply directed market-driven policies to resolve effectively the lack of PLS financing. The market should not be permitted to direct the deve-

lopment of Islamic banks; it is the bank that should also guide the market in the most desirable direction. Furthermore, the regulator should guide the development of IEFB and PLS-based finance. With this policy, the government and the relevant authorities will be able to implement other priority policies and operational strategies more effectively.

3) To obtain a more comprehensive overview of the problem, a further study on the optimal portfolio (PLS and non-PLS financing) of Islamic banks is required that can minimise risks and maximise profits. The study could be used to persuade and guide Islamic banks in the adjustments of their portfolio to a more optimal one.

In conclusion, the bottom-line strategies to increase the application of PLS-based finance are to create supply, to create demand, and to gain support. Supply can be created by the innovation of competitive PLS-based Islamic financial products and services. Demand can be created by effective education, socialisation, communication, and marketing of Islamic economics, finance and banking. Moreover, support could come from government commitment in all areas and sectors, the implementation of PLS-based sovereign *sukuks,* and the implementation of PLS-based monetary instruments.

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Ascarya, Hasanah, H., & Achsani, N.A. 2008a. Demand for money and monetary stability under dual financial system in Indonesia. Paper presented at the Third Islamic Banking, Accounting and Finance Conference 2008,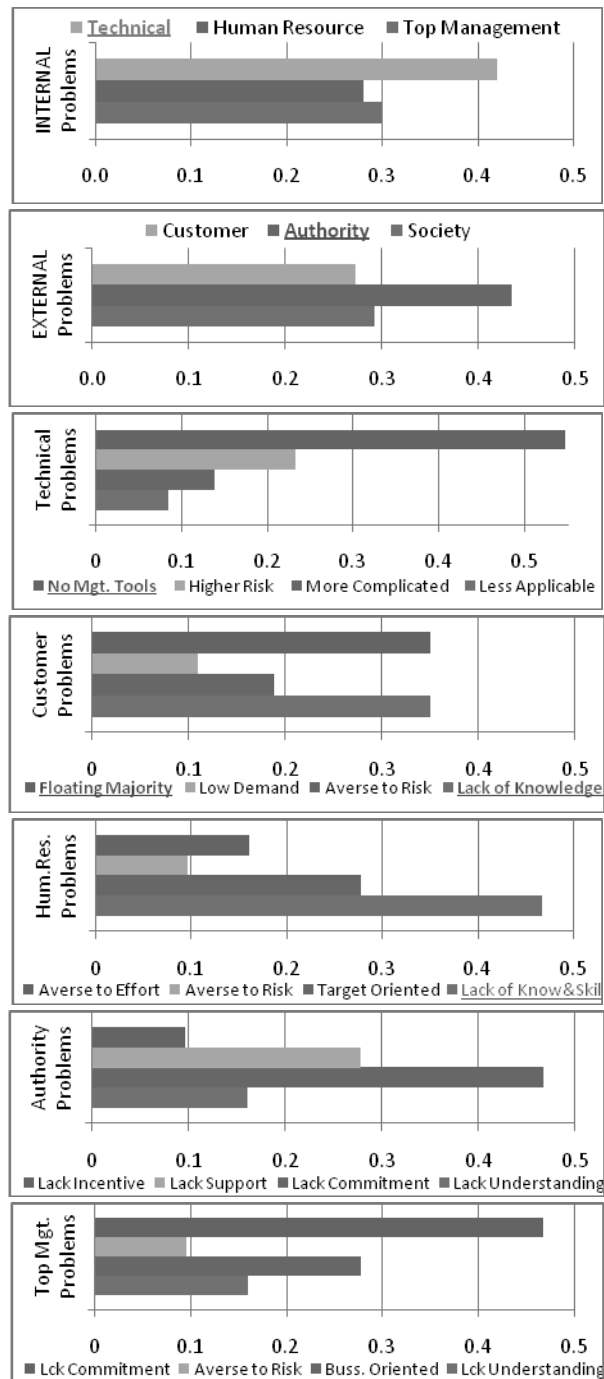 'Financial Intelligence in Wealth Management. Islam Hadhari's Perspectives'. Universiti Sains Islam Malaysia, Kuala Lumpur Malaysia, 29-30 July.

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Appendix 1. Conceptual Framework

| Lack of PLS Financing |

P r o b l e m s

Internal Problems ←→ **External Problems**

Top Mgt
Lack of Understanding
Business Oriented
Averse to Risk
Lack of Commitment

Human Resources
Lack of Knowledge and Skills
Target Oriented
Averse to Risk
Averse to Effort

Technical
Less Applicable
Higher Risk
More Complicated
Lack of Management Tools

Society
Diversity
Lack/Loss of Trust
Lack of Perception
Lack of Knowledge

Authority
Lack of Understanding
Lack of Commitment
Lack of Support
Lack of Incentive

Customer
Lack of Knowledge
Averse to Risk
Low Demand
Floating Majority

S o l u t i o n s

Internal Solutions ←→ **External Solutions**

Top Mgt
Fit and Proper
Commitment
Reward & Punishment

Human Resource
Selection
Improvement
Incentive

Technical
Simplification
Innovation
IT and SOP

Society
Communication
Da'w ah
Education

Authority
Will and
Support
Regulation

Customer
Education
Promotion
Incentive

Directed Mkt Driven
Fair Treatment
Gradual and
Sustainable

P o l i c i e s

Shar iah Compliance
Professionalism

New Image Program
New Market Mapping
Product Development
Program

S t r a t e g i e s

Service Improvement
Program
Socialisation and
Communication

Appendix 2. Graphical Results

INTERNAL Problems
■ Technical ■ Human Resource ■ Top Management
0.0 0.1 0.2 0.3 0.4 0.5

EXTERNAL Problems
■ Customer ■ Authority ■ Society
0.0 0.1 0.2 0.3 0.4 0.5

Technical Problems
0 0.1 0.2 0.3 0.4 0.5
■ No Mgt. Tools ■ Higher Risk ■ More Complicated ■ Less Applicable

Customer Problems
0 0.1 0.2 0.3 0.4 0.5
■ Floating Majority ■ Low Demand ■ Averse to Risk ■ Lack of Knowledge

Hum.Res. Problems
0 0.1 0.2 0.3 0.4 0.5
■ Averse to Effort ■ Averse to Risk ■ Target Oriented ■ Lack of Know&Skill

Authority Problems
0 0.1 0.2 0.3 0.4 0.5
■ Lack Incentive ■ Lack Support ■ Lack Commitment ■ Lack Understanding

Top Mgt. Problems
0 0.1 0.2 0.3 0.4 0.5
■ Lck Commitment ■ Averse to Risk ■ Buss. Oriented ■ Lck Understanding

Appendix 2. Graphical Results_*lanjutan*

Hum. Res. Solutions
- Incentive
- Improvement
- Selection

Customer Solutions
- Incentive
- Promotion
- Education

POLICIES
- Professionalism
- Shariah Compliance
- Gradual & Sustainable
- Fair Treatment
- Directed Mkt Driven

STRATEGIES
- Sos&Comm Program
- Service Improvement
- Product Development
- New Image Program
- Market Mapping

Apendix 3. Complete Results

Name	Limiting	Normalised by Cluster	Name	Limiting	Normalised by Cluster
ASPECTS					
Internal	0.024334	0.50376	External	0.023971	0.49624
INTERNAL PROBLEMS			EXTERNAL PROBLEMS		
Top Management	0.044613	0.29971	Society	0.043501	0.29243
Human Resource	0.041697	0.28012	Authority	0.064661	0.43468
Technical	0.062546	0.42018	Customer	0.040594	0.27289
TOP MANAGEMENT PROBLEMS			SOCIETY PROBLEMS		
Lack Understanding	0.001126	0.16008	Diversity	0.000574	0.08371
Business Oriented	0.001950	0.27722	Lack of Trust	0.003746	0.54630
Averse to Risk	0.000671	0.09539	Lack of Perception	0.001593	0.23232
Lack Commitment	0.003287	0.46730	Lack of Knowledge	0.000944	0.13767
HUMAN RESOURCE PROBLEMS			AUTHORITY PROBLEMS		
Lack of Know&Skill	0.003072	0.46737	Lack Understanding	0.001632	0.16008
Target Oriented	0.001822	0.27719	Lack of Commitment	0.004764	0.46729
Averse to Risk	0.000627	0.09539	Lack of Support	0.002826	0.27719
Averse to Effort	0.001052	0.16005	Lack of Incentive	0.000973	0.09544
TECHNICAL PROBLEMS			CUSTOMER PROBLEMS		
Less Applicable	0.000826	0.08376	Lack of Knowledge	0.002246	0.35094
More Complicated	0.001358	0.13771	Averse to Risk	0.001210	0.18906
Higher Risk	0.002291	0.23233	Low Demand	0.000698	0.10906
No Mgt. Tools	0.005386	0.54619	Floating Majority	0.002246	0.35094
INTERNAL SOLUTIONS			EXTERNAL SOLUTIONS		
Top Management	0.045616	0.30644	Society	0.043266	0.29085
Human Resource	0.041558	0.27918	Authority	0.063376	0.42604
Technical	0.061682	0.41437	Customer	0.042115	0.28311
TOP MANAGEMENT SOLUTIONS			SOCIETY SOLUTIONS		
Fit & Proper	0.002136	0.29700	Communication	0.002728	0.40000
Commitment	0.003881	0.53963	Da'wah	0.002728	0.40000
Reward & Punishment	0.001175	0.16338	Education	0.001364	0.20000
HUMAN RESOURCE SOLUTIONS			AUTHORITY SOLUTIONS		
Selection	0.001562	0.23844	Commitment	0.004996	0.50000
Improvement	0.000894	0.13647	Support	0.002498	0.25000
Incentive	0.004095	0.62510	Regulation	0.002498	0.25000
TECHNICAL SOLUTIONS			CUSTOMER SOLUTIONS		
Simplification	0.002512	0.25833	Education	0.003794	0.57147
Innovation	0.001018	0.10469	Promotion	0.000948	0.14279
IT & SOP	0.006194	0.63698	Incentive	0.001897	0.28574
POLICIES			STRATEGIES		
Directed Mkt Driven	0.028662	0.21827	Market Mapping	0.012748	0.09708
Fair Treatment	0.027456	0.20908	New Image Program	0.022444	0.17091
Gradual & Sustainable	0.018526	0.14108	Product Development	0.024625	0.18752
Shariah Compliance	0.027944	0.21280	Service Improvement	0.040445	0.30800
Professionalism	0.028728	0.21877	Sos&Comm Program	0.031055	0.23649