DEVELOPING MANPOWER PLANNING FRAMEWORK FOR THE MALAYSIAN PUBLIC SECTOR

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INTRODUCTION

People are one of the most important resources the organization and the managers have at their disposal to achieve their objectives. It is undoubtedly true that people, especially people with high intellectual capital have become the most important asset of the organization. With the advent of ICT, globalization, dynamic operating environment, rising cost of human resources, nations and organizations cannot afford to mismanage their human resources without the risk of losing their competitiveness and being overtaken by their competitors in the increasingly competitive international arena and even in the domestic market.

In the era of K-economy, the production, distribution and utilization of knowledge has become the primary engine of economic growth and creation of wealth in the k-economy. The New Growth Theory has postulated the importance of human capital in contributing to the economic growth of the country. At the organizational level, the ability to plan and implement a well-structured human resource plan will contribute toward the successful implementation of its strategic and business plans. The activities of manpower planning have become more important at the organization level.

Manpower planning has many definitions. Lynch (1982) defined it as:

" Manpower planning is concerned with human activity directed towards a particular economic purpose. It aims to provide an enterprise with: -
>The right **number** of employees;
>possessing the right types and degree of **skills**;
>in the right **job**;
>at the right **time**;
>performing the right **activities**;
>to achieve the right **objectives**."

Another most recent definition adopted by NAPA stated that "Strategic workforce planning is a systematic process for identifying the human capital required to meet organizational goals and for developing the strategies to meet these requirements." This definition covers the key elements of strategic manpower or workforce planning. In essence, manpower planning aims to avoid shortages and poor utilization of manpower in an organization. It has to be integrated with other planning work. Thus the primary objective of manpower planning is to incorporate the planning and utilization of manpower into organization planning, so that all economic resources are used synergistically in the best possible combination in order to achieve organizational objectives.

The other important objective of manpower planning is to coordinate all human resource policies in the organization. Without manpower planning, decisions are made without assessing their effects or their relevance to the objectives of the organization. Manpower planning system is necessary to coordinate manpower policies both with each other and with the organization's objectives.

In today's environment, the scope of manpower planning may include:

- Responding to changing economic and business conditions and trends;
- Providing short, medium and long-term competency needs & availability forecasts;
- Retraining or redeploying employees as organizational needs change;
- Assisting in planning of education and training;
- Addressing critical human resource issues in an organized and integrated way; and
- Defining future staffing requirements to assist employees in career and development efforts.

With these diverse requirements, the development of a Manpower Planning Framework must by necessity be viewed as the designing and integration of a wide range of HR activities, besides the consideration given to the use of statistical projection models. In short, manpower planning enables the agency to define and integrate short-term manpower actions with the longer-term context of business or agency strategy. It helps to identify and develop a skilled workforce to meet the changing needs of the organization.

The Public Service Department (PSD) has been entrusted to coordinate the manpower planning functions for the Malaysian Public Sector. In relation to this, with the assistance of KPMG, an external consultant, the PSD has undertaken a study with the following objectives: -

(i)   Streamline and develop consistency in the manpower planning process, practices and information across all Government ministries, agencies and departments;

(ii) Develop a framework and process that will assist the agencies to identify demand and supply (mobility), forecast and advise on the manpower size and competency requirements; and

(iii) Leverage on the existing HRMIS, SISPEN and SISMAP to architect a workable framework, which will be utilised to retrieve and enhance the accessibility in manpower profiling with regards to competency and analytical information aspects of manpower planning.

The two main scope of work for the study encompassed the following: -

(i)   Studying and evaluating the existing manpower planning process in the public sector agencies. For this purpose, five agencies were selected namely, the Ministry of Agriculture and Agro-based Industry, the Department of Veterinary Services, the Selangor State Secretariat, the Subang jaya Municipal Council and the Selangor State Development Corporation (PKNS), a state statutory body.

(ii) Based on the above findings and by leveraging on international best practices in manpower planning, develop a generic manpower planning model, the Malaysian Public Sector Manpower Planning Framework (MPF) to be used by all public sector agencies in Malaysia.

This article intends to share some of the study's key findings by reviewing the current manpower planning practices used by the five sample agencies. This article will attempt to explain how the MPF was designed and developed. The main characteristics and steps required to perform the manpower planning at the agency level will also be explained.

REVIEWING THE CURRENT MANPOWER PLANNING PRACTICES

The first phase of the study provides the overview of the findings and recommendations with regard to current manpower planning practices used by the five selected agencies. The findings were used as inputs in designing and developing the new Manpower Planning Framework.

The Phase 1 As-is diagnosis was conducted using the following methodologies: -

(i) Interviews
Interviews were conducted to gather further information in understanding the manpower planning practices and processes in JPA and across the five selected agencies. Interviews were both informally and formally conducted. Formal interviews were conducted through questionnaires.

(ii) Documents and Literature Research
A documentary study and literature research was undertaken to review the current practices within the PSD and the five selected government agencies. This complemented the analysis of the current documents and data that were collated by the consultants. External studies retrieved from the Internet and other source of knowledge and information on manpower planning were also used in the study.

(iii) Global Good Practices

Good Practices on manpower planning were gathered through extensive research of current practices in the United Kingdom, United States of America, Australia and New Zealand. Thiese serve as a benchmark against which the current practices were reviewed and serve as input to the development of the new manpower planning framework.

Findings of the Phase 1 study – As-is Diagnosis

Manpower Planning is viewed as a strategic management process for making staffing decisions based on the organization's strategic and business plans and a set of desired manpower competencies. Strategic Management is the process of specifying the organization's mission, vision, goal and objectives, developing strategies and plans to achieve these goals and objectives, and allocating the resources to implement these plans. It provides an overall direction to the organization.

The assessed agency quoted the Manpower Planning Process being the establishing of new permanent positions i.e. the activities of these agencies is a part of the overall recruitment process, which involves various other organizations. The key tasks of the Human Resource Division in terms of Manpower Planning included the collation of the number of workers required from various departments, based on workload requirement. With these collations and justifications, applications for new permanent positions would be ultimately sent to the central agency and when the approval was provided, the agency would follow through with the recruitment of personnel to fill the vacancies established.

In using the approach of Strategic Management in assessing the selected agencies in their Manpower Planning processes, five possible areas of concern were identified: -

(i) Responsibility and Accountability;

(ii) Availability of Information;
(iii) HR System and Strategies;
(iv) HR Competency; and
(v) Strategic Partnership.

(i) Responsibility and Accountability

> Key findings: -
> - There are individual functional groups, which are not directly involved with the strategic development of the agency; and
> - Most of the HR managers interviewed stated that they played a role mainly that of being implementers.
>
> Possible Concerns: -
> Requirement of integration of HR strategies and various activities to achieve strategic goals of agencies.

With these findings, the area of responsibility and accountability is red-flagged, to highlight that the integration of strategy and implementation is vital in order for Manpower Planning to take a strategic management approach. Any separation of responsibility and accountability for strategy making from implementation may result in the following: -

- Managers passing on the decision making and planning, not having to do strategic thinking;
- Implementers have no buy-in to strategy; and
- Implementers not motivated to constantly evaluate performance, monitor situation and make necessary adjustments;

Agencies may begin to actively implement the strategic management process by:
- Pro-actively disseminating and providing data, feedback and review; and
- Reviewing and evaluating performance, such as the use of the balanced scorecard, and strategy formulation for improvement.

(ii) Availability of Information

> Key findings: -
> - The pool of data available only covers the basic personnel information, which is insufficient to assess the competencies requirement;
> - Most of the agencies agreed that the information system serves as a tool to collate and store data; and
> - Modules relating to Manpower Planning in SISPEN e.g. Training and Qualification are available but may not be used.
>
> Possible Concerns: -
> - Data and information storage retrieval and analysis may not be totally IT enabled.

With these findings, the area of Availability of Information is red flagged because a warehouse of information and data is necessary for: -

- Assessing current and future workforce;
- Performing SWOT for analysis and formulation of business strategies; and
- Enabling the generation of manpower planning scenarios in aligning it with business strategies.

The absence of this may rule out: -

- Effective and systematic analysis based on manpower projection or survey data;
- Comprehensive analysis of the country's economy and trends; and
- Analysis of competencies requirements.

(iii) HR System and Strategies

Key findings: -

- Manpower Planning is limited to establishment of new positions and training; and
- HR is not involved in strategic plans development at the beginning and assessing a whole suite of possible initiatives and strategies to realize the organization's long-term direction.

Possible Concerns: -

- Performance measures with competencies and skills need to be further developed as part of Manpower Planning to meet the future organizational development needs.

With these findings, the area of HR System and Strategies is red-flagged because the HR system and strategies should be aligned to the organization's business strategies, requiring it to show how it is supporting the organization's mission accomplishment. The current trend is towards HR seeing the 'big picture', to enable them to assess means and strategies to achieve success of the agency.

(iv) HR Competency

Key findings: -

- Most of the HR specialists' primary role is the implementation of the action plans formulated by the strategic planning bodies and ensuring compliance with policies, rules and regulations; and
- Measurement of success is mainly based on internal HR processes and activities, such as the completion of a number of training courses.
- As long-term manpower planning is not emphasized in the assessed agencies, it is not certain whether the HR personnel are equipped with the skills and competencies required to perform manpower planning.

Possible Concerns: -

- The HR Manager/Specialist's role needs to be developed so as to be more consultative in collaboration with strategic partners;
- There is a possible gap in skills and competencies required to perform manpower planning.

The HR specialist plays the important roles of being both internal consultant and strategic partner, requiring competencies in a wide range of inter-related disciplines.

Today, HR Specialists are required to be empowered to make adjustments to the existing HR system and strategies. For example, the performance management systems should be utilized to reflect the future needs of the organization. The HR Specialist or specialists is/are required to have an extensive knowledge covering the whole spectrum of HR management and beyond. For instance, comprehending the definition of culture and competencies required for the future that would affect the structure of the organization would propel the organization towards more strategic manpower planning processes.

(v) Strategic Partnership

Key findings: -
This area of strategic management was not particularly emphasized in the methodologies employed, but the feedback provided by the interviewers indicate that attention may need to be given to this very important area.

Possible Concerns: -
There may be a greater need for shared accountability and responsibility amongst partners to help realize goals of the agencies.

With these findings, the area of Strategic Management process is red-flagged because it is essential that a strategic partnership amongst the organizations be further developed. Such a strategic management process calls for: -

- Pro-active dissemination and provision of data, feedback and review;
- Review and evaluation of performance, such as the use of the Balanced Scorecard, and strategy formulation for improvement; and
- Close partnering between the various functional groups in order to facilitate implementation of changes or revisions in activities in the short term.

It should be noted that the above findings and areas of concerns were based on the assessments of the five selected sample agencies. As such the findings and observations made should not be generalized to the whole Malaysian Public Sector. It only serves as a quick feedback and used as a general guidelines for the study team to design and develop the Manpower Planning Framework for the Malaysian Public Sector.

International Good Practices in Manpower Planning

Good practice in Manpower Planning in the public sector of the United Kingdom, United States of America, Australia and New Zealand were investigated and the findings were categorized as follows: -

(i)	HR Strategy Formulation
(ii)	Strategic Alignment
(iii)	Technology Enabled
(iv)	Organizational Development Approach
(v)	Change Management Approach

(vi)   Continuous Process Improvement
(vii)   Human Resource Development

(i) HR Strategy Formulation

Human Resource strategy formulation requires decisions based on feasibility and practicality in implementation whilst considering organizational strategies, organizational characteristics, organizational capabilities and the challenges posed by the environment. Scenario analysis and planning must be done to support business requirements and their various possible scenarios and time frames.

Human resource strategy formulation takes into consideration different scenarios generated by business planning and the different time horizons to generate strategies to meet the different possible requirements.

Scenario planning and analysis will help form a set of possible HR strategies that can be implemented in the appropriate environment, making the organisation ready for change when change is called for, providing for contingency plans for both favourable and unfavourable futures. It recognises that it is important to think strategically about the future and how to get there.

This involves strategic management activities, as in business strategies formulation, of assessing the organization's internal competencies and capabilities, assessing environmental threats and opportunities, and scope of the organisation.

Following the forecasting of organizational needs and decision on the most suitable strategy for implementation, the continual monitoring and adjustments of personnel and administrative processes/systems when necessary and managing the process of change in the organisation follows.

(ii) Strategic Alignment

Organizations need a big-picture, a holistic integration strategy and to be driven by goals. By aligning and integrating the organization, people, structure, system, plans and strategies, will form a degree of management thinking and influence that is greater than the individual silos within the organization.

Manpower Planning is integrated with the organization's business processes, strategies and plans. It is implemented in line with requirements of the organization's strategic plan. It focuses on processes, decisions and direction, and applies general principles in a flexible process that is systematic, integrated, methodical and ongoing.

Manpower Planning processes when aligned with strategic and business plans will result in the development of long-term staffing plans that will help realize the organization's mission and vision, objectives and goals. It includes the full spectrum of actions and activities from aligning the organization behind clear long-term goals to allocating resources, and developing the workforce to achieve the desired outcomes. The involvement of the HR Specialist will offer input that may reveal different opportunities and threats that could affect the organization's business strategies.

(iii) Technology Enabled

Technology has enabled HR practitioners to deliver services in ways that were never before possible. Employee segmentation, employee self-service capabilities via portals, not to mention the access to a vast pool of information that is up to date and easily retrieved is only the beginning of what technology can offer an organization as it realizes the value of human resource as a capital.

To allow timely access to reliable, up-to-date and accurate data on all aspects of the organisation's operations and experience across organisational boundaries. The vast volume of data and information in any organisation would call for it to be IT enabled in order for these information to be used and analysed. The kind of data and the reason why the data is being collected must be identified for it to be of full use.

To enable effective and efficient decision-making to develop the best possible strategies, analysis of data must be accurate. This calls for a system that can provide data that is precise, reliable and most up-to-date. Efforts must be taken to ensure that the lead-time between the request for information and its delivery is as short as possible.

(iv) Organizational Development Approach

Organizations are social systems and for development initiatives that have organization wide effect to be successful, leadership and personnel involvement are critical factors. Top management together with management sets the direction, ensures its implementation, reviews and institutes changes and gives them the resources to ensure success.

For manpower planning to be embedded in the HR processes with an organizational development approach, it requires the support of top management and the ownership of the processes by both HR and team leaders.

To cope with challenges and threats faced by the organization, a wide range of human resources management development techniques and approaches were looked at to manage changes to organization structure, culture and systems and develop new behaviours and performance standards. Manpower planning must consider the macro perspective of a systems approach of organisation development linking human resources and organisation potential to technology, structure and management processes.

Top leadership is required to drive and champion manpower planning from the top. When there is clear support and "buy-in" from top management, the work of manpower planning strategies and solutions will be given priority and resources, as it is not a 'fix-it' strategy but a continuous process.

HR and Line Managers are required to be jointly and directly involved in the processes in a strategic management approach affecting the whole organization. They need to work together to integrate workforce planning within the planning processes of the agency. Manpower planning needs to be seen as a mainstream management activity engaging the entire workforce, not only to be undertaken by HR and personnel staff in isolation from business units and services.

(v) Change Management Approach

All Human Resource development initiatives require consideration to be given with respect to its impact on the people within the organization. It involves and requires careful planning and execution both in implementation and communication.

Manpower planning requires careful consideration of resource requirements and it should be implemented progressively beginning with critical or core positions.

In starting the planning effort, a manageable scope that can be accomplished within a reasonable period of time should be firstly looked into, developing on it as it builds and expand in its processes and implementation. Implementation plans should include a communication plan as part of change management.

(vi) Continuous Process Improvement

Continuous improvement requires a systematic approach to measure and review the progress and outcome of the work done against strategic objectives and goals to ensure improvement is being continually pursued.

Manpower Planning requires clear documentation of processes, which includes input and output of information, persons responsible and the involved timeline to enable continual process review and effective improvement in implementation.

Documentation of various Manpower Planning processes with information flow between relevant divisions, persons responsible, location, performance measures such as time taken would lead to benchmarking performance levels, identify improvement opportunities as part of continuous improvement initiatives, preventing potential performance gap in the event of the incumbent leaving a job.

(vii) Human Resource Development

Changes in the workplace and amongst the workforce require organizations to engage in planned efforts to increase employee competencies. It will help the organizations in maintaining their competitiveness and improving its productivity, to meet future challenges.

Training is viewed as a critical manpower planning process, linked directly to organizational performance improvement requirements. Training needs analysis should focus on competency-based models.

Training, used in the context of human resource management, refers to the planned learning and development of persons as individuals and as groups to benefit the organization as well as themselves.

Organizational capabilities can be built through training with a strategy/business led approach and through the identification of staffing and skills requirements of the changing environment and future business directions.

Training needs analysis and skills audits can be mapped against business strategies, which will identify key competency and skills gaps that require addressing. This will become the

focus of a detailed manpower plan, identifying and implementing strategies that will build the relevant skills and capacity needed for organisational success.

Once specific learning initiatives are identified, the commitment and involvement of line managers to monitor, including their own roles and responsibilities in the process are important.

DESIGNING AND DEVELOPING THE MALAYSIAN PUBLIC SECTOR MANPOWER PLANNING FRAMEWORK

In strategic manpower planning, the focus is on aligning HR strategies, competencies development, methodology and operations to the agency's long-term business strategic goals and requirements. This rational approach to the strategic management of HR strategies to the wider context of the agency forms the basis of development for the proposed manpower planning framework.

Four Key Drivers of MPF

The design criteria support the four key organizational drivers of strategic manpower planning viz. Strategy, Organization, Methodology and Operations/Systems. The criteria take into account global good practices as investigated in Phase 1. Furthermore, the process in Phase 1 of identifying possible key concerns has enabled a feel of how the manpower planning process works in the agency and the learning is incorporated in the design criteria. The four key drivers are as shown in **Figure 1**.

(i) Strategy

Manpower planning in the agency should take a strategic management approach, giving emphasis on strategic assessment of the future of the agency, thus giving it a long-term outlook, which will allow for a better understanding towards the fulfillment of the agency's mission during implementation in the shorter term. This therefore calls for long-term strategic alignment towards achievement of business plans and goals.

Manpower planning should take into account the whole spectrum of strategic staffing, not limit itself to recruitment and training. It should embrace the agency's strategic direction, analyzing its demand and current supply of manpower, identifying its gaps and formulating strategies to bridge those gaps. Performance measures with competencies and skills need to be further developed in order for the agency to meet its future development needs.
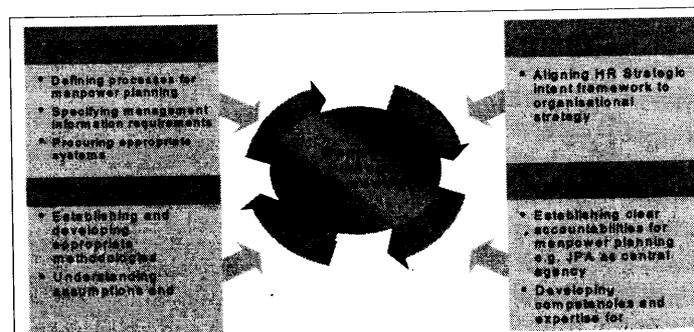

Figure 1: Four Key Drivers of Manpower Planning Framework

Strategic partnership is crucial to the realization of the agency's strategic objectives and goals and it has to be stressed upon in manpower planning. Every organization involved in the planning process has to have a close partnering relationship with pro-active dissemination and provision of data, feedback and review to facilitate the implementation and review of the manpower plan.

(ii) Organization

The HR Specialist in the agency should serve as a strategic partner, to be part of the strategic planning team who would be able to contribute as to how decisions made may impact the agency in terms of human resource matters. His role needs to be developed to be more consultative in collaborating with strategic partners. The HR Specialist in the agency needs to build on the competencies required to perform manpower planning.

There should be integration between the various divisions and related organizations in responsibilities and accountability as well as in HR strategies so that the goals and objectives of the agency can ultimately be met. This would call for partnership across divisions and organizations to promote strategic thinking and buy-in to business plans and strategies.

(iii) Methodology

The warehousing and mining of data are critical due to the vast amount of data available. It is essential to enable trend analysis to be performed. The vast amount of data available needs to be first stored in a data warehouse, which is a tool used to store vast amount of data, e.g., personnel data. The relevant data is then selected or "mined" using data mining tools and put through formula/formulae in order to project the trends analysis.

(iv) Operations/Systems

Strategic management requires effective alignment across functional groups and the sharing of information vital to the processes of manpower planning. Wherever data and information storage retrieval and analysis may not be totally IT enabled, the PSD and the agencies need to consider prioritizing and defining critical areas or functions in the initial effort prior to building the database. This focused effort in database building may allow for better management of resources.

Performance measurements for operations and systems must be adequately linked to organizational strategic requirements. Competency models and performance appraisals are vital tools to ensure that the right competency and skills are developed to meet agency requirements.

The 7-Step Manpower Planning Model

Many manpower planning models have been developed and used by both public and private organisations. The various models may use different terminologies, but their manpower planning framework and processes are similar. This model breaks manpower planning into seven major steps namely: Strategic Planning, Demand Analysis and Forecast, Supply Analysis and Forecast, Gap Analysis, Develop Manpower Plan, Implement Manpower Plan and lastly, Monitor, Evaluate and Review. The stages are as depicted in **Figure 2**.
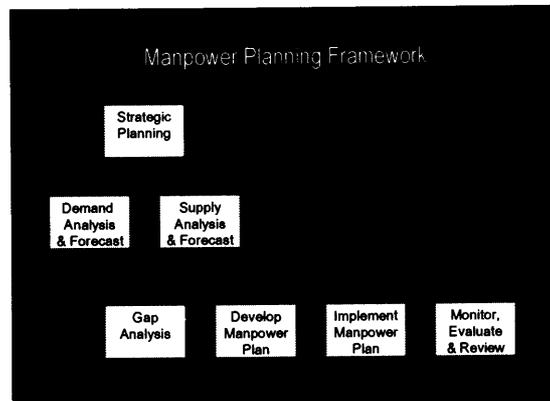
Figure 2: The 7-Step Manpower Planning Model

Step 1 - Strategic Planning

Generally, an organisation's direction and its environmental factors will influence the demands placed on the organisation. Analysis of these two categories of issues will provide some understanding as to the demand for labour. Some of the organisational issues which may influence direction include the strategic plan, budget forecasts, work practices, workforce culture and reward systems. The manpower plan needs to be integrated with the organisation's strategic plan to ensure HR policies and programmes are not out of step with the future direction of the organisation. The HR division is required to set its strategic direction so that it is aligned with that of the agency and identify critical functions that must be performed to achieve the agency's vision, mission, goals and objectives.

Step 2 – Demand Analysis and Forecast

Demand analysis identifies the manpower needed to carry out the mission of the agency. It should focus on the functions that the agency must perform to meet the requirements of the changing environment. These changes might have a significant impact on the size and type of manpower that will be required in the future. Thus the main purpose of this step is to forecast the required number and sets of competencies to meet the future functional needs of the agency.

The MPF for the Malaysian Public Sector proposes the QandQ Methodology to forecast the future manpower demands. It focuses on 2 key factors of manpower planning, namely, the quality and quantity of human resources.

The quality aspect of human resource would include the competencies required to perform a job, which includes knowledge, skills and attitudes or KSAs. KSAs can be addressed by defining the expertise required for a defined position to fill. In discharging the duties of a defined position, we need to clarify the role and function of that position. The role and function can then be used to map out the KSAs that are required to fill that position. With this data collected on what competencies are needed to perform the job, a competency model or skills map can be built, which is a validated decision tool to identify competency gaps to fill. This set of competencies provides management and staff with a common understanding of the skills and behaviors that are important to the organization. If properly developed, it can be used in the process of recruitment, training and development, placement and performance development.

The next key factor in the QandQ Methodology is planning for the quantity. The Manpower Planning Quantitative Model is to assist the agency to estimate and forecast the expected manpower requirement based on the following aspects:-

(i) Reorganisation

It takes into account the aspects covering the transfer of staff into the agency from another agency and transfer of staff out of the agency to another agency, privatised entity, corporate body or due to mere closure of a department (if known).

(ii) Retirement and Replacement

It is the figure representing the projected quantum of staff retiring for that year plus anticipated leavers.

(iii) Depth Factor

The depth factor represents the income level which represents the economic affluence of the population or segment there of in which the agency services. It represents the depth of the demand and may require greater level of service. Given that the population size in the service segment of the agency does not change, the level of service required of the agency may increase or deepen due to the increase level of income of that region and the increase in expectations from the population served.

(iv) Breadth Factor

The breadth factor represents the population in which the agency services. The growth in that population is likely to have an influencing factor on the breadth of the demand for services of that agency. Often, the factor is expressed by the ratio of number of population per civil servant (or "cr", the civil servant ratio as referred to here). Assuming the increase in population is P, the additional quantum of manpower required is P/cr. In the long run, the cr factor will not be a straight line regression but will reach a plateau due to economy of scale.

(v) Efficiency (E) Factor

The manpower planning model can now be extended to drive productivity and help monitor the outcome of continuous improvement of an agency. In preparing the service plan for the following year, an agency can now set a target to drive efficiency. For example, an agency may have an initiative to help automate its function that can seek to achieve a reduction of manpower by 5%.

The E factor will gain prominence with the government's initiative of automation. While there may not be any formula to estimate as it varies so much from one end to the other, it can be determined based on the strategic and service plan of the agency. Every initiative would result in some pre-determined cost savings, which can be used to estimate E. Efficiency achievement can also be affected by available facilities, tools and equipment. Hence, the agency needs to invest and undertake certain initiatives to drive efficiency.

Step 3 – Supply Analysis and Forecast

The main purpose of this step is to determine the current manpower supply and characteristics in order to forecast what it will be in the future if no management action is taken. It will present the profile of the present workforce projected out as if no action was taken to address attrition or develop the staffs. In Step 3, current manpower data and information to be gathered for analyses to be performed covers the following aspects: -

- Level of staffing number and demographics;
- Trends analysis (turnover, retirement, transfer, resignation, death, ill-health, disciplinary problems, etc.);
- Volume, type and location of work performed;
- Organizational structure and design and its effectiveness;
- Skills and competencies analysis;
- Performance and productivity level;
- How work is currently performed (Job Analysis);
- Capabilities of information systems in data warehousing and data mining;
- Flow and process of work;
- Reporting relationship between levels of employees;
- Recruitment and retention patterns; and
- Succession planning efforts.

Step 4 – Gap Analysis

By comparing the results of demand forecast and the supply projection, gaps in terms of either shortages or surpluses of manpower in number, competencies according to job, job groups, unit and division will be identified. It is crucial to identify these gaps in skills and competencies that will require further planning for manpower strategies to address the shortfall.

After gaps have been identified, prioritization of gaps must be done to pick out those that will exert the most impact on the agency. Steps must be undertaken to identify the extent of the possible outcome and consequences if the gaps are not addressed. Top management involvement is crucial to the identification of major and significant gaps that will affect the agency as a whole.

Priority must first be given to the critical gaps to ensure that actions are taken before the projected gap becomes a problem.

Step 5 – Develop Manpower Plan

The main purpose of this step is to develop HR strategies and plans that will address the gaps identified. The HR and Division Heads need to perform analysis of the agency's structure and culture to determine how the gaps can be best addressed. Appropriate strategies will be developed to bridge these gaps. Key performance indicators or KPIs need to be identified for the purpose of review and evaluation as to the success of these strategies to bridge the identified gaps.

It is proposed that when developing these strategies, the following issues need to be taken into consideration:

- HR strategies and action plans that are up-to-date and reflect the needs of the agency;
- All strategies and plan that are integrated and consistent with each other, aligned with other business processes and directly linked to overall business plan;
- Resources issues – staff, time and costs associated with the strategies, particularly in addressing skills and competency gaps;
- Training and development of employees to be maximized to minimize recruitment;
- Recruitment to be maximized to minimize training needs of new employees;
- Appropriate retention strategies to be developed;

- Alternative training mechanisms to be introduced;
- The possibility of sourcing skills through shared resources;
- The cost-effectiveness of contracting;
- Development and implementation of career management programmes and succession planning;
- Development of graduates and trainees in appropriate programmes that will meet the skills required;
- Performance management system that is robust, transparent and linked to agency needs; and
- Identification of wastage and hidden costs of HR management plans.

Step 6 – Implement Manpower Plan

The manpower plan prepared and strategies formulated need to be implemented according to the needs of the agency and within the time frame of the plan. For the plan to be implemented effectively, an appropriate implementation approach need to be identified.

The proposed approach to implement the plan is as follows: -
- Ensuring the buy-in and support of the organization;
- Allocating the necessary resources to carry out the manpower strategies;
- Determining and clarifying roles and responsibilities of the people involved;
- Coordinating the different parts of the agency or with different organizations;
- Establishing timelines;
- Defining performance measures and milestones and expected end product; and
- Communicating the manpower plan to the employees, its basis, why and how it was developed, how it will be implemented and how it will affect them.

Step 7 – Monitor, Evaluate and Review

Manpower planning is a circular process that requires evaluation, monitoring, reviewing and frequent feedback. In this step, the outcome and performance of the implementation of the manpower plan against the KPIs identified has to be evaluated. In the evaluation of performance, the HR Specialist and Division Heads are to measure the performance of the manpower plan against goals and standards or KPIs already identified.

If the manpower plan falls short of the goals and standards, a review will be done to identify the causes. After the identification of the causes of non-performance, corrective action must be taken. Changes have to be made to enable the goals and standards to be met. Action may need to be taken in improving data management and retrieval in order to have adequate data or the implementation of a better change management approach to improve the execution of strategies. This process of monitoring, evaluating and reviewing should be implemented at any step of the manpower planning process.

The 7-Step Manpower Planning Model can be summarized as indicated in **Table 1** below.

Table 1: Summary of 7-Step Manpower Planning Model

Flowchart	Purpose	Input	Output	People Involved
1. Analysis of Strategic & Operational Plans	To set the strategic direction of the HR division to align it to that of the agency, so that the HR initiatives that results from the manpower planning will be set to meet the agency's needs as a whole.	Agency's mission & vision statements, plans, strategies and environment data.	HR mission and vision statement aligned to the agency.	Top mgmt, HR & Division Heads
2. Demand Analysis and Forecast	To forecast the required number and set of skills and competencies to meet the agency's future needs.	Agency's direction. PEST/SWOT analysis.	Forecasted number, skills &competencies required.	HR & Division Heads
3. Supply Analysis and Forecast	To determine the current manpower supply and characteristics in order to forecast what it will be in the future if no action from the management is taken.	Internal manpower supply data.	Forecasted manpower supply expected.	HR & Division Heads
4. Gap Analysis	To identify the gaps between the forecasted demand and supply in order to address them as shortfalls/surpluses that might occur as forecasted.	Forecasted demand and supply of manpower	Identified gaps in number, skills and competencies.	HR & Division Heads
5. Develop Manpower Plan	To develop HR strategies, plans and goals that will address the possible gaps identified in order to be all-ready to be executed when it occurs.	Identified gaps.	Possible HR strategies to bridge gaps.	HR & Division Heads
6. Implement Manpower Plan	To implement the manpower plan set up appropriating it to the needs of the agency within the time frame of the plan.	Formulated HR Strategies.	Outcomes from the carrying of HR strategies.	HR & Division Heads
7. Monitor, evaluate and review	To monitor, evaluate and review the outcomes and the process for feedback and improvement of manpower planning.	Outcomes of HR strategies.	Feedback and evaluation of the outcomes and the processes.	Top Mgmt, HR & Division Heads

CONCLUSION

This article has highlighted some key findings with regard to the current manpower planning practices implemented by the five sample agencies in the Malaysian Public Sector. Some possible areas of concern have also been red-flagged and need to be addressed by the relevant agencies. By leveraging on the international good practices, a generic manpower planning framework has been designed and developed. The new MPF has been validated by actual applications of the model in the PSD as well as in the five selected sample agencies.

The new MPF developed should provide a starting point for all the public sector agencies interested in identifying and addressing potential manpower issues, particularly in determining the right size and competency mix of their workforce in facing the future functional requirements. Using the framework provided, the agencies should be able to focus their attention

on several specific human resource issues and develop appropriate strategies and programmes to ensure that the next generation of managers and leaders are readily available in terms of number and competencies to take over the leadership positions in the public sector.

It should be noted that the manpower planning framework presented, as in any other management model, could be further refined, adjusted and improved. Manpower planning has always been an iterative process involving a series of small steps forward. It should be remembered that it is always better to implement something that require development than to wait for approval and direction and do nothing about it, as stated by J. Bramham:

> *"Decisions will be made whether or not they are planned, but even rudimentary planning will improve the quality of the decision made..."*

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