# THE EFFECT OF HUMAN RESOURCE PLANNING ON ORGANIZATIONS PERFORMANCE IN ACCESS BANK

**BY**

# ABSTRACT

The study examines the effect of human resource planning on organizations performance in access bank, the target population is the top management staffs of Access Bank. Primary data was used in the research work, the study adopt the simple random sampling technique while data was analysed using the regression analysis. The geographical location of the study will be Access Bank, Lagos state.

The result from the findings of this study reveals that Human resource evaluation has positive and significant effect on employee commitment in access bank Nigeria Plc, Shagamu Branch, Ogun State; Recruitment and selection has positive and significant effect on employee’s productivity of access bank plc, Shagama branch; Human resource training and development has positive and significant effect on employee’s effectiveness of Access bank; The findings from the study also reveals that human resource planning have positive and significant effect on organizational performance.

Hence, the study concluded that human resource planning has a positive and significant effect on organizational performance, it was concluded that the dimensions of human resource planning has a significant effect on organizational performance in access bank Plc at Shagamu branch, Ogun State.

The study recommended that Access bank and their human resource managers should continually carry out human resource evaluation and planning to determine in advance the demand and supply situation in the labor market prior to recruitment of employees; Access bank and their human resource managers should train their employees to prepare them to fill positions in the future; Access bank should collaborate with training institutions to develop custom tailored programmes to suit their manpower needs.

# CHAPTER ONE INTRODUCTION

* 1. **Background to the Study**

The contemporary corporate landscape is characterised by a high level of competitiveness, wherein the ability to survive and maintain long-term viability has become increasingly elusive for numerous organisations. The genesis of this competition can be attributed to the exponential expansion of technology and the overwhelming abundance of information accessible to contemporary corporate organisations. According to Makinde (2014), the implementation of this has resulted in an enhancement in the calibre of products and services provided by contemporary commercial organisations. Due to intense rivalry, firms have been compelled to cultivate specific areas of core competences that can serve as sources of competitive advantage. Therefore, it is crucial to recognise that people inside business organisations are highly important assets and can serve as sources of competitive advantage. Consequently, effectively managing and handling employees is essential for the success and long-term viability of any company organisation (Versailles, 2015). In Nigeria, there is a significant competition for talented individuals, particularly within the banking industry. Consequently, organisations must effectively manage their people resources to align with their specific requirements. According to Iraniwo (2016), human resource planning has emerged as a crucial management technique for enhancing organisational performance.

Human Resource Planning (HRP) can be defined as a proactive endeavour aimed at forecasting the future needs of an organisation and ensuring the availability of suitable individuals to meet the demands of its customers. Additionally, Bulla and Scott (2004) defined it as the systematic approach employed to identify the human resource needs of an organisation and develop appropriate plans and procedures to meet those demands. On a global scale, the primary difficulty of human resource planning (HRP) is in the process of converting an organization's strategic aims and goals into a structured timeline of workforce needs (Dimba, 2013). In contemporary business environments, the success of a company hinges upon its ability to strategically recruit and retain suitable personnel who align with the organization's vision and objectives (Plesil, 2009). Frequently, managers frequently encounter the issue of making incorrect recruiting decisions, resulting in subpar employee performance and subsequently, diminished organisational performance. Consequently, Human Resource Planning (HRP) becomes imperative (Mason, 2016). In addition, the contemporary phenomenon of trade globalisation and the emergence of new and developing economies globally have engendered a global competition for skilled individuals and workforce (Lamiro, 2014). Complaints have arisen from the Silicon Valley region in the United States of America, as an illustrative example.

The issue of talent scarcity in the technology sector has been similarly acknowledged within the engineering business (Jackson & Schuler, 2011). The aforementioned issue may arise as a result of human resource planners' inability to accurately anticipate the future demands of the sector and develop appropriate methods to address them.

Moreover, it is noteworthy that in Nigeria, the implementation of corporate governance legislation for Nigerian public businesses, mandating a specific proportion of female representation on their boards, has resulted in a significant surge in the demand for female professionals inside numerous prominent corporations in Nigeria (Akpata, 2017). This has resulted in the need for numerous firms to predict the availability of female talent and develop strategic plans to attract the most exceptional female talent (Keshinro, 2013). Moreover, Nigerian human resource managers encounter the obstacle of effectively replacing retiring personnel with individuals possessing comparable skill sets and expertise, so as to prevent the emergence of significant gaps within the organisation. The utilisation of Human Resource Planning (HRP) has been employed as a strategy to address this particular issue within various organisational contexts (Onugu, 2014). Human Resource Planning (HRP) is employed as a strategic approach to address the need for replacing personnel who are either ageing or departing, and possess unique skill sets that are valuable to the organisation. The organisations are unlikely to desire to vacate the position and consequently deprive the organisation. Consequently, Human Resource Planning (HRP) is employed to guarantee that the respective job is staffed in a manner that minimises any potential disruptions to the organisational efficiency.

Moreover, within the Nigerian banking sector, there exists a significant demand for Human Resource Planning (HRP) skills, mostly driven by the prevalent issue of high staff turnover (Worlu, 2016). Consequently, Human Resource Planning (HRP) is employed as a means to anticipate and address the vacancy resulting from staff attrition, by devising appropriate methods for their successful replacement. Human resource planning (HRP) plays a significant role in the training and development of employees within the banking industry (Worlu, 2016). The utilisation of Human Resource Planning (HRP) in the banking industry is essential for ensuring that newly hired personnel align with the cultural values upheld by the bank and contribute towards the achievement of the organization's vision, purpose, goals, and objectives. Moreover, it is evident that human resource managers within the Nigerian banking sector are confronted with a dearth of competent and proficient leaders. This scarcity arises from the fact that a substantial number of leaders who have contributed significantly to the industry's accomplishments are either advancing in age or nearing retirement (Adeyinka, 2014). The significance of effective leadership was evident in financial institutions such as Guarantee Trust Bank, where the untimely demise of their former CEO, Tayo Aderinokun, resulted in a substantial vacancy. Numerous business analysts have observed that the current CEO, Segun Abgaje, has not adequately addressed this void (Osinowo, 2017). According to the study conducted by Usman (2017), this phenomenon has resulted in

The purpose of this analysis is to evaluate the downward trajectory of Guarantee Trust Bank's business performance. Previous research papers have proposed the utilisation of Human Resource Planning (HRP) as a potential remedy for the aforementioned challenges (Worlu, 2016; Ejifor & Mbachu, 2011). Nevertheless, while the significance of Human Resource Planning (HRP), there remain certain reservations regarding its efficacy in enhancing organisational performance. Hence, the primary objective of this study is to examine the impact of Human Resource Practises (HRP) on the overall performance of organisations.

# Statement of the Problem

According to Porter (2011) for a company to attain organizational sustainability it must be run responsibly in a stable manner that ensures that the organization consistently puts in a high level of performance. However, when employee turnover is at a high level it is difficult to create the stability required to run it responsibly. The rate of employee turnover in the banking industry in Nigeria is the highest of any sector (Mukaila, 2012). This has created an environment that is unstable and has sometimes led to inconsistencies in performance of banks in Nigeria.

Furthermore, the retiring of employees and the resignation or sacking of employees create a gap that organization has to fill. However, has seen before, there have been many cases of the wrong employee being employed which has led to poor performance by the employee and the bank itself.

Furthermore, the customers of many of the leading banks are beginning to complain concerning the attitude of some employees towards them especially when handling their complaints about service failures (Hiti, 2016). This has led to loss of trust of customers in the banking sector and a loss of their loyalty (Keshinro, 2015).

Additionally, there have hardly been any studies that have tried to investigate the use of HRP in Nigeria or in the banking sector. Therefore it is against this backdrop that this study will aim to determine the effect of human resource planning on the organizational performance of Access bank Nigeria.

# Research Objectives

The general objective of the study is to determine the effect of human resource planning on the performance of Access bank Nigeria. The specific objectives are:

* + 1. To determine the effect of human resource evaluation on employee commitment of Access bank Nigeria.
    2. To determine the effect of employee recruitment and selection on the employee’s productivity of Access bank Nigeria.
    3. To determine the effect of human resource training and development on employee’s effectiveness of Access bank Nigeria.

# Research Questions

The research will attempt to answer the following questions:

* + 1. What is the effect of human resource evaluation on employee commitment of Access bank Nigeria?
    2. What is the effect of recruitment and selection on employee’s productivity of Access bank Nigeria?
    3. What is the effect of human resource training and development on employee’s effectiveness of Access bank Nigeria?

# Research Hypothesis

The following hypothesis will be tested during the course of the research:

H0(1): Human Resource Evaluation has no significant effect on employee commitment of Access bank Nigeria

H0(2): Recruitment and Selection has no significant effect on employee’s productivity of Access bank Nigeria

H0(3): Human Resource Training and Development has no significant effect on employees effectiveness of Access bank Nigeria.

# Operationalization of Variables

The variables adopted by this study are: Human resource planning and organizational performance. The study will seek to investigate the influence of Human resource planning; the independent variable, on the dependent variable; organizational performance.

The variables for this research are consequently operationalized as follows: Y = f(X)

Y = Organizational Performance X = Human Resource Planning where Y = Dependent variable

X = Independent variable y = f (x1, x2, x3…xn)

x1 = Human resource evaluation x2= Recruitment and Selection

x3= Human resource training and development y = (y1, y2, y3)

y1= Employee commitment y2 = Employee’s Productivity y3 = Employees effectiveness

y= f(x1) (1)

y = f(x2) (2)

y = f(x3) (3)

The study will focus on equation (4) above.

Based on regression, we have y1 = α0 + β1x1 + μ…. (1)

y2 = α0 + β2x2 + μ…. (2)

y3 = α0 + β3x3 + μ…. (3)

Where, α is the constant of the equation, β is the coefficient of X the independent variable where μ is the error or stochastic term in the equation.

# Scope of the Study

The study will focus on assessing the effect of human resource planning on organizations performance in Access Bank. The target population is the top management staffs of Access Bank. The study will adopt the simple random sampling technique while data will be analysed using the regression analysis. The geographical location of the study will be Access Bank, Lagos state. Finally, the study would be carried out between September 2017 and April 2018 (8 months).

# Significance of the Study

From a practical perspective, the findings of this study will be useful to top management and HR managers and practitioners in showing them to design their Human resource planning in a suitable manner that would improve organizational performance.

For the Banking sector the study will show the sector can mitigate against the malaise of employee turnover which is highest in the sector.

For the government the finding from this study is also significant in its application to the public sector. In situations whereby civil servants plan to retire they must be adequately replaced. Therefore this study will show the government how human resource planning helps solve this problem.

For society the study will provide a significant framework upon which further studies on Human Resource planning can be developed.

# Definition of Operational Terms

**Employee’s commitment:** Employee Performance Management is about aligning the organizational objectives with the employees*'* agreed measures, skills, competency requirements, development plans and the delivery of results (Nicolson, 2016).

**Human Resource Planning:** Human resource planning is a process that identifies current and future human resources needs for an organization to achieve its goals (Lair, 2015).

**Employee’s productivity:** It is a symbol of efficiency in production activities. It is a measure of efficiency of person, machine and factory in converting inputs into useful outputs (Stevenson 2013).

**Training and Development:** training is a learning activity directed towards the acquisition of specific knowledge and skills for the purpose of an occupation or task (Cole 2002).

**Recruitment and Selection:** Recruitment can be defined as searching for and obtaining a pool of potential candidates with the desired knowledge, skills and experience to allow an organization to select the most appropriate people to fill job vacancies against defined position descriptions and specifications ( Kotler 2009).

**Human Resource Evaluation:** The process of an evaluation may include one or more of these things: An assessment on how well the employee is doing. Sometimes, this may include a scale rating indicating strengths and weaknesses in key areas (e.g., following instructions, promptness, and ability to get along with others) (Michael 2014).

**Employees effectiveness:** It can be defined as the outcomes of work because they provide the Strongest linkage to the strategic goals of an organization, customer satisfaction and economic Contributions (Gichuhi, Ajaja & Ochieng 2012).

# CHAPTER TWO LITERATURE REVIEW

**Introduction**

This chapter will observe the Conceptual Review, Theoretical Review, and Empirical Review.

# Conceptual Review

In this section, the concept of human resources planning and employee performance and their measures were discussed in detail. These are shown below.

# Human Resource Planning

Human resource planning (HRP) is described as the process of identifying current and future needs of the human resource so that an organization may achieve its goals (Reilly, 2003). Human resource planning (HRP) is a crucial process in every organization. It is essential to conduct human resource planning (HRP) because if the wrong employees are hired it could lead to failure in the organization and it could also be costly in the long run. The process of HRP ensures that, an organization’s employees have the requisite skills and competencies an enterprise needs for it to succeed (Ghazala & Habib, 2012). Gupta (2008) adds that, HRP prepares employees for potential rationalization. It further enables a firm to make adequate preparations for recruitment and strategic hiring.

Human resource information system (HRIS) is a concept that is associated with human resource planning. This concept is necessitated by the dynamic environment. It is employed to facilitate effective planning of human resources. The primary essence of HRIS is to store employee data in a manner that enhances the pace of the ordinarily slow HRP. HRIS is also said to aid human

resource managers in their strategic activities of training and development, succession planning, applicant tracking in recruitment and selection, and manpower planning. It can also play a major role in identifying vacant positions and positions that are occupied in an organization. The role of HRIS in HRP is further underscored by Bal et al. (2012) who asserted that, HRIS support activities such as identification of potential employees, maintaining complete records on existing employees and creating programs to develop employee talents and skills. Essentially, therefore, the role of human resource planning in any organization cannot be underestimated.

# History of Human Resource Planning

Human Resource planning has been criticized as speculative and over-mathematical. Nevertheless, proponents argue that rather than attempting to predict the future, the value lies in challenging assumptions and stimulating thinking. Human resource planning has been recognized to be an important process in organization from the past. To mention about the statement above, it represents that human resource planning has focused more on quantitative and missed the qualitative part. In other words, most managers in organizations relay on theories and statistics over their own opinions and observations.

The whole Human Resource planning is an evolving process as it is a part of Human Resource management; it is an evolution from scientific management developed in the late 19th century by Frederick Winslow Taylor and the System Theory by Niklas Luhmann. The concept of HRP was drawn upon from these classical approaches, thus the core consideration while developing a HRP is theory-based, as the guidelines and the framework are set. These approaches were sufficient and commonly used in the late 19th and early 20th century as the majority of the workforce was engaged in productions and factories. And yet the contemporary human resource planning is facing a lot of challenges and instabilities such as demographic and political changes, intense international competitions, expensive and rapid development of technologies, and rising demand of customers. Because of all of these changes and development, they have shifted the nature of Human resource planning from being just plain predictions to including personal assumptions and thoughts in order to prolong the 'life' of HR planning.

# Effects of Human Resource Planning

According to Mursi (2003), there are significant and positive relationships between HR planning and organizational performance. In another study by Hiti (2000), HR planning have a positive relationship with organizational performance. In another study by M Arsad (2012) manpower planning effect on organizational performance and have a positive relationship between manpower planning an organizational performance. Study by Chand and Katou (2007) in their study in the Indian hotel industry were also found out that manpower planning have strong relationship to productivity, and productivity impact on organizational performance. It is also known that Training and development is an important element of human resource management (HRM). Training is defined as the organized activity aimed at imparting information or instructions to get better the staff performance or attain a required level of skill or knowledge to help him or her (Saed & Asgher, 2012). Training is also the process of teaching and learning a skill or a job.

Development is defined those activities that lead to the attainment of fresh skills or knowledge for the sole aim of personal growth. (Peteraf, 1993). Study by Apospori, Nikandrou, Brewster & Papalexandris, (2008) suggested that there is a significant impact of training and development on organizational performance. Subramanian et al. (2011) mentioned that training and development could influence organizational performance because employees’ skills, knowledge and abilities can be enhanced and up to date. In another study by Dimba, (2010) found that There are the influence and relationship between training and development on organizational performance. Development is also an incident that causes a situation to change or progress.

Companies have been advised to develop mission statements and elaborate strategy definitions, which provide direction, goals and profitability targets for their activities. They should also create specific functional strategies, such as financial management or marketing strategies, which define how the companies will allocate their resources in order to achieve their mission and goals. The exercise of strategic planning helps managers to analyze the relevant environmental and internal conditions, in order to anticipate opportunities and threats and therefore improve organizational performance. According to this logical instrumentalism perspective (Quinn, 1978), the top management teams set the corporate strategy and sub-units develop specific strategies and tactics needed to respond effectively to environmental challenges (Wright, McMahan & McWilliams, 1994). The implementation of corporate and functional strategies depends on the companies ‘resources and, particularly, on people.

The human resource strategy focuses on how the company should manage its staff to assist the organization in the achievement of corporate objectives (Walker, 1992, Schuler & Jackson, 1987). As such, it is argued that companies with explicit mission statements and corporate strategies could be expected to have developed aligned human resource strategies to address the issues relevant for strategy implementation (Schuler & Jackson, 1987). Thus, the strategy pursued by the company is correlated with the needs of human resources, the skills that must be acquired, or that are already possessed, and the types of control systems to ensure the achievement of business goals. According to the resource-based view of the firm, strategies are contingent on having the human resources needed for their implementation (Wright, McMahan & McWilliams, 1994).

Positive correlations have been found between the degree of planning formality and firm performance (Lyles et al, 1993; Pearce, Robbins & Robinson, 1987) because greater emphasis will be placed on improving the quality of the strategic decision making process, such as goal formulation, developing distinctive competences, determining authority relationships, deploying resources and monitoring implementation. Tregaskis (1997) also found that organizations with a formalized HR strategy had a higher probability of adopting practices in line with high performance work systems than those with informal or no HR strategy.

# Methods of Human Resource Planning

John (2008) elaborated that usually a five step process is used for creating a linkage between HR or workforce planning and departmental planning to regulate the current and future requirements and demands of the human resource. These steps include: 1. Determination of business goals. 2. Environmental Scanning (that includes a workforce analysis, and an internal and external scans as well). 3. Performing gap analysis. 4. Deciding HR priorities. 5. To measure, monitor, and report the progress.

To establish HR priorities is the main reason for listing the steps above involved in creating a linkage between HR or workforce planning and departmental and strategic planning.

# STEP 1: Determination of business goals:-

For smooth running of business, organizations need to identify and determine their business goals and prepare government documents including budget speeches and other necessary documents including strategic and business plans (John, 2008). This is important in order to understand governmental regulations, deciding on organization’s and department’s HR priorities and to cope with changing and new emerging environmental trends.

# STEP 2: Environmental Scanning:- Analysis of workforce

John (2008) mentioned that after determining the business goal, next step is to address theneed to understandthe workforce as well as to plan about the necessary workforce (shortage and surplus) with specific skills and knowledge. There is need to undergo the workforce analysis. Characteristics such as age, gender, skills, competencies, etc. are vital to look at; also some internal factors such as eligibility criteria, vacancy, turnover rate, etc. are significant for conducting workforce analysis.

# Internal scanning

According to John (2008) internal scan mainly looks at identifying the factors that have an effect on the organization’s work force capabilities necessary to meet the departmental goals. Barret et al. (2006) mentioned that internal analysis gives attention to workforce trends including their age distribution, and portion of positions filled by internal candidates.

Each department is responsible for identifying the internal opportunities and challenges. It is necessary for the organization to make and retain strengths to face and reduce the risks and challenges to attain success.

# External scanning

Barnard et al. (2006) advised that external analysis should not be a time consuming process. All the potential changes that may occur and their influences may be reviewed by the planning team. Also, team should look at the how the changes impact the organization, its work and recruitment and selection patterns, process of training, retaining and developing the required workforce.

# STEP 3: Performing gap analysis:-

John (2008) explained how to recognize the business goals and requirements and how these may help forecast the future hiring needs, in terms of the number of employees, skills, and work experiences required.

On the basis of departmental goals, priorities and environmental scanning, McGraw-Hill Ryerson (2000) determined the current and future HR requirement. Following questions are found to be helpful in identifying the HR needs and requirements for gap analysis.

1. Do the organization have succession plans for critical positions?
2. In order to bring changes in delivery system, do acquiring new skills necessary?

# STEP 4: Deciding HR priorities to help achieve departmental goals:-

McGraw-Hill Ryerson (2000) explained that after looking at the results of gap analysis, some HR priorities must be decided and strategies to attain the desired outcomes should be developed that must be acknowledged by the department.

**STEP 5:** Measuring, Monitoring, and Reporting the progress**:-**

John (2008) mentioned that while evaluating the progress of the targeted area, monitoring, assessing and presenting the results of HR performance is highly critical. It brings improvements in the skills, and capabilities of the employees and organizational learning so as to meet future demand.

# Developing and Retaining Staff Strategies Capacity building

If an organization wants to meet future needs and requirements then the employees must be capable to perform. It would become possible only when the employees are committed to continuous learning and development and are ready to avail the career development opportunities.

Learning and development is not only important to get the competitive benefit but also it is necessary to boost talent and delivery of best services and performances. John (2008) explains that in order to retain the top talent and to deliver the best services there should be access to the learning as well as knowledge and skill enhancement programs by performing the challenging tasks because when challenging tasks are assigned, employees will struggle more and try to find new knowledge related to assigned task. This will enhance their knowledge and skills, and increase their confidence.

# Relationship building:

Providing a significant learning opportunity using a sense of real work is the main ingredient of this activity. For example, organization may consider arranging such programs in different work departments including: Apprenticeships, Internships, Workshops and Part time employment.

# Assignment opportunities:

Employees get the opportunity to work in the other departments of the organization where the work is different and also there is a need of an employee to complete it. Such opportunities are known as reassignment opportunities. Employers’ requirement is also fulfilled this way and also offers at hand learning opportunities to the employees.

Barnard et al. (2006) said that participating in formal succession planning and development programs does not a guarantee employee replacement. Candidates need to face competition on open positions. Succession planning goals may be short term or long term. Following are the factors that measure succession planning: Presence of diversified and qualified pool of talent, Leaders’ effectiveness is developed through the process and the succession planning and the department’s workforce planning processes should be integrated.

# Concept of Human Resource Evaluation

In the workplace, an evaluation is a tool employers use to review the performance of an employee. Usually, the employee's supervisor (and frequently, a more senior manager) is responsible for evaluating the employee. A private conference is often scheduled to discuss the evaluation.

The process of an evaluation may include one or more of these things: An assessment on how well the employee is doing. Sometimes, this may include a scale rating indicating strengths and weaknesses in key areas (e.g., following instructions, promptness, and ability to get along with others). Often, the supervisor and manager will discuss the key areas. Or, as some have dared to expose, employers often time don't care about following instructions, arriving on time, or the ability to get along with others. Michael Lewis (author), non- fictional author, once wrote about working at a financial institution: "The bosses rightly cared far more about how much money we squeezed from our customers than how much time we spent squeezing."

Employee goals that are expected to be met (or have significant progress made) by a set time, such as the next evaluation. Sometimes, the employee may voluntarily offer a goal, while other times it will be set by his boss. A significantly underperforming employee may be given an

performance improvement plan, which details specific goals that must be met to maintain his/her job. Sharing of feedback by a worker's fellow employees and supervisors. The employee is given his chance to share his/her feelings, concerns and suggestions about the workplace as well. Details about workplace standing, promotions and pay raises. Sometimes, an employee who has performed very well since his last review period may get an increase in pay or be promoted to a more prestigious position.

However, a pay raise that is denied is not always the result of a poor review, as economic conditions and other factors dictate the ability for employers to raise their workers' pay. The frequency of an evaluation, and policies concerning them, varies widely from workplace to workplace. Sometimes, an evaluation will be given to a new employee after a probationary period lapses, after which they may be conducted on a regular basis (such as every year). According to the 2014 Performance Management survey, 96% of employers perform annual performance evaluations and 44% of employers perform a 90-day performance review for new employees.

# Concept of Employee Recruitment and Selection

Recruitment can be defined as searching for and obtaining a pool of potential candidates with the desired knowledge, skills and experience to allow an organisation to select the most appropriate people to fill job vacancies against defined position descriptions and specifications. The purpose of the recruitment process is to find the widest pool of applicants to provide the greatest opportunity to select the best people for the required roles in an organisation. Acquiring the best applicants for a role can be a competitive advantage for an organisation whereas ineffective recruitment and selection can result in enormous disruption, reduced productivity, interpersonal difficulties and interruptions to operations, customer service and long term costs.

Once a pool of candidates has been identified through the recruitment process the most appropriate candidate, or candidates are identified through a selection process including but not limited to interviewing, reference checking and testing. The purpose of the selection process is to ensure that the best person or people are appointed to the role or roles using effective, fair and equitable assessment activities.

Having an effective recruitment strategy is paramount to the success of any organisation. The recruitment and selection function can become a costly and inefficient process if not approached in a systematic and proactive manner. A recruitment and selection strategy: Ensures the organisation has the necessary skills, knowledge and attributes to meet current and future strategic and operational requirements Ensures supply meets demand requirements Increases the pool of potential applicants Improves the selection process by ensuring that only those applicants that meet the requirements of the position are selected for further investigation Can impact on the likelihood that a suitable candidate will accept a job offer Increases organisational effectiveness

# Concept of Human Resource Training and Development

According to Cole (2002), training is a learning activity directed towards the acquisition of specific knowledge and skills for the purpose of an occupation or task. The focus of training is the job for example, the need to have efficiency and safety in the operation of particular machines or equipment, or the need for an effective sales force to mention but a few. Training is the planned and systematic modification of behaviour through learning events, activities and programs which results in the participants achieving the levels of knowledge, skills, competencies and abilities to carry out their work effectively (Gordon 2002).

According to Oxford Advance Learner’s Dictionary, training is the process of preparing somebody or being prepared for job. In manpower development, training is therefore an indispensable element and at the same time, a vehicle for development and planning. According to Cole (2002), training is a learning activity directed towards the acquisition of specific knowledge and skills for the purpose of an occupation or task. The focus of training is the job for example, the need to have efficiency and safety in the operation of particular machines or equipment, or the need for an effective sales force to mention but a few. Training is the planned and systematic modification of behaviour through learning events, activities and programs which results in the participants achieving the levels of knowledge, skills, competencies and abilities to carry out their work effectively (Gordon 2002). Pheesey (2001) defined training as the systematic process of altering the behaviour or attitudes of employees in a direction to increase the achievement of organizational goals. This means for any organization to succeed in achieving the objectives of its training program, the design and implementation must be planned and systematically tailored towards enhancing performance and productivity.

Most organizations have long recognized the importance of training to its development. As new technology progresses, making certain jobs and skills redundant, an increasing emphasis is being placed on the need for a skilled and highly trained workforce. Many of the jobs being replaced by machines have been of an unskilled and semi-skilled nature, and this emphasizes the need for higher education and skills for those wishing to gain employment in the future. According to Armstrong (2006), expressing an understanding of training emphasizes that training should be developed and operated within an organization by appreciating learning theories and approaches if the training is to be well understood.

This was also affirmed by Sherman (2006). They expressly indicated that the success of a training program depends more on the organization’s ability to identify training needs and the care with which it prepares the program so that if the trainees do not learn what they are supposed to learn, the training has not been successful. They further indicated that training experts believe that if trainees do not learn, it is probably only because some important learning principle had been overlooked. What they are saying is that the success or failure of a training program is frequently related to the recognition and application of basic psychological principles of learning.

McGhee et al (2006) wrote on the nature of learning and said learning is a term used to describe the process by which behavioural changes results from experience. They also said the fact that learning has occurred could only be inferred from a comparison of an individual’s behaviour prior to the experiences of specific kinds of task. This is not to say that there has been no learning if there is no overt behavioural change. Since training generally is intended to provide learning experiences that will help people perform more effectively in their jobs, organizational training should follow the learning principle.

Training therefore can be explained as a planned and systematic effort by management aimed at altering behaviour of employees, in a direction that will achieve organizational goals. A formal training program is an effort by the employer to provide opportunities for the employee to acquire job-related skills, attitudes and knowledge, (McGhee et al, 2006).

# Organizations Performance

The concept of organizational performance is based upon the idea that an organization is the voluntarily association of productive assets including human, physical, and capital resources, for the purpose of achieving a shared purpose (Alchain, 2012). Organizations are commonly defined as instruments of purpose. According to March and Sutton (2007) organizations are seen to be coordinated by intentions and goals. An organization cannot be said to be made up of a unitary organ there must be multiple forces coming together for an organization to be called an organization. The main objective of an organization is either profit and growth or profit or growth. Business firms are compared in terms of profit, sales, market share, productivity debt ratio and stock prices. Firms use their various abilities within them to achieve their organizational objectives; this is called organizational performance.

# Concept of Organizations Performance

Every organization has been established with certain objectives to achieve. These objectives can be achieved by utilizing the resources like men, machines, materials and money. All these resources are important but out of these the manpower is the most important. It plays an important role in performing tasks for accomplishing the goals. The question arises that how these resources are utilizes by manpower. Further, the business environment is changing drastically. The environmental factors are uncontrollable. These are beyond control of management of the firms. One has to adjust with the external factors to do the business in the market. Every environmental factor like social, cultural, legal, political, economic, technology and competition gets changed very fast.

For effective working the knowledge of these factors is must otherwise the plan will misfire. In present situation it is difficult to predict about anything. It is uncertain to say that what will happen tomorrow. Again the need for highly skilled and dedicated manpower is felt who can give the best output. Nowadays the markets are also very competitive and there is cut throat competition. For every organization it is difficult to start, survive, stabilize and excel in the business. The firm that gets the advantage over other competitors through their talented and dedicated manpower can take the lead in the market. The contribution of employees on job is the most important factor for development and excellence in business. The performance of employees on different jobs in close coordination is needed for success of the unit.

Employees are performing different jobs in an organization depending upon the nature of the organization. They mainly perform tasks like production, storage, manufacturing, transportation, marketing, purchasing, distribution, promotion of business, finance and accounting, human resource, research and public relations. All these activities are inter-related to achieve the targets. These are to be performed by the employees properly so they can give their best output at the job. This will have great impact on the total production, sales, profit, progress and market position of the company in the market. Various factors like skills, training, motivation, dedication, welfare, management policies, fringe benefits, salary and packages, promotion, communication etc. are responsible to encourage the people to work sincerely and give their best output. The importance of employees’ performance must be understood by the management and sincere efforts must be put in that direction. The management of the company taking timely steps in that direction will be in position to develop and motivate the people to do so. Finally the company may take the lead the market and grab the opportunities available in the market.

# Concept of Employee’s Productivity

Employee’s productivity is a symbol of efficiency in production activities. It is a measure of efficiency of person, machine and factory in converting inputs into useful outputs. Productivity has been defined in many ways. According to Stevenson (2013) productivity is a measure of the effective use of resources, usually expressed as the ratio of output to input. Roy (2005) defined productivity as human endeavor of effort to produce more and more with less and less of inputs or resources so that the products can be purchased by a large number of people at affordable price. To Scott Grant (2011) productivity is about effective and efficient use of all resources.

In computing productivity, measures can be based on a single output input. When this is considered, it is called partial productivity. Also when productivity is based on more than one input, then it is called multifactor productivity. More so, when productivity measure is based on more than one input, it is called total Productivity.

# Concept of Employee’s Effectiveness

Organizational effectiveness is an index of organizational efficiency which according to Pekuri and Haapasalo (2011) occur as a result of relationships between various inputs measured in terms of man hour, quality of work supervision, employee commitment on the job, yielding to an

output. Gichuhi, Ajaja & Ochieng (2012) referred to effectiveness as doing the work, as well as being about the results achieved. It can be defined as the outcomes of work because they provide the strongest linkage to the strategic goals of an organization, customer satisfaction and economic contributions. Performance management according to Mankidy (2012) is any integrated, systematic or collaborative way of improving organizational performance directed at achieving strategic aims of an organization in line with its mission, values and goals. In that sense organizational performance management is quite different than individual performance management which specifically targets the personal performance of an employee although the latter comprises an essential part of the overall organizational performance framework. In fact, a performance management system based on the observation of Salem (2013) aims at improving the results of people’s efforts by linking these to the organization’s goals and objectives. According to Mwema & Gachunga (2014) it is, ideally, the means through which employees’ performance can be improved by ensuring appropriate recognition and reward for their efforts, and by improving communication, learning and working arrangements.

# Concept of Employee Commitment

Every organization has been established with certain objectives to achieve. These objectives can be achieved by utilizing the resources like men, machines, materials and money. All these resources are important but out of these the manpower is the most important. It plays an important role in performing tasks for accomplishing the goals. The question arises that how these resources are utilizes by manpower. Further, the business environment is changing drastically. The environmental factors are uncontrollable. These are beyond control of management of the firms. One has to adjust with the external factors to do the business in the market. Every environmental factor like social, cultural, legal, political, economic, technology and competition gets changed very fast.

For effective working the knowledge of these factors is must otherwise the plan will misfire. In present situation it is difficult to predict about anything. It is uncertain to say that what will happen tomorrow. Again the need for highly skilled and dedicated manpower is felt who can give the best output. Nowadays the markets are also very competitive and there is cut throat competition. For every organization it is difficult to start, survive, stabilize and excel in the business. The firm that gets the advantage over other competitors through their talented and

dedicated manpower can take the lead in the market. The contribution of employees on job is the most important factor for development and excellence in business. The performance of employees on different jobs in close coordination is needed for success of the unit.

Employees are performing different jobs in an organization depending upon the nature of the organization. They mainly perform tasks like production, storage, manufacturing, transportation, marketing, purchasing, distribution, promotion of business, finance and accounting, human resource, research and public relations. All these activities are inter-related to achieve the targets. These are to be performed by the employees properly so they can give their best output at the job. This will have great impact on the total production, sales, profit, progress and market position of the company in the market. Various factors like skills, training, motivation, dedication, welfare, management policies, fringe benefits, salary and packages, promotion, communication etc. are responsible to encourage the people to work sincerely and give their best output. The importance of employees’ performance must be understood by the management and sincere efforts must be put in that direction. The management of the company taking timely steps in that direction will be in position to develop and motivate the people to do so. Finally the company may take the lead the market and grab the opportunities available in the market.

# Theoretical Framework

The theoretical underpinning of study was hinged on the human capital and human resources theories, the resource base theory and motivational theories. These theories were also related to the concepts examined and they are explained below;

# The Human Capital Theory

According to Marimuthu, Arokiasamy and Ismail (2009), the theory of human capital was rooted from the field of macroeconomic development theory. According to them, Becker’s (2003) in the explanation of the theory argued that there are different kinds of capitals that include schooling, a computer training course, expenditures on medical care. And in fact, lectures on the virtues of punctuality and honesty are capital too. In the true sense, they improve health, raise earnings, or add to a person’s appreciation of literature over a lifetime. Consequently, it is fully in keeping with the capital concept as traditionally defined to say that expenditures on education, training, and medical care, etc., are investment in capital. These are not simply costs but investment with

valuable returns that can be calculated. From the perspective of Classical Economic Theory, human capital considers labour as a commodity that can be traded in terms of purchase and sale. This classical theory very much focuses on the exploitation of labour by capital.

However, unlike the meaning traditionally associated with the term labour, human capital refers to the knowledge, expertise, and skill one accumulates through education and training. Emphasizing the social and economic importance of human capital theory, Becker (2003) noted the most valuable of all capital is that investment in human being. Becker distinguished firm- specific human capitals from general-purpose human capital. Examples of firm-specific human capital include expertise obtained through education and training in management information systems, accounting procedures, or other expertise specific to a particular firm. General-purpose human capital is knowledge gained through education and training in areas of value to a variety of firms such as generic skills in human resource development. Regardless of the application, Becker considers education and training to be the most important investment in human capital.

# Resource Base View (RBV) theory

The resource-based view (RBV) is a theory that sees resources as key to superior firm performance. According to the theory, if a resource exhibits capacity Valuable, Rare, Inimitable, Organizationally Aligned (VRIO) attributes, the resource enables the firm to gain and sustain competitive advantage. The supporters of the view argued that organizations should look inside the company to find the sources of competitive advantage instead of looking at competitive environment for it. The major assumption of the Resource Based View is that companies achieve competitive advantage by using their different bundles of resources.

# Human Resource Management, Motivational Theories

Personnel management concept deals with the utilization of employees for administrative purposes, with less concern about employee upgrade or development for further personal and economic transformation. This gave rise to contemporary human resources management practices in which its major premise were centered on the utilization of employees, not in a use- and-dump manner, but in such a manner that an individual employee will grow in techniques and skills as this would aid the achievement of the overall organizational objectives while employee performance increases.

Human resource management is concerned about the understanding, empowering and employee motivation in order to improve employee workplace performances. However, the basic premise of the motivational theories were centered on the fact that the human elements in an organization, or human resources should be motivated with different types of motivation for the improvement of employee performances. This was confirmed in the Hierarchy of needs theory and the hygiene or the Two- Factor theory of motivation as propounded by Abraham Maslow and Frederick Herzberg. While Maslow explained the need for organizations to recognize and satisfy employee physiological and psychological needs, Herzberg stressed the need for the recognition and satisfaction of hygiene and hygienic factors.

Motivational factors have been categorized as intrinsic and extrinsic. Examples of the intrinsic motivators are responsibility, organizational growth, recognition, challenging work, achievement and many more while the extrinsic motivation are wage, fringe benefits, training programmes, good working condition and many more. While motivational theories have not explicitly specified a single particular motivational tool for employee motivation, the human capital theory has stressed the need for organizations to ensure that their employees are trained accordingly with the appropriate skills and techniques. Following the human capital theory, organizations should adopt training of its employees as a motivational tool to getting the best out of its employees, increasing their workplace performance.

# Empirical Review

Moyo (2015) examined the contribution of human resources planning in public institutions. The specific objectives of the study were to determine the relationship between Human Resources Planning and institutional performance, to analyse the factors that will lead to effective implementation of HRP at MDC and examine the outcome of Human Resources Planning in public institution towards its performance. Mlele District council was used as a case study. Sample selection involved a simple random sampling was 50 employees were selected as a study sample. Data were collected through Questionnaires, and other document review. The collected data were edited, organized to meaningful way and were analyzed and presented in by using quantitative and qualitative research procedures. The major findings show that poor planning of HR has an impact on organization performance as the response from the respondents shows

inadequate priority for HRP; there exist a lot of problems during process of HRP as insufficient top management support, insufficient funds, as well as shortage of expertise.

Al-Qudah, Osman, Ab Halim and Al Shatanwi (2014) examined the effect of human resources planning and training and development on organizational performance in government sector in Jordan. It investigated the factors that affect HR planning, training and development in Jordanian ministries. The study population, which consisted of employees in the HR departments in 23 Jordanian ministries, comprised 166 respondents. To achieve the study objectives, the researcher developed and distributed a questionnaire, and collected and analyzed the data using SPSS. An overall analysis was performed based on the descriptive statistics and correlation analysis. The results indicated that HR planning, training and development significantly correlated with the organizational performance in the Jordanian Ministry.

Afal, Mahmood, Sajid and Hassan (2013) examined the effect of human resources planning on organizational performance in telecom sector. Objective of the study was to determine key determinants of formal human resource planning that contributes towards performance in the telecom sector. The data collected from top managers, middle level managers and the first line HR managers of 50 offices including head offices and regional offices of 160 questionnaires including some interview and open ended questions based on the measures of performance and Human Resource Planning. The results from the factor analysis on HRP measures selection, training, and incentives and the organizational performance measures which are job satisfaction, efficiency, employee motivation and technology constitutes significant and a positive relationship with other. As modern HR practices are implemented in telecom sector and companies would spend more on Human Resources, it would lead towards High performance achievement.

Hassan (2016) examined the impact of human resources planning on employee performance. Random sampling technique was used to collect data for this research study. A questionnaire based on 34 items was distributed among 68 employees of textile industry for data collection. To check the association between HRM practices and employee’s performance, Pearson correlation statistical technique and regression analysis was applied on the data. The results indicate that HRM practices Compensation, Career Planning, Performance Appraisal, Training, and Employee Involvement have a positive impact on employee’s performance.

Hammed & Waheed (2011) did a conceptual framework on employee development and its affect on employee performance. According to them, employee development is an important human resources management function that both positively influences the individual and the organization as a whole. In their conceptualization, they proposed two basic framework showing relationships between sub-variables of employee development which leads to employee performance. Using Lee and Bruvold (2003), they explained that investments in perceived developmental activities of the employee are important in order to increase the employee performance. As investment in perceived developmental activities also provide the organization as a competitive advantage. Therefore, if organizations would focus on employee developmental activities, this would help in enhancing the skills of the employees. Further, as their skills are enhanced, they would be able to develop their own realistic career plan and thus lead to increase organizational effectiveness (Hammed & Waheed, 2011). The resolved model developed by Hammed and Waheed (2011) showed that skill growth, employee learning, self directedness and employee attitudes are employee development approaches that positively influences employee performance and as well affect the overall organizational effectiveness.

Oyitso & Olomukoro (2012) showed how training and retraining of employees can enhance task performance. According to them, human being is the central of productivity in any organization. However, productivity cannot be achieved at the neglect of the detriment of individual employee skills improvement. They showed different definition of worker amongst which was used was the definition that worker is any individual who is engaged in a particular service in anticipation of agreed wages to be paid in return for the services he renders to his employer (Imhabekhai and Oyitso, 2000). It was argued that training involves a wide range of professional activities for workers which contribute to their enhancement of work, however re-training of workers involves the updating of worker’s skills, knowledge, attitude, work habits and competencies to enable them perform their assigned responsibilities creditably (Imhabekhai, 2000). Re-training is a function of observed training needs and the amount of changes which have taken place in the techniques of production. Types of training that can be used on Nigerian workers according to them were on-the-job and off-the-job training. They further stressed that training and re-training help worker to become more confident in themselves and have a sense of belonging and commitment to the achievement of organizational goal. Hence, if workers receive necessary educational and developmental opportunities necessary to perform their work well, they will not

only work with dedication but will aspire to achieve excellence on the job (Ajileye, 1992). The concluded that training serves as a motivating force in improving the efficiency and productivity of the workers in Nigeria, Thus, for any organization to maintain higher productivity, the organization must engage in training and re-training of its workforce to meet technological changes taking place in the world of work. This is to ensure improved performance on the job and boost the morale of workers in Nigeria (Oyitso & Olomukoro, 2012).

Raja, Furqan & Muhammed (2011) focused on understanding the effect of Training and Development, On the Job Training, Training Design and Delivery style on Organizational performance. They did a critical review of empirical studies which provided way for the identification of gaps and as well formed a basis for their hypothesis development. Thus, four Hypotheses are developed to see the Impact of all the independent variables which are Training and Development, On the Job Training, Training Design and Delivery style on the overall Organizational Performance. Their results further showed that all the independent variables significantly and positively affect the organization, thus making the reviews consistent with their findings. They recommended with hypothesis through empirical data that organizations should provide training and development to their employees as Training and Development have advantages not only for employee but the ultimate benefit is for the organization itself (Raja et al, 2011).

Sultana, Irum, Ahmed & Mehmood (2012) examined the impact of training on employee performance in the telecommunication sector in Pakistan. They believed that regardless of all the resources of machine, money and materials, man which is the human resources is the most important element that is responsible for appropriate utilization of other organizational resources. They further argued that for any organization to succeed in achieving the objectives of its training program, the design and implementation must be planned and systematic, tailored towards enhancing performance and productivity. The authors subjected empirical literature to critical review in order to provide a justification for their arguments. Questionnaire was the data collection instrument used for survey. Thus, 360 questionnaires were distributed among the employees of five telecom companies. They observed that most organizations met their needs for training in an ad hoc and haphazard way while others set about identifying their training needs, then design training activities in a rational manner and finally assess the results of training. They

concluded that if organizations invest in right type of employee training it can enhance employee performance as well as competencies and skills. It was added that training is a useful means of coping with changes triggered by technological innovation; market competition, organizational structuring and most importantly it plays a key role to enhance employee performance (Sultana et al, 2012).

Obisi (2011) studied employee training and development in Nigerian organizations. According to him, the ultimate aim of any training program is to add value and once a training program cannot add value, it should be reworked or altogether cancelled. Without training, it will be very difficult to acquire skills and without skills organizations will not achieve its objectives through people. He explained that some organizations see training as an expensive venture and may put embargo on training and utilize the money for other projects in the organization. Thus, organizations must encourage learning organizations through its serious approach to training and development. Consequently, a leadership organization is one which continuously enhances the skills of its entire workforce. Therefore, organizations should show in words and indeed its resolve to place high emphasis on training by having a training philosophy, identifying training needs, training objectives, training administration and also evaluating training needs. The study discovered that organizations show poor attitude to training administration by not preparing and equipping their trainees before, during and after a training program. More importantly, he advised that research efforts should be devoted to identifying missing gaps in the reviewed materials. Priority would be given to empirical analysis of the significance of identifying specific and appropriate needs before venturing into training and the reason why training fails (Obisi, 2011).

Onula and Kassim (2012) examine the effects of manpower development on worker job performance. The objectives of the study was to explain the concept of manpower development, determine if manpower development has effect on organizational performance, ascertain how to identify training and development needs in an organization, determine if lack of manpower development programmes leads to low productivity, and ascertain the link between poor development programmes and labour turnover. The study outlined the benefits of manpower development in modern business organizations. One hundred employees of a manufacturing

outfit were used as sample. Data from the study were analysed using descriptive and inferential statistics particularly chi-square distribution test. Findings revealed that capital, equipment, manpower among others contributed to the company’s success. The most significant of these was the human factor. This was so, because it is the human who pools other resources together for objective realization. Thus, manpower development should be given top priority management attention. Also, human beings constitute the ultimate basis of a nation’s wealth and an organization’s assets. Therefore, according to Onuka & Kassim (2012), it is imperative for the organization to continuously build the capacity of its human capital on which the huge responsibilities of achieving the organizational goals rest. It was, therefore, recommended that organizations in Nigeria should embrace manpower development as Corporate and Management strategy to continuously improve knowledge, skills and attitude required by employees to perform creditably on a given task or job and cumulatively enhances organizational productivity and optimizes corporate profitability (Onuka & Kassim, 2012).

Abeeha and Bariha (2012) examine the effects of employee training on the organizational competitive advantage, According to them, Non Government Organizations existed in Pakistan are performing noble work with welfare and rehabilitation to less fortune people. These organizations are facing problem of staff turnover, due to lack of motivation and low employees’ satisfaction level. These two factors could be addressed through extending opportunities of learning, developing and imparting on- hand training and workforce experience. Training & Development facets include learning experience, training quality and training design. The effect of employees training has been analyzed as to how it brings competitive advantage to an organization. Variables were analyzed through the results of various scholars on the subjects. Result reveals positive relations between training & development and competitive advantage. On the origin of these outcome, it have be recommended that trainer quality, training design and learning experience shall be accorded due consideration for deriving job satisfaction. Learning ability and education shall be given importance upon selection of employees. To improve training outcome, feedback from the employer shall be obtained and improvement are instituted (Abeeha & Bariha, 2012).

Olumiyiwa, Adelaja and Chukwuemeka (2012) in their study, looked at Training and Development, as a vital tool for Organizational Effectiveness. The study made use of primary

data and questionnaire were distributed to one hundred Staff of Sterling bank Nigeria Plc and Spearman’s rank Correlation coefficient was adopted as the estimation techniques. Moreover, the objectives of the study was to examine the impact of staff training and development on Organizational Effectiveness and to also examine whether through Staff training and development of employees in Sterling bank Nigeria Plc, the bank’s performance has been enhanced. The result of the study reveals that Staff Training and development has a significant effect on organizational effectiveness and that Staff Training and development has enhanced employees’ performance in Sterling bank Nigeria Plc. Therefore, the study recommended and concluded that the training and development is a vital tool to achieve organizational effectiveness in Sterling bank Nigeria Plc and management training, leadership skills, language and technical skills training, should be the interest of the management of Sterling bank Nigeria Plc (Olumiyiwa, et al., 2012).

Stephen and Vincent (2012) in their study asserted that manpower training and development are based on the premise that skills need to be improved for organization to grow. Physical, social, intellectual and mental training is very essential in facilitating the level of productivity and development of personnel in an organization. Absence of these programmes result to incompetence, inefficiency and ineffectiveness of employees in organization. The study was a survey/descriptive research conducted among one hundred (100) employees of selected business organizations in Oredo local government area of Edo state, Nigeria with headquarter in Benin- City. Five Likert point structured questionnaires containing thirty five (35) items were used as instruments for data collection. Results from the study showed that organizational performance depends largely on manpower training and development. In view of this, the researchers recommended that business organizations should have regular and well-though out training programmes for their employees. Indeed, the researchers also called for the involvement of experts in the design and implementation of manpower training and development programmes in the organization (Stephen & Vincent, 2012).

Monday (2009) examined manpower development in Nigeria using a conceptual and methodological perspective. The work unfolded manpower development from the conceptual and methodological perspectives. On the conceptual perspective, the study analyzed the effort of the Nigerian State at developing manpower vis-à-vis the efforts of organizations at manpower

development and eventually situating the concept manpower development as encompassing both State and organizational efforts. On methodological perspective, organizational techniques for manpower development were discussed; the relevance and problems against manpower development in Nigeria were unfolded with the researcher stated the options of enhanced government regulatory capability and persuasive device as means of improving manpower development in Nigeria (Monday, 2009).

Yakubu and Kamba (2011) studied manpower training and development for sustainable jog performance in public organization. The training and development of human resources in any organization be it public or private is widely acknowledged as a realistic step toward enhancing job performance. Manpower training is therefore, a field that needs special attention at all times in human history. Human resources are active agents that accumulate wealth for the nation, exploit material resources, build social, economic and political organizations and assist in national development of a country. That is, if the public service has sufficient and effective personnel, with suitable and relevant skill and knowledge, there is every possibility for achieving its aim and objectives. Lack of provision of accommodation and working facilities have a great effect on manpower efficiency and effectiveness in public organization in Nigeria. It could be said that manpower development for sustainable job performance is designed to improve the overall effectiveness of managers in their present position and to prepare them for greater responsibility when they are promoted. In fact, the mere acceptance of the idea of training and development of manpower for sustainable job performance by policy makers and planners does not make things happen, organization can not succeeds without the great inputs of its human resources. The public organization secure the confidence of their employees by motivation, good salary structure working materials, organizing seminar, workshop, inductive raining for sustainable job performance in the country (Yakubu & Kamba, 2011).

# 2.4.2 Gap in the Study

The aim of the study was to determine the relationship between Human resource planning and organizational performance. To that end this chapter was a discussion of the past literatures of other researchers on relationship between Human resource planning and organizational performance. Therefore in achieving this aim this chapter was divided into 3 parts apart from the gap to the study namely: the introduction, the conceptual framework, the theoretical framework

and the empirical framework. The introduction was a brief discussion describing the arrangement of the study. The conceptual framework was a detailed discussion of several concepts pertaining to Human resource planning and organizational performance. The theoretical framework was a discussion of several underpinning theories that explain the relationship between Human resource planning and organizational performance. Finally the empirical framework is a discussion of past studies of other researcher on Human resource planning and organizational performance. From the literature review, it can be seen that majority of studies focused on only Human resource practices. There are only a few studies that have focused on the effect of Human resource planning on organizational performance Therefore this research is going to attempt to clearly define the link between Human resource planning and organizational performance.

# 2.5 Conceptual Model

The conceptual model of Employee’s Performance and Human Resource Planning

Employees effectiveness

Employee’s productivity

Employees commitment

Organization’s Performance

Human resource training and development

Recruitment and selection

Human resource evaluation

Human Resource Planning

Ho1

Ho2

Ho3

Ho4

# CHAPTER THREE METHODOLOGY

This chapter will observe the research design, population and sample of the study, sample size determination, sampling technique, methods of data collection, research instrument, pilot study, validity of the research instrument, reliability of research instrument, methods of data analysis,

Conceptual model, model specification, limitation of the study and Ethical consideration.

# Research Design

Cooper (2003) describes research design as the plan and structure of enquiry used to obtain answers to research questions and the overall scheme of program for the research. The research centers on analyzing the information gotten from the questionnaires administered to some selected organization in order to gather enough data to be able to arrive at a sensible conclusion at the end of the research work. The survey research design is used for this study. According to Osuagwu (2008) the survey research design centers on the vital facts of people which includes their opinions, behaviors, attitudes, actions, beliefs and motivations.

# Population and Sample of study

According to Ogundipe, Lucas & Sanmi (2006) population is the totality of the considerable number of components, subjects or individuals that groups a predefined set of one or more regular qualities. Furthermore, Population can be defined as the aggregate sum of living things in a place. For this research, the study population refers to the entire number of employees in Access Bank plc, Shagamu, Ogun state. The total population of staff in Access Bank plc, Shagamu, Ogun State is 205 employees.

# Sample Size Determination

A sample is a fraction or a subset of a population and therefore includes any subgroup drawn from the target population (Adedayo, 2000). Sample is a subset of a population. The standard ability of the specimen is to authorize the expert to guide the study to people from the populace so that the after effects of their study can be used to determine conclusions that will apply to the whole populace. Sampling, as defined by Osuala (1982) is taking any fraction of a population or universe as a representative of that population or universe.

To determine the sample size, the researcher is using the employees of Access Bank plc.., Shagamu, Ogun state. The total number of employees was retrieved from the Human resource department; this was done to get the accurate number of employees in Access Bank plc, Shagamu, Ogun state.

The Taro Yamane formula is:

n= N/1+N (e)ꜗꜗ 2 Where n= Sample size N= Study Population 1= Constant

e= Degree of error n= 205/1+205 (0.05)

n= 205/1+205(0.0025) n=205/1.5125

n= 136

# Sampling Techniques

Sampling techniques can be defined as the system of selecting elements (samples) to represent a given population (Ojo, 2003). It also refers to the procedure that permits the researcher to select

samples which in behavior and number adequately display the relevant characteristics of the population they are drawn from.

For the purpose of this study, the non probability or the simple random sampling techniques would be adopted in selecting the required sample size for the study. The random sampling technique makes use of the principle of randomization which is the process of giving every subject in the population an equal chance of being in the selection. The reason for this process is to assure randomness and representative by giving all the respondents in a population an equal chance of being selected.

# Method of Data Collection

There are different sources of data available to a researcher. For the purpose of this study, the two main sources of data used are the primary and secondary sources of data. The primary source of data used for this research was through the administration of questionnaires to respondents for obtaining their views and opinions. While the secondary source of data used in this research was through the use of textbooks, journals and articles, internet sources, unpublished projects and other related studies and similar findings important to the research work and conducted by other researchers.

# Research Instrument

The research instrument used for this study was the questionnaire because it gives the assurance of anonymity and confidentiality which makes respondents comfortable and induces truthful responses. The questionnaire is meant to record specified and tangible information relevant to this research and was structured by the researcher. The questionnaire begins with an introductory letter where the researcher introduces oneself and explains what the study is about. In the letter, the research also assures anonymity and confidentiality and solicits their assistance in obtaining relevant and useful information. The body of the questionnaire is divided into two sections where the section A comprises of the respondent bio data and section B consists of questions relevant to the research topic. The questions contained in the questionnaire are closed ended questions and uses the Likert scale requiring respondents to tick whichever option suits them ranging from Strongly Agree(SA), Agree(A), Partially Agree (PA), Partially Disagree (PD), Disagree(D), Strongly Disagree(SD).

# Pilot Study

The pilot study will be carried on employees of Access Bank Nigeria plc, Shagamu, and Ogun state. It will be based on the total number of questionnaire that will be administered to Access Bank Nigeria Plc, Ogun state. The reliability of the research instrument will be tested using Statistical Package Social Science (SPSS).

# Validity of Research Instrument.

In order to ensure the research instrument was valid, the questionnaire will be checked by the expert in the department of Business Administration and Marketing.

There are three types of validity, which are; construct validity, content validity, and criterion related validity.

Kimberlin and Winstein (2008) defined construct validity as a type of validity whose judgement is based on the accumulation of evidence from different studies using a specific measuring instrument.

Furthermore, they defined content validity as a type of validity which addresses how well an item is developed to operationalize a construct to provide sufficient and representative sample of all the items that might measure the construct of interest. For the content validity, a pre-test of the instrument will be carried out in Access Bank Nigeria Plc in Ogun state.

To ensure that the research instrument will produce valid results, a pilot study will be conducted before the field research will commence.

# Reliability of Research Instrument

The reliability of research instruments is carried out to measure the level of consistency and stability of a research instrument. Reliability refers to the degree to which empirical measures that represents a theoretical concept are stable and accurate when used for the study of the concept in several studies (Churchill, 2002).

In this study, the Cronbach alpha (coefficient alpha) was used to test the reliability of the research instrument. The cronbach alpha is a procedure of deciding the internal consistency of a research instrument by averaging all the possible ways of splitting the items in the instrument and probing the degree of correlation. The coefficient values ranges from 0 to 1. A research instrument with a high reliability will have a coefficient value as close to one as possible while a coefficient value that is close to 0 is an indication that the research instrument has very low or no reliability. The widely accepted score indicating that a research instrument is reliable ranges from 0.7 and above.

# Methods of Data Analysis

The statistical package for social sciences (SPSS) was used to analyse and interprete the data. In testing the research hypothesis the research made use of the regression analysis. This was done to test the extent of the effect of the independent variable on the dependent variable.

# Regression analysis

Regression analysis evaluates the relationship between the outcome variable (i.e. dependent variable) and one or more risk factors or confounding variables which are known as predictors or independent variables. In regression analysis, a single dependent variable Y is conceived to be a function of one or more independent variable.

Y=f (X1, X2……Xn)

Regression analyses are based on the following assumptions:

* + 1. There must be a linear relationship between the dependent and independent variables.
    2. All variables must be multivariate normal and this can be checked with the use of a histogram and a fitted normal curve.
    3. There must be little or no multi-co linearity in the data
    4. It requires little or no autocorrelation in the data; and
    5. The data must be homoscedastic.

# Conceptual Model

The conceptual model of Organiations Performance and Human Resource Planning

Employees effectiveness

Employee’s productivity

Employees commitment

Human resource training and development

Recruitment and selection

Human resource evaluation

Human Resource Planning

Ho1

Ho2

Ho3

Ho4

# Limitations of the study

This study made use of primary data which was adopted from another researcher. The

questionnaire was designed to obtain response from the respondent, but as a result of the

questionnaire not being authorized, this study will be incomplete with the lack of the imputation

Of the necessary data required. This limitation can be overcome ones the questionnaire has been

Authorized and completed.

# Ethical Considerations

This research will follow rules and confidentiality. The researcher must remain honest during the

Period of the research and ensures that the study is original and unique in its own way and

Ensure that the material will be used for the benefit of this study.

# CHAPTER FOUR

**DATA ANALYSIS AND INTERPRETATION**

# Introduction

The main objective of this chapter was to examine the effects of human resource planning in organizations performance in access bank. The chapter is presented in three parts. First the Analysis of Respondents Demographic Characteristic, second, the analysis of research questions and, the testing of hypotheses lastly, the discussion of findings. The results of the finding were discussed under the following sub headings:

* Demographic information of the respondents: gender, age, academic qualification, professional qualification, level at work and years of experience.
* Effect of human resource evaluation on employee commitment of Access bank Nigeria.
* Effect of employee recruitment and selection on the employee’s productivity of Access bank

Nigeria.

* Effect of human resource training and development on employee’s effectiveness of Access bank Nigeria.

# Analysis of Respondents Demographic Characteristic Table 4.1: Respondents Demographic Characteristic

|  |  |  |  |
| --- | --- | --- | --- |
| **Parameters** | **Classification** | **Frequency** | **Percentage** |
| **Gender** | Male | 105 | 82.0 |
|  | Female | 24 | 18.6 |
|  | **Total** | 129 | 100% |
| **Age** | 20- 30 years | 51 | 39.5 |
|  | 30-50 years | 55 | 42.6 |
|  | 50-60 years | 23 | 17.8 |
|  | **Total** | 129 | 100 |
| **Academic Qualification** | SSCE | 13 | 10.1 |
|  | OND/NCE | 39 | 30.2 |
|  | HND/B.Sc | 51 | 39.5 |
|  | PGD/M.Sc | 22 | 17.1 |
|  | PhD | 4 | 3.1 |
|  | Total | 129 | 100% |
| **Professional Qualification** | None | 18 | 14.0 |

|  |  |  |  |
| --- | --- | --- | --- |
|  | ACA | 28 | 21.7 |
|  | ACCA | 18 | 14.0 |
|  | ICAN | 30 | 23.3 |
|  | MBA/MPA | 21 | 16.3 |
|  | CIM | 14 | 10.9 |
|  | Others | 0 | 0.0 |
|  | Total | 129 | 100% |
| **Level at Work** | Junior Staff | 63 | 48.8 |
|  | Senior staff | 44 | 34.1 |
|  | Management Staff | 22 | 17.1 |
|  | Total | 129 | 100% |
| **Years of Experience** | 2-10 years | 58 | 45.0 |
|  | 11-20 years | 44 | 34.1 |
|  | 20-30 years | 27 | 20.9 |
|  | Total | 129 | 100% |

**Source: field survey, 2018**

Table 4.1 presents the respondent’s demographic characteristic. It was found out that 105 of the respondents represented by 82.0% are male and 24 of the respondents represented by 18.6% are female.

Based on age group, the analysis reveals that 51(39.5%) of the respondents were between the age group of 20 – 30 years, 55(42.6%) of the respondents were between the age range of 30 – 50 years and 23(17.8%) were at the age range of 50 – 60 years.

The respondents classification based on educational qualification reveals that 13(10.1 have SSCE, 9(30.2) have OND/NCE, 51(39.5%) have HND/BSc, 22(17.1%) have PGD/MSc and

4(3.1%) have PhD.

Based on professional qualification, it was found out that 18(14.0) have no professional qualification, 28(21.7%) have ACA, 18(14.0%) have ACCA, 30(23.3%) have ICAN, 21(16.3%) have MBA/MPA, and 14(10.9) have CIM.

The respondents classification based on level at work reveals that 63(48.8%) were junior staff, 44(24.1%0 were senior staff and 22(17.1%0 were management staff.

Out of 129 staff that responded, 58(45.0%) have worked for 2 – 10 years, 44(34.1%) have

worked for 20 – 20 years and 27(20.9%) have worked for 20 – 30 years.

# Analysis of Research Questions

**Research Question One**

What is the effect of human resource evaluation on employee commitment of Access bank Nigeria?

# Table 4.2: Human resource evaluation

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Items** | SA | A | PA | PD | D | SD | Mean | Std. Dev. |
| Employees performance are assessed as a whole | 18  (14.0) | 30  (23.3) | 41  (31.8) | 26  (20.2) | 8  (6.2) | 6  (4.7) | 4.05 | 1.292 |
| Human resource experts are hired to evaluate performance | 20  (15.5) | 28  (21.7) | 55  (42.6) | 17  (13.2) | 6  (4.7) | 3  (2.3) | 4.23 | 1.149 |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Employees think of various human resource issues | 4  (3.1) | 32  (24.8) | 47  (36.4) | 36  (27.9) | 6  (4.7) | 4  (3.1) | 3.75 | .984 |
| Staffs feel good about workplace safety and company ethics | 16  (12.4) | 21  (16.3) | 47  (36.4) | 27  (21.0) | 14  (10.9) | 4  (3.1) | 3.89 | 1.241 |
| Staffs rate their organization and work environment highly | 20  15.5) | 30  (23.3) | 37  (28.7) | 29  (22.5) | 6  (4.7) | 7  (5.4) | 4.06 | 1.327 |
| **Grand Mean (3.983)** | | | | | | | | |

**Source: field survey, 2018**

Table 4.2 presents the respondent opinion on human resource evaluation. Their opinion were measured on six point likert scale using mean score. The analysis reveals that the respondents agreed with assertion concerning human resource evaluation based on the grand mean of 3.983. Hence, it was concluded that human resource evaluation have effect on employee commitment.

# Table 4.3: Employee commitment

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Items** | SA | A | PA | PD | D | SD | Mean | Std. Dev. |
| I am very loyal to this organization | 16  (12.4) | 23  (17.8) | 47  (36.4) | 25  (19.4) | 15  (11.6) | 3  (2.3) | 3.93 | 1.245 |
| I am willing to put in a great deal of effort to contribute to the success of this organization | 18  (14.0) | 22  (17.1) | 44  (34.1) | 24  (18.6) | 15  (11.6) | 6  (4.7) | 3.89 | 1.342 |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| I understand the importance of my work contribution to this organization | 11  (8.8) | 18  (14.0) | 36  (27.9) | 42  (32.6) | 15  (11.6) | 7  (5.4) | 3.58 | 1.251 |
| I am willing to recommend this organization as a great place of work | 18  (14.0) | 23  (17.9) | 46  (35.7) | 31  (24.0) | 8  (6.2) | 3  (2.4) | 4.03 | 1.168 |
| For me, this is the best organization to work in | 16  (12.4) | 31  (24.0) | 62  (48.1) | 12  (9.3) | 6  (4.7) | 2  (1.6) | 4.26 | 1.048 |
| **Grand Mean (3.938)** | | | | | | | | |

**Source: field survey, 2018**

Table 4.2 presents respondents opinion on employee commitment. The result of the analysis indicates that respondents agree with the researcher’s assertion considering the grand mean (3.938). Their opinion were measured using mean score on six point likert scale. Hence, it was concluded that employee is influence by good human resource evaluation.

# Research Question two

What is the effect of recruitment and selection on employee’s productivity of Access bank Nigeria?

# Table 4.4: Recruitment and Selection

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Items | SA | A | PA | PD | D | SD | Mean | Std. Dev. |
| Recruitment and selection process is done timeliness | 18  (14.0) | 32  (24.8) | 22  (17.1) | 14  (10.9) | 29  (22.5) | 14  (10.9) | 3.64 | 1.638 |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Affirmative action needs are well clarified and supported in the selection process | 20  (15.5) | 33  (25.6) | 53  (41.1) | 15  (11.6) | 5  (3.9) | 3  (2.3) | 4.30 | 1.129 |
| The interviewing process and other selection instruments are high and effective | 20  (15.5) | 43  (33.3) | 45  (34.9) | 15  (11.6) | 4  (3.1) | 2  (1.6) | 4.42 | 1.080 |
| Recruitment of employees is based on the needs of the company | 17  (13.2) | 32  (24.8) | 32  (24.8) | 22  (17.1) | 8  (6.2) | 18  (14.0) | 3.80 | 1.558 |
| HR department is always efficient in selection policy of the employees | 18  (14.0) | 37  (28.7) | 54  (41.9) | 14  (10.9) | 4  (3.1) | 2  (1.6) | 4.35 | 1.051 |
| **Grand Mean (4.102)** | | | | | | | | |

**Source: field survey, 2018**

Table 4.4 presents respondents opinion on recruitment and selection. Their opinion were measured using mean score based on six point likert scale. The grand mean of 4.102 indicates respondents agreement with the assertions hence, it was concluded that recruitment and selection have effect on employee’s productivity.

# Table 4.5: Employee’s Productivity

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Items | SA | A | PA | PD | D | SD | Mean | Std. Dev. |
| My work contributes a great deal to the success of this organization | 12  (9.3) | 51  (39.5) | 43  (33.3) | 14  (10.9) | 5  (3.9) | 4  (3.1) | 4.30 | 1.108 |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| I am efficient and effective in the tasks I am given to carry out for this organization | 15  (12.4) | 42  (32.6) | 49  (38.0) | 15  (11.6) | 4  (3.1) | 3  (2.3) | 4.33 | 1.084 |
| Negligence of my work will lead to the downfall of this organization | 10  (7.8) | 31  (24.0) | 55  (42.6) | 20  (15.5) | 10  (7.8) | 3  (2.3) | 4.02 | 1.111 |
| My productivity is enhanced by my performance in this organization | 12  (9.3) | 13  (10.1) | 35  (27.1) | 31  (24.0) | 17  (13.2) | 21  (16.3) | 3.28 | 1.476 |
| I am motivated to contribute to the success of this organization | 16  (12.4) | 34  (26.4) | 54  (41.9) | 11  (8.5) | 11  (8.5) | 3  (2.30 | 4.19 | 1.171 |
| **Grand Mean (4.024)** | | | | | | | | |

**Source: field survey, 2018**

Table 4.5 presents respondents’ opinion on employee’s productivity in access bank. Their opinion were measured based on mean score using six point likert scale. The analysis shows that employee’s productivity is dependent on human resource recruitment and selection considering the grand mean 4.024.

# Research Question three

What is the effect of human resource training and development on employee’s effectiveness of Access bank Nigeria?

# Table 4.6: Human Resource Training and Development

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Items | SA | A | PA | PD | D | SD | Mean | Std. Dev. |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Employees who use their training are given preference for new assignment | 14  (10.9) | 31  (24.0) | 43  (33.3) | 26  (20.2) | 11  (8.5) | 4  (3.1) | 3.99 | 1.228 |
| Training programme is compulsory for employees | 17  (13.2) | 11  (8.5) | 26  (20.2) | 31  (24.0) | 19  (14.7) | 25  (19.4) | 3.23 | 1.618 |
| Staffs are satisfied with the effectiveness of training program in your organization | 17  (13.2) | 26  (20.2) | 53  (41.1) | 23  (17.8) | 8  (6.2) | 2  (1.6) | 4.10 | 1.125 |
| Training programmes have positive impact on the staffs | 19  (14.7) | 32  (24.8) | 43  (33.3) | 20  (15.5) | 9  (7.0) | 6  (4.7) | 4.11 | 1.300 |
| Training programmes are organized for both internal and external employees | 17  (13.2) | 22  (17.1) | 45  (34.9) | 34  (26.4) | 8  (6.2) | 3  (2.3) | 3.98 | 1.195 |
| **Grand Mean (3.882)** | | | | | | | | |

**Source: field survey, 2018**

Table 4.6 shows the respondents’ opinion on human resource training and development. The respondents opinion were measured using mean score on six point likert scale. Based on the grand mean, it can be concluded that the respondents agree that human resource training and development have effect on employee’s effectiveness in access bank.

# Table 4.7: Employee’s Effectiveness

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Items | SA | A | PA | PD | D | SD | Mean | Std. Dev. |
| I handle official and assigned duties effectively and professionally. | 35  (27.1  ) | 23  (17.8) | 50  (38.8) | 15  (11.6) | 5  (3.9) | 1  (0.8  ) | 4.50 | 1.167 |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| I carry out my duties with little or no supervision. | 20  (15.5  ) | 30  (23.3) | 52  (40.3) | 17  (13.2) | 7  (5.4) | 3  (2.3  ) | 4.22 | 1.159 |
| I am highly efficient while carrying out my job responsibilities. | 19  (14.7  ) | 27  (20.9) | 58  (45.0) | 21  (16.3) | 1  (0.8) | 3  (2.3  ) | 4.26 | 1.070 |
| I often my use my initiatives to carry out assigned and official duties. | 19  (14.7  ) | 53  (41.1) | 40  (31.0) | 11  (8.5) | 4  (3.1) | 2  (1.6  ) | 4.51 | 1.047 |
| I possess the ability to develop new ideas to generate positive results. | 19  (14.7  ) | 26  (20.2) | 51  (39.5) | 22  (17.1) | 4  (3.1) | 7  (5.4  ) | 4.10 | 1.255 |
| **Grand Mean (4.318)** | | | | | | | | |

**Source: field survey, 2018**

Table 4.7 presents the respondent opinion on employee effectiveness. The respondent opinion were measured using mean score on six point likert. The analysis reveals that employee effectiveness is influence by human resource training and development in access bank considering the grand mean 4.318.

# Testing of Hypotheses

This section presents the result of regression analysis which was used to test the hypotheses of the study. The purpose of the hypotheses are to enable the researcher make definite inference based on the end result of the tests.

# Hypothesis one

Human Resource Evaluation has no significant effect on employee commitment of Access bank Nigeria

# Table 4.8: Coefficients

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
| B | Std. Error | Beta |
| 1 | (Constant) | 2.151 | .276 | .504 | 7.783 | .000 |
|  | X1 | .447 | .068 | 6.579 | .000 |

a. Dependent Variable: Y1

R = 0.504, R-square = 0.254 Adjusted R-square = 0.248, p < 0.05

Table 4.8 shows that 24.8% of the variation in the dependent variable (employee commitment) have been explained by the independent variable (human resource evaluation). This implies that human resource evaluation have 24.8% effect on employee commitment in access bank. The p- value (p < 0.05) provide enough evidence to reject the null hypothesis. Hence, it was concluded that human resource evaluation has positive and significant effect on employee commitment of access bank Nigeria.

# Hypothesis two

Recruitment and Selection has no significant effect on employee’s productivity of Access bank Nigeria

# Table 4.9: Coefficients

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| B | Std. Error | Beta |
| 1 | (Constant) | 1.472 | .275 | .643 | 5.350 | .000 |
|  | X2 | .622 | .066 | 9.449 | .000 |

a. Dependent Variable: Y2

R = 0.643, R-square = 0.413 Adjusted R-square = 0.408, p < 0.05

From table 4.9, it can be seen that recruitment and selection explained up to 40.8% of the variation in the employees’ productivity in access bank. The p –value, which is p < 0.05 provided evidence of rejecting the null hypothesis. Hence, the alternative hypothesis was accepted and it was concluded that recruitment and selection has positive and significant effect on employee’s productivity of Access bank Nigeria.

# Hypothesis three

Human Resource Training and Development has no significant effect on employee’s effectiveness of Access bank Nigeria.

# Table 4.10: Coefficients

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| B | Std. Error | Beta |
| 1 | (Constant) | 2.359 | .246 | .586 | 9.576 | .000 |
|  | X3 | .505 | .062 | 8.144 | .000 |

a. Dependent Variable: Y3

R = 0.586, R-square = 0.343 Adjusted R-square = 0.338, p < 0.05

The adjusted R-square in table 4.10 indicates that 33.8% of the variation in the dependent variable (employee’s effectiveness) have been explained by the independent variable (human resource training and development). This implies that human resource training and development have 33.8% effect on employee effectiveness in access bank.

# Table 4.11: Coefficients

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| B | Std. Error | Beta |
| 1 | (Constant) | 1.252 | .204 | .781 | 6.124 | .000 |
|  | HRP | .711 | .050 | 14.094 | .000 |

a. Dependent Variable: OP

R = 0.781, R-square = 0.610 Adjusted R-square = 0.607, p < 0.05

Table 4.11 indicates that human resource planning explained up to 60.7% of the variation in the dependent variable (organizational performance). The p–value of less than indicate enough evidence to reject the null hypothesis. Hence, the alternative hypothesis was accepted and it was concluded that human resource planning have positive and significance effect on organizational performance in access bank.

# 5.4 Discussion of Result

The result of the finding of this study reveals that human resource evaluation has positive and significant effect on employee commitment in access bank Nigeria Plc, Shagamu Branch, Ogun State.

Secondly, the finding of the study reveals that recruitment and selection has positive and significant effect on employee’s productivity of access bank plc.

Thirdly, it was found out that human resource training and development has positive and significant effect on employee’s effectiveness of Access bank. This findings support the findings of Al-Qudah, Osman, Ab Halim and Al Shatanwi (2014) who examined the effect of human resources planning and training and development on organizational performance in government sector. Their findings show that HR planning, training and development significantly correlated with the organizational performance in the Jordanian Ministry. The findings also support the findings of Hassan (2016), Yakubu and Kamba (2011).

Lastly, the result of the analysis reveals that human resource planning have positive and significant effect on organizational performance. This findings support the findings of Moyo (2015) who examined the contribution of human resources planning to public institutions. Their major findings show that poor planning of HR has an impact on organization performance. The findings also support the findings of Afal, Mahmood, Sajid and Hassan (2013).

# CHAPTER FIVE

**SUMMARY, CONCLUSION AND RECOMMENDATION**

# Summary

The result from the findings of this study reveals the following

* + 1. Human resource evaluation has positive and significant effect on employee commitment in access bank Nigeria Plc, Shagamu Branch, Ogun State.
    2. Recruitment and selection has positive and significant effect on employee’s productivity of access bank plc, Shagama branch.
    3. Human resource training and development has positive and significant effect on employee’s effectiveness of Access bank.
    4. The findings from the study also reveals that human resource planning have positive and significant effect on organizational performance.

# Conclusion

In conclusion, human resource planning has a positive and significant effect on organizational performance in forecasting future demand of banks and environmental factors which help to manage human resource demand as required. Having a required number and qualified personnel in organization helps to achieve firm’s success. Specifically, in banking industry, the implementation of human resource planning has led to employee productivity, employee commitment, employee’s effectiveness. From the result of the analyses, it was concluded that the dimensions of human resource planning has a significant effect on organizational performance in access bank Plc at Shagamu branch, Ogun State.

# Recommendation

Based on the findings and conclusions of this study, the following recommendations are made to access bank Nigeria Plc:

1. Access bank and their human resource managers should continually carry out human resource evaluation and planning to determine in advance the demand and supply situation in the labor market prior to recruitment of employees.
2. Access bank and their human resource managers should train their employees to prepare them to fill positions in the future.
3. Access bank should collaborate with training institutions to develop custom tailored programmes to suit their manpower needs.

# Suggestion for Further Findings

Further research work should consider other commercial bank or increase the sample size in highly commercial area like Lagos, Nigeria

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# QUESTIONNAIRE

# SECTION A: Personal Data of Respondents

**(Please tick out of the boxes provided for each questions)**

* + 1. Gender

(a.) Male [ ] (b.) Female [ ]

* + 1. Age

(a.) (20- 30 years [ ](b.) 30-50 years [ ] (c.) 50-60 years [ ]

* + 1. Academic Qualification

(a.) SSCE [ ] (b.) OND/NCE [ ] (c.) HND/B.Sc [ ] (d.) PGD/M.Sc [ ] (e.) PhD [ ]

* + 1. Professional Qualification

(a.) None [ ] (b.) ACA [ ] (c.) ACCA [ ] (d.) ICAN [ ] (e.) MBA/MPA [ ]

(f.) CIM [ ] (f.) Others [ ]

* + 1. Level at Work

(a.) Junior Staff [ ] (b.) Senior Staff [ ] (c.) Management Staff [ ]

* + 1. Years of Experience

(a.) 2-10 years [ ] (b.) 11-20 years [ ] (c.) 20-30 years [ ]

# SECTION B: HUMAN RESOURCE EVALUATION

1. Indicate your level of agreement with the following statement as regards human resource planning used by your company

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| S/N | STATEMENT | SA | A | PA | PD | D | SD |
| 1. | Employees performance are assessed as a whole |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 2 | Human resource experts are hired to evaluate performance |  |  |  |  |  |  |
| 3 | Employees think of various human resource issues |  |  |  |  |  |  |
| 4 | Staffs feel good about workplace safety and company ethics |  |  |  |  |  |  |
| 5 | Staffs rate their organization and work environment highly |  |  |  |  |  |  |

Source: Nguyen (2016)

# SECTION C: RECRUITMENT AND SELECTION

1. Indicate your level of agreement with the following statement as regards to recruitment and selection in your company.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| S/N | STATEMENT | SA | A | PA | PD | D | SD |
| 1 | Recruitment and selection process is done timeliness |  |  |  |  |  |  |
| 2 | Affirmative action needs are well clarified and supported in the selection process |  |  |  |  |  |  |
| 3 | The interviewing process and other selection instruments are high and effective |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 4 | Recruitment of employees is based on the needs of the company |  |  |  |  |  |  |
| 5 | HR department is always efficient in selection policy of the employees |  |  |  |  |  |  |

Source: Sue Hayday (2014)

# SECTION D: TRAINING AND DEVELOPMENT

1. Indicate your level of agreement with following statement as regards to training and development in your company.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| S/N | STATEMENT | SA | A | PA | PD | D | SD |
| 1 | Employees who use their training are given preference for new assignmennt |  |  |  |  |  |  |
| 2 | Training programme is compulsory for employees |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 3 | Staffs are satisfied with the effectiveness of training program in your organization |  |  |  |  |  |  |
| 4 | Training programmes have positive impact on the staffs |  |  |  |  |  |  |
| 5 | Training programmes are organized for both internal and external employees |  |  |  |  |  |  |

Source: Phelister Amollo (2016)

# SECTION E: EMPLOYEES COMMITMENT

1. Indicate your level of agreement with the following statement as regards to employees commitment in your organization

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| S/N | STATEMENT | SA | A | PA | PD | D | SD |
| 1 | I am very loyal to this organization |  |  |  |  |  |  |
| 2 | I am willing to put in a great deal of effort to contribute to the success of this organization |  |  |  |  |  |  |
| 3 | I understand the importance of my work contribution to this organization |  |  |  |  |  |  |
| 4 | I am willing to recommend this organization as a great place of work |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 5 | For me, this is the best organization to work in |  |  |  |  |  |  |

Source: Sue Hayday (2014)

# SECTION F: EMPLOYEES PRODUCTIVITY

1. Indicate your level of agreement with the following statement as regards to employees productivity

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| S/N | STATEMENT | SA | A | PA | PD | D | SD |
| 1 | My work contributes a great deal to the success of this organization |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 2 | I am efficient and effective in the tasks I am given to carry out for this organization |  |  |  |  |  |  |
| 3 | Negligence of my work will lead to the downfall of this organization |  |  |  |  |  |  |
| 4 | My productivity is enhanced by my performance in this organization |  |  |  |  |  |  |
| 5 | I am motivated to contribute to the success of this organization |  |  |  |  |  |  |

Source: Cynthia way, Beverly & Susan (2011)

# SECTION G: EMPLOYEES EFFECTIVENESS

1. Indicate your level of agreement with the following statements as regards to customer satisfaction

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| S/N | STATEMENTS | SA | A | PA | PD | D | SD |
| 1 | I handle official and assigned duties effectively and professionally. |  |  |  |  |  |  |
| 2 | I carry out my duties with little or no supervision. |  |  |  |  |  |  |
| 3 | I am highly efficient while carrying out my job |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | responsibilities. |  |  |  |  |  |  |
| 4 | I often my use my initiatives to carry out assigned and official duties. |  |  |  |  |  |  |
| 5 | I possess the ability to develop new ideas to generate positive results. |  |  |  |  |  |  |

Source: Harthon (2012)

# APENDIX

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| Q 1 | Q 2 | Q 3 | Q 4 | Q 5 | Q 6 | B 1 | B 2 | B 3 | B 4 | B 5 | C 1 | C 2 | C 3 | C 4 | C 5 | D 1 | D 2 | D 3 | D 4 | D 5 | E 1 | E 2 | E 3 | E 4 | E 5 | F 1 | F 2 | F 3 | F 4 | F 5 | G 1 | G 2 | G 3 | G 4 | G 5 | X 1 | X 2 | X 3 | Y 1 | Y 2 | Y 3 | O P | H R  P |
| 2 | 1 | 1 | 1 | 1 | 1 | 6 | 3 | 2 | 4 | 3 | 6 | 6 | 4 | 6 | 6 | 6 | 5 | 6 | 5 | 4 | 3 | 3 | 2 | 5 | 5 | 6 | 6 | 6 | 5 | 5 | 6 | 6 | 5 | 5 | 6 | 3  . 6 | 5  . 6 | 5  . 2 | 3  . 6 | 5  . 6 | 5  . 6 | 4  . 8 | 4  . 9  3 |
| 1 | 1 | 1 | 1 | 1 | 2 | 3 | 6 | 3 | 6 | 6 | 6 | 4 | 6 | 6 | 6 | 2 | 6 | 5 | 5 | 5 | 1 | 2 | 6 | 4 | 5 | 5 | 6 | 5 | 3 | 4 | 4 | 4 | 6 | 6 | 4 | 4  . 8 | 5  . 6 | 4  . 6 | 3  . 6 | 4  . 6 | 4  . 8 | 4  . 3  3 | 5 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 6 | 5 | 5 | 6 | 6 | 6 | 3 | 4 | 6 | 1 | 6 | 3 | 3 | 4 | 6 | 3 | 6 | 6 | 6 | 4 | 5 | 1 | 2 | 6 | 1 | 4 | 6 | 3  . 4 | 5  . 2 | 4 | 4  . 4 | 4  . 4 | 3  . 8 | 4  . 2 | 4  . 2 |

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| 1 | 1 | 1 | 1 | 3 | 2 | 3 | 3 | 5 | 6 | 5 | 3 | 3 | 6 | 3 | 5 | 6 | 6 | 6 | 3 | 4 | 2 | 3 | 3 | 5 | 6 | 6 | 3 | 5 | 6 | 5 | 6 | 6 | 6 | 5 | 3 | 4  . 4 | 4 | 5 | 3  . 8 | 5 | 5  . 2 | 4  . 6  7 | 4  . 4  7 |
| 1 | 1 | 1 | 1 | 1 | 1 | 4 | 6 | 4 | 6 | 3 | 5 | 6 | 5 | 4 | 4 | 5 | 3 | 6 | 6 | 5 | 5 | 1 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 1 | 4 | 5 | 5 | 4  . 6 | 4  . 8 | 5 | 4  . 6 | 5  . 8 | 4 | 4  . 8 | 4  . 8 |
| 1 | 1 | 1 | 1 | 1 | 2 | 6 | 1 | 4 | 4 | 3 | 5 | 6 | 5 | 4 | 6 | 5 | 3 | 6 | 6 | 5 | 5 | 1 | 5 | 6 | 6 | 6 | 6 | 4 | 6 | 5 | 5 | 1 | 4 | 5 | 5 | 3  . 6 | 5  . 2 | 5 | 4  . 6 | 5  . 4 | 4 | 4  . 6  7 | 4  . 6 |
| 1 | 1 | 1 | 1 | 2 | 1 | 5 | 5 | 5 | 4 | 6 | 3 | 4 | 4 | 5 | 6 | 3 | 2 | 6 | 5 | 5 | 5 | 3 | 3 | 6 | 6 | 6 | 6 | 5 | 6 | 2 | 6 | 6 | 5 | 5 | 2 | 5 | 4  . 4 | 4  . 2 | 4  . 6 | 5 | 4  . 8 | 4  . 8 | 4  . 5  3 |
| 1 | 1 | 1 | 1 | 3 | 1 | 5 | 4 | 4 | 4 | 6 | 6 | 5 | 5 | 4 | 6 | 4 | 2 | 5 | 5 | 3 | 5 | 2 | 2 | 6 | 6 | 5 | 5 | 4 | 3 | 5 | 5 | 6 | 4 | 5 | 3 | 4  . 6 | 5  . 2 | 3  . 8 | 4  . 2 | 4  . 4 | 4  . 6 | 4  . 4 | 4  . 5  3 |
| 1 | 1 | 2 | 1 | 1 | 1 | 6 | 6 | 3 | 3 | 6 | 5 | 1 | 6 | 5 | 6 | 6 | 5 | 2 | 4 | 3 | 5 | 3 | 5 | 6 | 1 | 1 | 6 | 6 | 2 | 1 | 1 | 6 | 6 | 6 | 6 | 4  . 8 | 4  . 6 | 4 | 3  . 9 | 3  . 2 | 5 | 4  . 0  3 | 4  . 4  7 |
| 1 | 1 | 2 | 1 | 1 | 1 | 5 | 5 | 3 | 5 | 6 | 4 | 5 | 6 | 5 | 5 | 6 | 2 | 3 | 6 | 6 | 6 | 2 | 6 | 1 | 4 | 5 | 6 | 3 | 1 | 6 | 6 | 4 | 6 | 4 | 5 | 4  . 7 | 5 | 4  . 6 | 3  . 8 | 4  . 2 | 5 | 4  . 3  3 | 4  . 7  7 |
| 1 | 1 | 2 | 1 | 2 | 1 | 4 | 5 | 3 | 4 | 4 | 3 | 5 | 6 | 6 | 2 | 6 | 6 | 6 | 6 | 6 | 6 | 1 | 6 | 4 | 4 | 4 | 4 | 3 | 3 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 4  . 4 | 6 | 4  . 2 | 4 | 4 | 4  . 0  7 | 4  . 8 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| 1 | 1 | 2 | 1 | 3 | 2 | 5 | 5 | 4 | 5 | 5 | 6 | 4 | 6 | 5 | 4 | 6 | 6 | 6 | 6 | 6 | 6 | 3 | 4 | 6 | 4 | 3 | 3 | 3 | 2 | 6 | 3 | 3 | 4 | 6 | 4 | 4  . 8 | 5 | 6 | 4  . 6 | 3  . 4 | 4 | 4 | 5  . 2  7 |
| 1 | 1 | 2 | 1 | 1 | 1 | 6 | 6 | 3 | 4 | 3 | 6 | 5 | 5 | 2 | 5 | 5 | 6 | 6 | 6 | 6 | 4 | 4 | 3 | 6 | 4 | 4 | 5 | 4 | 4 | 6 | 4 | 6 | 6 | 6 | 6 | 4  . 4 | 4  . 6 | 5  . 8 | 4  . 2 | 4  . 6 | 5  . 6 | 4  . 8 | 4  . 9  3 |
| 1 | 1 | 2 | 1 | 1 | 1 | 6 | 6 | 3 | 2 | 6 | 2 | 3 | 4 | 6 | 6 | 5 | 6 | 5 | 6 | 2 | 3 | 4 | 4 | 6 | 4 | 3 | 3 | 2 | 3 | 6 | 6 | 6 | 6 | 6 | 6 | 4  . 6 | 4  . 2 | 4  . 8 | 4  . 2 | 3  . 4 | 6 | 4  . 5  3 | 4  . 5  3 |
| 1 | 1 | 2 | 1 | 1 | 1 | 6 | 6 | 3 | 4 | 6 | 5 | 6 | 4 | 6 | 6 | 6 | 6 | 4 | 5 | 3 | 4 | 5 | 4 | 4 | 4 | 5 | 6 | 4 | 1 | 6 | 5 | 4 | 6 | 5 | 5 | 5 | 5  . 4 | 4  . 8 | 4  . 2 | 4  . 4 | 5 | 4  . 5  3 | 5  . 0  7 |
| 2 | 1 | 2 | 1 | 1 | 1 | 5 | 6 | 3 | 4 | 6 | 2 | 6 | 6 | 6 | 6 | 6 | 6 | 2 | 4 | 3 | 6 | 4 | 3 | 3 | 4 | 4 | 6 | 4 | 4 | 6 | 4 | 4 | 6 | 5 | 5 | 4  . 7 | 5  . 2 | 4  . 2 | 4 | 4  . 8 | 4  . 8 | 4  . 5  3 | 4  . 7 |
| 1 | 1 | 2 | 1 | 1 | 1 | 4 | 6 | 3 | 6 | 6 | 2 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 6 | 6 | 5 | 4 | 4 | 6 | 4 | 6 | 4 | 4 | 6 | 5 | 5 | 5 | 6 | 4 | 5 | 5  . 2 | 5  . 8 | 5 | 4  . 8 | 5 | 4  . 9  3 | 5  . 3  3 |
| 1 | 1 | 2 | 1 | 1 | 1 | 4 | 6 | 3 | 6 | 6 | 6 | 4 | 6 | 2 | 6 | 6 | 1 | 6 | 5 | 6 | 6 | 5 | 4 | 4 | 6 | 4 | 4 | 4 | 4 | 6 | 5 | 5 | 5 | 6 | 6 | 5 | 4  . 8 | 4  . 8 | 5 | 4  . 4 | 5  . 4 | 4  . 9  3 | 4  . 8  7 |
| 2 | 1 | 2 | 2 | 1 | 1 | 5 | 5 | 3 | 6 | 4 | 6 | 5 | 4 | 1 | 6 | 6 | 4 | 6 | 5 | 6 | 1 | 5 | 5 | 5 | 6 | 5 | 4 | 5 | 1 | 6 | 6 | 5 | 6 | 5 | 6 | 4  . 6 | 4  . 4 | 5  . 4 | 4  . 4 | 4  . 2 | 5  . 6 | 4  . 7 | 4  . 8 |

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| 1 | 1 | 2 | 2 | 1 | 2 | 6 | 4 | 3 | 4 | 4 | 6 | 3 | 5 | 5 | 6 | 6 | 4 | 6 | 4 | 6 | 5 | 5 | 5 | 5 | 6 | 5 | 4 | 6 | 5 | 6 | 3 | 5 | 6 | 3 | 6 | 4  . 2 | 5 | 5  . 2 | 5  . 2 | 5  . 2 | 4  . 6 | 5 | 4  . 8 |
| 1 | 1 | 2 | 2 | 1 | 1 | 6 | 3 | 3 | 4 | 5 | 5 | 6 | 4 | 5 | 6 | 2 | 4 | 6 | 2 | 6 | 6 | 4 | 5 | 4 | 6 | 2 | 6 | 6 | 6 | 6 | 4 | 4 | 6 | 6 | 3 | 4  . 2 | 5  . 2 | 4 | 5 | 5  . 2 | 4  . 6 | 4  . 9  3 | 4  . 4  7 |
| 1 | 1 | 2 | 2 | 1 | 2 | 6 | 4 | 2 | 1 | 6 | 5 | 6 | 5 | 6 | 6 | 3 | 6 | 4 | 3 | 3 | 6 | 4 | 1 | 3 | 6 | 5 | 6 | 6 | 6 | 4 | 4 | 6 | 4 | 6 | 3 | 3  . 8 | 5  . 6 | 3  . 8 | 4 | 5  . 4 | 4  . 6 | 4  . 6  7 | 4  . 4 |
| 1 | 1 | 2 | 2 | 1 | 1 | 6 | 4 | 3 | 6 | 6 | 5 | 6 | 5 | 6 | 6 | 3 | 6 | 4 | 3 | 3 | 6 | 4 | 1 | 3 | 6 | 5 | 6 | 6 | 6 | 4 | 4 | 6 | 4 | 4 | 3 | 5 | 5  . 6 | 3  . 8 | 4 | 5  . 4 | 4  . 2 | 4  . 5  3 | 4  . 8 |
| 1 | 1 | 2 | 2 | 1 | 2 | 6 | 4 | 3 | 6 | 6 | 3 | 5 | 4 | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 6 | 4 | 3 | 5 | 6 | 4 | 6 | 6 | 6 | 4 | 6 | 6 | 3 | 5 | 6 | 5 | 4  . 8 | 5  . 4 | 4  . 8 | 5  . 2 | 5  . 2 | 5  . 0  7 | 5  . 0  7 |
| 1 | 1 | 2 | 2 | 1 | 1 | 2 | 6 | 3 | 6 | 6 | 6 | 5 | 4 | 6 | 6 | 6 | 6 | 5 | 5 | 6 | 4 | 4 | 3 | 5 | 4 | 4 | 6 | 6 | 1 | 4 | 6 | 3 | 6 | 5 | 6 | 4  . 6 | 5  . 4 | 5  . 6 | 4 | 4  . 2 | 5  . 2 | 4  . 4  7 | 5  . 2 |
| 1 | 1 | 2 | 2 | 1 | 2 | 5 | 6 | 4 | 6 | 6 | 2 | 2 | 5 | 6 | 3 | 4 | 6 | 5 | 4 | 6 | 3 | 5 | 5 | 4 | 5 | 3 | 4 | 6 | 3 | 4 | 6 | 4 | 6 | 6 | 6 | 5  . 4 | 3  . 6 | 5 | 4  . 4 | 4 | 5  . 6 | 4  . 6  7 | 4  . 6  7 |
| 1 | 1 | 2 | 2 | 1 | 1 | 3 | 6 | 3 | 6 | 6 | 6 | 4 | 5 | 6 | 5 | 4 | 6 | 4 | 4 | 6 | 4 | 5 | 5 | 3 | 3 | 5 | 5 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 6 | 4  . 8 | 5  . 2 | 4  . 8 | 4 | 4  . 4 | 6 | 4  . 8 | 4  . 9 |

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| 1 | 1 | 2 | 2 | 2 | 2 | 3 | 6 | 3 | 6 | 3 | 6 | 3 | 3 | 6 | 4 | 3 | 6 | 3 | 6 | 6 | 3 | 3 | 2 | 6 | 6 | 1 | 5 | 2 | 1 | 3 | 3 | 6 | 6 | 6 | 3 | 4  . 2 | 4  . 4 | 4  . 8 | 4 | 2  . 4 | 4  . 8 | 3  . 7  3 | 4  . 4  7 |
| 1 | 1 | 2 | 2 | 2 | 1 | 3 | 6 | 3 | 6 | 3 | 3 | 6 | 3 | 6 | 4 | 3 | 2 | 3 | 6 | 6 | 3 | 3 | 6 | 6 | 6 | 6 | 5 | 2 | 1 | 3 | 3 | 6 | 4 | 6 | 3 | 4  . 2 | 4  . 4 | 4 | 4  . 8 | 3  . 4 | 4  . 4 | 4  . 2 | 4  . 2 |
| 1 | 1 | 2 | 2 | 2 | 1 | 1 | 6 | 5 | 6 | 4 | 6 | 6 | 3 | 6 | 4 | 3 | 5 | 6 | 6 | 6 | 2 | 2 | 6 | 6 | 4 | 6 | 5 | 5 | 5 | 4 | 4 | 6 | 4 | 6 | 3 | 4  . 4 | 5 | 5  . 2 | 4 | 5 | 4  . 6 | 4  . 5  3 | 4  . 8  7 |
| 1 | 1 | 2 | 2 | 2 | 1 | 1 | 6 | 5 | 5 | 6 | 6 | 6 | 3 | 4 | 4 | 3 | 5 | 6 | 6 | 6 | 2 | 2 | 6 | 6 | 4 | 6 | 5 | 5 | 5 | 4 | 4 | 6 | 4 | 6 | 3 | 4  . 6 | 4  . 6 | 5  . 2 | 4 | 5 | 4  . 6 | 4  . 5  3 | 4  . 8 |
| 2 | 1 | 2 | 2 | 1 | 1 | 4 | 6 | 4 | 4 | 6 | 1 | 6 | 4 | 5 | 4 | 4 | 2 | 6 | 6 | 6 | 4 | 5 | 6 | 6 | 4 | 6 | 2 | 2 | 4 | 4 | 6 | 4 | 3 | 6 | 4 | 4  . 8 | 4 | 4  . 8 | 5 | 3  . 6 | 4  . 6 | 4  . 4 | 4  . 5  3 |
| 1 | 1 | 2 | 2 | 1 | 1 | 1 | 6 | 2 | 3 | 6 | 2 | 6 | 2 | 1 | 2 | 2 | 2 | 3 | 6 | 2 | 4 | 2 | 6 | 6 | 2 | 6 | 2 | 1 | 2 | 2 | 6 | 2 | 3 | 1 | 1 | 3  . 6 | 2  . 6 | 3 | 4 | 2  . 6 | 2  . 6 | 3  . 0  7 | 3  . 0  7 |
| 1 | 1 | 2 | 2 | 1 | 1 | 6 | 6 | 4 | 4 | 6 | 6 | 4 | 4 | 5 | 5 | 2 | 1 | 3 | 6 | 4 | 4 | 2 | 6 | 6 | 5 | 6 | 4 | 3 | 3 | 5 | 6 | 4 | 6 | 5 | 4 | 5  . 2 | 4  . 8 | 3  . 2 | 4  . 6 | 4  . 2 | 5 | 4  . 6 | 4  . 4 |
| 1 | 1 | 2 | 2 | 1 | 1 | 6 | 6 | 5 | 3 | 4 | 6 | 5 | 5 | 1 | 5 | 3 | 5 | 4 | 2 | 3 | 5 | 3 | 3 | 6 | 5 | 5 | 5 | 5 | 4 | 6 | 6 | 5 | 6 | 6 | 5 | 4  . 8 | 4  . 4 | 3  . 4 | 4  . 4 | 5 | 5  . 6 | 5 | 4  . 2 |
| 1 | 1 | 2 | 2 | 1 | 1 | 6 | 3 | 3 | 2 | 3 | 6 | 2 | 3 | 5 | 5 | 5 | 5 | 4 | 6 | 2 | 4 | 6 | 4 | 6 | 3 | 3 | 4 | 2 | 1 | 6 | 2 | 6 | 6 | 6 | 4 | 3 | 4 | 4 | 4 | 3 | 4 | 4 | 4 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| 1 | 1 | 2 | 2 | 2 | 1 | 6 | 3 | 3 | 2 | 3 | 6 | 2 | 6 | 5 | 5 | 5 | 5 | 4 | 6 | 2 | 4 | 6 | 4 | 6 | 3 | 3 | 4 | 2 | 1 | 6 | 2 | 6 | 6 | 6 | 6 | 3  . 4 | 4  . 8 | 4  . 4 | 4  . 6 | 3  . 2 | 5  . 2 | 4  . 3  3 | 4  . 2 |
| 1 | 1 | 2 | 2 | 2 | 1 | 6 | 4 | 5 | 3 | 4 | 6 | 3 | 6 | 3 | 4 | 5 | 4 | 4 | 6 | 4 | 4 | 6 | 3 | 3 | 5 | 4 | 3 | 4 | 5 | 3 | 4 | 6 | 3 | 5 | 6 | 4  . 4 | 4  . 4 | 4  . 6 | 4  . 2 | 3  . 8 | 4  . 8 | 4  . 2  7 | 4  . 4  7 |
| 1 | 1 | 2 | 2 | 2 | 1 | 6 | 4 | 4 | 5 | 3 | 5 | 4 | 6 | 4 | 4 | 4 | 3 | 4 | 6 | 1 | 4 | 2 | 2 | 3 | 4 | 4 | 5 | 4 | 6 | 5 | 4 | 3 | 4 | 4 | 1 | 4  . 4 | 4  . 6 | 3  . 6 | 3 | 4  . 8 | 3  . 2 | 3  . 6  7 | 4  . 2 |
| 1 | 1 | 2 | 2 | 2 | 1 | 6 | 4 | 4 | 5 | 3 | 5 | 4 | 6 | 4 | 4 | 4 | 3 | 4 | 4 | 1 | 4 | 2 | 2 | 3 | 4 | 4 | 5 | 4 | 6 | 5 | 6 | 3 | 4 | 4 | 1 | 4  . 4 | 4  . 6 | 3  . 2 | 3 | 4  . 8 | 3  . 6 | 3  . 8 | 4  . 0  7 |
| 2 | 1 | 3 | 2 | 1 | 2 | 3 | 4 | 3 | 3 | 2 | 2 | 4 | 6 | 4 | 5 | 5 | 4 | 4 | 4 | 3 | 4 | 1 | 5 | 4 | 4 | 5 | 4 | 4 | 6 | 4 | 6 | 2 | 4 | 5 | 6 | 3 | 4  . 2 | 4 | 3  . 5 | 4  . 6 | 4  . 6 | 4  . 2  3 | 3  . 7  3 |
| 1 | 1 | 3 | 2 | 1 | 1 | 2 | 3 | 4 | 2 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 2 | 4 | 1 | 3 | 3 | 4 | 4 | 3 | 4 | 5 | 4 | 4 | 3 | 6 | 6 | 3 | 4 | 4 | 6 | 3  . 2 | 4  . 2 | 3 | 3  . 6 | 4  . 4 | 4  . 6 | 4  . 2 | 3  . 4  7 |
| 1 | 1 | 3 | 2 | 1 | 2 | 4 | 4 | 4 | 4 | 2 | 5 | 4 | 4 | 4 | 4 | 5 | 1 | 4 | 4 | 4 | 4 | 6 | 1 | 4 | 4 | 4 | 4 | 4 | 1 | 4 | 6 | 4 | 4 | 4 | 4 | 3  . 6 | 4  . 2 | 3  . 6 | 3  . 8 | 3  . 4 | 4  . 4 | 3  . 8  7 | 3  . 8 |
| 1 | 1 | 3 | 2 | 1 | 1 | 5 | 5 | 5 | 4 | 4 | 2 | 4 | 4 | 5 | 4 | 3 | 1 | 5 | 4 | 4 | 4 | 6 | 3 | 3 | 4 | 4 | 4 | 4 | 2 | 2 | 4 | 3 | 4 | 4 | 2 | 4 | 3 | 3 | 4 | 3 | 3 | 3 | 3 |

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| 1 | 1 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 3 | 5 | 3 | 4 | 5 | 3 | 3 | 2 | 3 | 3 | 4 | 3 | 6 | 5 | 2 | 3 | 3 | 3 | 5 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 2  . 6 | 4 | 3 | 3  . 8 | 3  . 2 | 3  . 6 | 3  . 5  3 | 3  . 2 |
| 1 | 1 | 3 | 3 | 2 | 1 | 5 | 5 | 1 | 2 | 5 | 1 | 5 | 5 | 3 | 5 | 4 | 1 | 5 | 5 | 5 | 5 | 6 | 4 | 3 | 5 | 5 | 5 | 4 | 3 | 5 | 5 | 5 | 5 | 5 | 6 | 3  . 6 | 3  . 8 | 4 | 4  . 6 | 4  . 4 | 5  . 2 | 4  . 7  3 | 3  . 8 |
| 1 | 1 | 3 | 3 | 2 | 2 | 5 | 5 | 1 | 2 | 5 | 1 | 5 | 5 | 3 | 5 | 4 | 1 | 5 | 5 | 5 | 5 | 6 | 4 | 3 | 5 | 5 | 5 | 4 | 3 | 5 | 5 | 5 | 5 | 5 | 6 | 3  . 6 | 3  . 8 | 4 | 4  . 6 | 4  . 4 | 5  . 2 | 4  . 7  3 | 3  . 8 |
| 2 | 1 | 3 | 3 | 1 | 1 | 1 | 3 | 3 | 3 | 4 | 3 | 1 | 4 | 3 | 3 | 4 | 3 | 3 | 4 | 3 | 4 | 6 | 3 | 3 | 3 | 4 | 4 | 3 | 3 | 4 | 4 | 3 | 3 | 5 | 4 | 2  . 8 | 2  . 8 | 3  . 4 | 3  . 8 | 3  . 6 | 3  . 8 | 3  . 7  3 | 3 |
| 1 | 1 | 3 | 3 | 2 | 1 | 3 | 4 | 3 | 5 | 1 | 5 | 5 | 4 | 1 | 4 | 4 | 1 | 4 | 4 | 3 | 4 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 3  . 2 | 3  . 8 | 3  . 2 | 4  . 2 | 4  . 4 | 4 | 4  . 2 | 3  . 4 |
| 1 | 1 | 3 | 3 | 1 | 1 | 3 | 4 | 3 | 5 | 1 | 5 | 5 | 4 | 1 | 4 | 4 | 1 | 4 | 4 | 3 | 4 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 6 | 4 | 4 | 4 | 6 | 3  . 2 | 3  . 8 | 3  . 2 | 4  . 2 | 4  . 4 | 4  . 8 | 4  . 4  7 | 3  . 4 |
| 1 | 1 | 3 | 3 | 2 | 2 | 5 | 4 | 3 | 2 | 3 | 4 | 4 | 4 | 2 | 4 | 4 | 2 | 4 | 4 | 3 | 2 | 1 | 1 | 2 | 4 | 4 | 5 | 4 | 3 | 4 | 6 | 4 | 4 | 2 | 3 | 3  . 4 | 3  . 6 | 3  . 4 | 2 | 4 | 3  . 8 | 3  . 2  7 | 3  . 4  7 |
| 1 | 2 | 3 | 3 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 6 | 1 | 1 | 1 | 1 | 4 | 2 | 4 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 6 | 2 | 1 | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 2 |

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| 1 | 2 | 3 | 3 | 2 | 2 | 4 | 5 | 4 | 3 | 4 | 5 | 6 | 4 | 5 | 5 | 3 | 2 | 4 | 3 | 4 | 6 | 4 | 2 | 3 | 4 | 4 | 5 | 3 | 5 | 4 | 6 | 3 | 4 | 4 | 4 | 4 | 5 | 3  . 2 | 3  . 8 | 4  . 2 | 4  . 2 | 4  . 0  7 | 4  . 0  7 |
| 2 | 2 | 3 | 3 | 1 | 1 | 5 | 3 | 4 | 3 | 5 | 4 | 6 | 4 | 5 | 4 | 4 | 4 | 3 | 4 | 4 | 6 | 4 | 4 | 5 | 4 | 5 | 4 | 5 | 4 | 4 | 5 | 4 | 3 | 5 | 5 | 4 | 4  . 6 | 3  . 8 | 4  . 6 | 4  . 4 | 4  . 4 | 4  . 4  7 | 4  . 1  3 |
| 2 | 2 | 3 | 3 | 2 | 2 | 3 | 2 | 3 | 2 | 4 | 1 | 6 | 2 | 1 | 3 | 3 | 4 | 2 | 2 | 3 | 6 | 2 | 3 | 2 | 2 | 1 | 2 | 4 | 3 | 2 | 3 | 3 | 2 | 3 | 2 | 2  . 8 | 2  . 6 | 2  . 8 | 3 | 2  . 4 | 2  . 6 | 2  . 6  7 | 2  . 7  3 |
| 2 | 2 | 3 | 3 | 1 | 1 | 3 | 2 | 4 | 3 | 3 | 4 | 6 | 3 | 3 | 4 | 3 | 1 | 4 | 2 | 3 | 6 | 4 | 4 | 3 | 3 | 3 | 4 | 3 | 4 | 4 | 3 | 4 | 3 | 5 | 3 | 3 | 4 | 2  . 5 | 4 | 3  . 6 | 3  . 6 | 3  . 7  3 | 3  . 1  7 |
| 1 | 2 | 3 | 3 | 2 | 2 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 3 | 4 | 5 | 5 | 6 | 3 | 3 | 3 | 5 | 4 | 4 | 5 | 3 | 2 | 4 | 4 | 5 | 5 | 4 | 4  . 4 | 4  . 6 | 4  . 2 | 4 | 3  . 6 | 4  . 4 | 4 | 4  . 4 |
| 1 | 2 | 3 | 3 | 1 | 1 | 2 | 2 | 2 | 1 | 3 | 2 | 2 | 3 | 1 | 2 | 2 | 3 | 2 | 1 | 2 | 6 | 2 | 3 | 2 | 2 | 3 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 1 | 2 | 2 | 2 | 3 | 2 | 2 | 2  . 3  3 | 2 |
| 1 | 2 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 3 | 2 | 2 | 3 | 1 | 2 | 2 | 3 | 2 | 1 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 1 | 2 | 2 | 2 | 2  . 4 | 2 | 2 | 2  . 1  3 | 2 |
| 1 | 2 | 3 | 3 | 1 | 2 | 4 | 5 | 3 | 5 | 4 | 1 | 4 | 5 | 1 | 5 | 5 | 4 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 2 | 5 | 6 | 5 | 4 | 5 | 5 | 4 | 3 | 4 | 4 | 4 | 5 | 4 | 4 |

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| 1 | 2 | 3 | 3 | 2 | 2 | 3 | 4 | 4 | 3 | 5 | 1 | 5 | 4 | 1 | 4 | 4 | 1 | 4 | 4 | 3 | 4 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 6 | 4 | 4 | 4 | 4 | 3  . 8 | 3 | 3  . 2 | 4  . 2 | 4  . 4 | 4  . 4 | 4  . 3  3 | 3  . 3  3 |
| 1 | 2 | 3 | 3 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  . 4 | 1 | 2 | 1  . 4  7 | 1 |
| 2 | 2 | 3 | 3 | 2 | 2 | 3 | 4 | 4 | 2 | 3 | 5 | 4 | 5 | 5 | 5 | 4 | 3 | 5 | 5 | 3 | 4 | 5 | 5 | 3 | 4 | 4 | 5 | 5 | 4 | 4 | 6 | 5 | 4 | 3 | 4 | 3  . 2 | 4  . 8 | 4 | 4  . 2 | 4  . 4 | 4  . 4 | 4  . 3  3 | 4 |
| 1 | 2 | 3 | 4 | 1 | 1 | 4 | 5 | 4 | 4 | 1 | 2 | 4 | 5 | 3 | 3 | 2 | 1 | 3 | 4 | 3 | 4 | 3 | 2 | 4 | 4 | 4 | 5 | 4 | 3 | 4 | 6 | 4 | 4 | 5 | 4 | 3  . 6 | 3  . 4 | 2  . 6 | 3  . 4 | 4 | 4  . 6 | 4 | 3  . 2 |
| 1 | 2 | 3 | 4 | 2 | 2 | 4 | 5 | 4 | 4 | 1 | 2 | 4 | 6 | 3 | 3 | 2 | 1 | 3 | 4 | 3 | 4 | 3 | 2 | 4 | 4 | 4 | 5 | 4 | 3 | 4 | 6 | 4 | 4 | 5 | 4 | 3  . 6 | 3  . 6 | 2  . 6 | 3  . 4 | 4 | 4  . 6 | 4 | 3  . 2  7 |
| 1 | 2 | 3 | 4 | 1 | 1 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 6 | 5 | 5 | 4 | 3 | 5 | 5 | 4 | 2 | 4 | 3 | 2 | 4 | 5 | 4 | 3 | 2 | 4 | 6 | 4 | 3 | 4 | 4 | 4  . 6 | 4  . 8 | 4  . 2 | 3 | 3  . 6 | 4  . 2 | 3  . 6 | 4  . 5  3 |
| 1 | 2 | 3 | 4 | 2 | 1 | 4 | 4 | 4 | 4 | 5 | 2 | 5 | 6 | 5 | 4 | 1 | 4 | 4 | 2 | 4 | 4 | 5 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 5 | 6 | 4 | 4 | 5 | 4 | 4  . 2 | 4  . 4 | 3 | 4  . 2 | 4  . 4 | 4  . 6 | 4  . 4 | 3  . 8  7 |
| 1 | 2 | 3 | 4 | 1 | 1 | 4 | 4 | 5 | 4 | 4 | 3 | 5 | 6 | 5 | 4 | 2 | 1 | 2 | 4 | 4 | 3 | 4 | 3 | 4 | 5 | 5 | 4 | 4 | 1 | 4 | 4 | 5 | 4 | 4 | 3 | 4 | 4 | 2 | 3 | 3 | 4 | 3 | 3 |

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| 1 | 2 | 3 | 4 | 2 | 1 | 4 | 4 | 5 | 4 | 4 | 3 | 5 | 6 | 5 | 4 | 2 | 1 | 2 | 4 | 4 | 3 | 4 | 3 | 4 | 5 | 5 | 4 | 4 | 1 | 4 | 4 | 5 | 4 | 4 | 3 | 4  . 2 | 4  . 6 | 2  . 6 | 3  . 8 | 3  . 6 | 4 | 3  . 8 | 3  . 8 |
| 1 | 2 | 3 | 4 | 1 | 1 | 4 | 4 | 4 | 5 | 5 | 2 | 4 | 4 | 3 | 5 | 4 | 2 | 5 | 4 | 3 | 4 | 3 | 3 | 5 | 5 | 4 | 4 | 4 | 1 | 3 | 3 | 5 | 5 | 5 | 4 | 4  . 4 | 3  . 6 | 3  . 6 | 4 | 3  . 2 | 4  . 4 | 3  . 8  7 | 3  . 8  7 |
| 1 | 2 | 3 | 4 | 2 | 2 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 3 | 5 | 5 | 5 | 5 | 4 | 5 | 6 | 4 | 4 | 4 | 5 | 3 | 4 | 4 | 4 | 6 | 4 | 4 | 4 | 4 | 3  . 8 | 3  . 8 | 4  . 8 | 4  . 6 | 4 | 4  . 4 | 4  . 3  3 | 4  . 1  3 |
| 2 | 2 | 3 | 4 | 3 | 2 | 5 | 4 | 4 | 3 | 3 | 2 | 5 | 4 | 3 | 4 | 4 | 3 | 4 | 3 | 4 | 2 | 6 | 5 | 4 | 4 | 5 | 5 | 5 | 4 | 5 | 6 | 3 | 4 | 5 | 4 | 3  . 8 | 3  . 6 | 3  . 6 | 4  . 2 | 4  . 8 | 4  . 4 | 4  . 4  7 | 3  . 6  7 |
| 2 | 2 | 3 | 4 | 1 | 2 | 5 | 4 | 4 | 3 | 3 | 2 | 5 | 4 | 3 | 4 | 4 | 3 | 4 | 3 | 4 | 2 | 6 | 5 | 4 | 4 | 5 | 5 | 5 | 4 | 5 | 6 | 3 | 4 | 5 | 4 | 3  . 8 | 3  . 6 | 3  . 6 | 4  . 2 | 4  . 8 | 4  . 4 | 4  . 4  7 | 3  . 6  7 |
| 1 | 2 | 3 | 4 | 2 | 2 | 4 | 4 | 3 | 4 | 4 | 2 | 3 | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 6 | 4 | 4 | 4 | 2 | 4 | 4 | 4 | 4 | 6 | 4 | 5 | 4 | 4 | 3  . 8 | 2  . 6 | 4 | 4  . 6 | 3  . 6 | 4  . 6 | 4  . 2  7 | 3  . 4  7 |
| 1 | 2 | 3 | 4 | 1 | 3 | 4 | 4 | 5 | 4 | 4 | 3 | 5 | 5 | 1 | 4 | 3 | 1 | 4 | 4 | 5 | 4 | 6 | 3 | 4 | 4 | 5 | 4 | 2 | 2 | 4 | 6 | 5 | 4 | 5 | 5 | 4  . 2 | 3  . 6 | 3  . 4 | 4  . 2 | 3  . 4 | 5 | 4  . 2 | 3  . 7  3 |
| 1 | 2 | 3 | 4 | 2 | 3 | 4 | 4 | 5 | 4 | 4 | 2 | 5 | 4 | 2 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 6 | 3 | 4 | 4 | 2 | 3 | 3 | 2 | 4 | 4 | 4 | 3 | 4 | 2 | 4  . | 3  . | 4  . | 4  . | 2  . | 3  . | 3  . | 3  . |

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| 1 | 2 | 3 | 4 | 1 | 3 | 5 | 4 | 4 | 3 | 3 | 2 | 4 | 5 | 3 | 3 | 4 | 3 | 4 | 3 | 3 | 2 | 3 | 3 | 4 | 4 | 5 | 4 | 4 | 4 | 5 | 4 | 2 | 4 | 5 | 4 | 3  . 8 | 3  . 4 | 3  . 4 | 3  . 2 | 4  . 4 | 3  . 8 | 3  . 8 | 3  . 5  3 |
| 1 | 2 | 3 | 4 | 2 | 3 | 5 | 4 | 4 | 3 | 3 | 2 | 4 | 5 | 3 | 3 | 4 | 3 | 4 | 3 | 3 | 2 | 3 | 3 | 4 | 4 | 5 | 4 | 4 | 4 | 5 | 4 | 2 | 4 | 5 | 4 | 3  . 8 | 3  . 4 | 3  . 4 | 3  . 2 | 4  . 4 | 3  . 8 | 3  . 8 | 3  . 5  3 |
| 1 | 2 | 3 | 4 | 1 | 3 | 4 | 5 | 4 | 5 | 5 | 4 | 4 | 5 | 5 | 5 | 5 | 1 | 4 | 5 | 4 | 3 | 5 | 4 | 5 | 4 | 5 | 5 | 5 | 1 | 4 | 5 | 4 | 4 | 5 | 5 | 4  . 6 | 4  . 6 | 3  . 8 | 4  . 2 | 4 | 4  . 6 | 4  . 2  7 | 4  . 3  3 |
| 1 | 2 | 3 | 4 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 5 | 5 | 4 | 5 | 4 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 5 | 5 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 2 | 4  . 2 | 4  . 4 | 4  . 2 | 4  . 2 | 4 | 4  . 1  3 | 3  . 5  3 |
| 1 | 2 | 3 | 4 | 1 | 3 | 5 | 5 | 5 | 5 | 2 | 1 | 4 | 4 | 4 | 5 | 5 | 2 | 5 | 3 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 4  . 4 | 3  . 6 | 3  . 8 | 3  . 8 | 4 | 4  . 6 | 4  . 1  3 | 3  . 9  3 |
| 2 | 2 | 3 | 4 | 2 | 3 | 4 | 4 | 4 | 3 | 5 | 4 | 4 | 4 | 3 | 3 | 3 | 4 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 5 | 4 | 4 | 4 | 5 | 5 | 4 | 5 | 3 | 5 | 3 | 4 | 3  . 6 | 4 | 4  . 4 | 4  . 4 | 4 | 4  . 2  7 | 3  . 8  7 |
| 1 | 2 | 3 | 4 | 1 | 2 | 4 | 4 | 4 | 4 | 4 | 2 | 4 | 2 | 5 | 5 | 5 | 2 | 5 | 5 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 4 | 3  . 6 | 4  . 2 | 4  . 2 | 4  . 2 | 4  . 5 | 4  . 3 | 3  . 9  3 |
| 1 | 2 | 3 | 4 | 2 | 1 | 2 | 3 | 3 | 3 | 4 | 5 | 4 | 5 | 4 | 5 | 4 | 1 | 4 | 4 | 3 | 2 | 4 | 3 | 4 | 5 | 5 | 5 | 4 | 3 | 4 | 4 | 4 | 5 | 5 | 4 | 3 | 4 | 3 | 3 | 4 | 4 | 4 | 3 |

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| 1 | 2 | 4 | 4 | 1 | 2 | 3 | 4 | 4 | 3 | 1 | 2 | 3 | 3 | 4 | 4 | 3 | 3 | 3 | 5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 4 | 4 | 4 | 4 | 4 | 3 | 3  . 2 | 3  . 4 | 3 | 3  . 4 | 4 | 3  . 4  7 | 3  . 2 |
| 1 | 2 | 4 | 4 | 2 | 3 | 3 | 4 | 4 | 3 | 1 | 2 | 3 | 3 | 4 | 4 | 3 | 3 | 3 | 5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 4 | 4 | 4 | 4 | 4 | 3 | 3  . 2 | 3  . 4 | 3 | 3  . 4 | 4 | 3  . 4  7 | 3  . 2 |
| 1 | 2 | 4 | 4 | 1 | 3 | 3 | 4 | 5 | 4 | 3 | 4 | 4 | 4 | 2 | 4 | 3 | 2 | 4 | 3 | 3 | 4 | 4 | 3 | 3 | 4 | 3 | 3 | 2 | 1 | 2 | 3 | 4 | 3 | 4 | 4 | 3  . 7 | 3  . 6 | 3 | 3  . 6 | 2  . 2 | 3  . 6 | 3  . 1  3 | 3  . 4  3 |
|  | 2 | 4 | 4 | 2 | 3 | 3 | 3 | 3 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 3 | 4 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 5 | 5 | 4 | 5 | 3  . 2 | 4 | 4  . 2 | 4  . 4 | 4  . 3 | 4  . 6 | 4  . 4  3 | 3  . 8 |
| 1 | 2 | 4 | 4 | 1 | 3 | 4 | 4 | 4 | 5 | 5 | 1 | 4 | 5 | 2 | 5 | 4 | 2 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 5 | 5 | 1 | 4 | 4 | 5 | 4 | 4 | 4 | 4  . 4 | 3  . 4 | 3  . 4 | 3 | 4 | 4  . 2 | 3  . 7  3 | 3  . 7  3 |
| 1 | 2 | 4 | 4 | 2 | 3 | 4 | 4 | 5 | 4 | 5 | 4 | 5 | 5 | 4 | 4 | 5 | 4 | 3 | 3 | 3 | 5 | 5 | 4 | 4 | 5 | 5 | 4 | 5 | 1 | 4 | 5 | 5 | 4 | 5 | 5 | 4  . 4 | 4  . 4 | 3  . 6 | 4  . 6 | 3  . 8 | 4  . 8 | 4  . 4 | 4  . 1  3 |
| 1 | 2 | 4 | 4 | 1 | 2 | 5 | 5 | 5 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 4  . 6 | 5 | 4  . 6 | 4  . 8 | 4  . 6 | 4  . 8 | 4  . 7  3 | 4  . 7  3 |

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| 2 | 2 | 4 | 4 | 2 | 1 | 5 | 5 | 5 | 5 | 5 | 1 | 5 | 5 | 1 | 5 | 5 | 2 | 5 | 5 | 5 | 5 | 5 | 3 | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 4 | 5 | 5 | 5 | 3  . 4 | 4  . 4 | 4  . 4 | 4  . 8 | 4  . 8 | 4  . 6  7 | 4  . 2  7 |
| 1 | 2 | 4 | 4 | 1 | 2 | 5 | 3 | 4 | 4 | 4 | 5 | 3 | 4 | 4 | 4 | 5 | 3 | 5 | 4 | 4 | 3 | 6 | 5 | 5 | 4 | 4 | 3 | 4 | 5 | 4 | 4 | 4 | 4 | 5 | 5 | 4 | 4 | 4  . 2 | 4  . 6 | 4 | 4  . 4 | 4  . 3  3 | 4  . 0  7 |
| 1 | 2 | 4 | 5 | 3 | 3 | 5 | 5 | 5 | 5 | 5 | 1 | 5 | 5 | 1 | 5 | 5 | 1 | 5 | 5 | 5 | 5 | 6 | 3 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 3  . 4 | 4  . 2 | 4  . 6 | 5 | 5 | 4  . 8  7 | 4  . 2 |
| 1 | 2 | 4 | 5 | 3 | 3 | 3 | 3 | 4 | 4 | 3 | 2 | 4 | 5 | 1 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 6 | 4 | 3 | 4 | 4 | 5 | 4 | 3 | 4 | 5 | 5 | 4 | 5 | 4 | 3  . 4 | 3  . 2 | 3  . 8 | 4  . 2 | 4 | 4  . 6 | 4  . 2  7 | 3  . 4  7 |
| 1 | 2 | 4 | 5 | 3 | 3 | 4 | 4 | 5 | 4 | 5 | 4 | 5 | 4 | 3 | 4 | 4 | 3 | 4 | 3 | 4 | 2 | 4 | 3 | 3 | 4 | 5 | 4 | 4 | 3 | 5 | 4 | 4 | 5 | 5 | 4 | 4  . 4 | 4 | 3  . 6 | 3  . 2 | 4  . 2 | 4  . 4 | 3  . 9  3 | 4 |
| 1 | 2 | 4 | 5 | 3 | 2 | 4 | 4 | 3 | 2 | 4 | 4 | 4 | 4 | 5 | 4 | 5 | 3 | 5 | 4 | 3 | 4 | 4 | 2 | 4 | 4 | 5 | 5 | 3 | 3 | 5 | 4 | 5 | 5 | 4 | 4 | 3  . 4 | 4  . 2 | 4 | 3  . 6 | 4  . 2 | 4  . 4 | 4  . 0  7 | 3  . 8  7 |
| 1 | 2 | 4 | 5 | 3 | 1 | 4 | 4 | 4 | 4 | 5 | 2 | 5 | 4 | 5 | 4 | 1 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 5 | 5 | 4 | 4 | 5 | 4 | 4  . 2 | 4 | 3  . 4 | 4  . 2 | 4  . 4 | 4  . 4 | 4  . 3  3 | 3  . 8  7 |
| 1 | 2 | 4 | 5 | 3 | 3 | 3 | 3 | 4 | 4 | 3 | 1 | 3 | 3 | 1 | 3 | 3 | 1 | 3 | 3 | 4 | 1 | 2 | 1 | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 4 | 4 | 3 | 3 | 4 | 3  . 4 | 2  . 2 | 2  . 8 | 2 | 2  . 6 | 3  . 6 | 2  . 7 | 2  . 8 |

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| 1 | 2 | 4 | 5 | 3 | 2 | 5 | 4 | 5 | 4 | 4 | 3 | 4 | 5 | 3 | 5 | 4 | 3 | 4 | 4 | 4 | 5 | 5 | 3 | 4 | 4 | 5 | 5 | 5 | 1 | 5 | 5 | 4 | 4 | 4 | 4 | 4  . 4 | 4 | 3  . 8 | 4  . 2 | 4  . 2 | 4  . 2 | 4  . 2 | 4  . 0  7 |
| 2 | 2 | 5 | 5 | 3 | 1 | 3 | 4 | 4 | 4 | 5 | 5 | 4 | 4 | 5 | 5 | 5 | 4 | 3 | 3 | 3 | 3 | 3 | 4 | 5 | 4 | 4 | 4 | 5 | 4 | 2 | 3 | 4 | 3 | 3 | 3 | 4 | 4  . 6 | 3  . 6 | 3  . 8 | 3  . 8 | 3  . 2 | 3  . 6 | 4  . 0  7 |
| 2 | 2 | 5 | 5 | 3 | 2 | 3 | 4 | 4 | 4 | 5 | 5 | 4 | 4 | 5 | 5 | 5 | 4 | 3 | 3 | 3 | 3 | 3 | 4 | 5 | 4 | 4 | 4 | 5 | 4 | 2 | 3 | 4 | 3 | 3 | 3 | 4 | 4  . 6 | 3  . 6 | 3  . 8 | 3  . 8 | 3  . 2 | 3  . 6 | 4  . 0  7 |
| 1 | 2 | 5 | 5 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 1 | 4 | 4 | 4 | 4 | 3 | 1 | 4 | 4 | 4 | 3 | 3 | 4 | 3 | 4 | 4 | 4 | 5 | 3 | 4 | 4 | 5 | 4 | 4 | 4 | 3  . 8 | 3  . 4 | 3  . 2 | 3  . 4 | 4 | 4  . 2 | 3  . 8  7 | 3  . 4  7 |
| 1 | 2 | 5 | 5 | 3 | 2 | 3 | 5 | 3 | 3 | 5 | 5 | 4 | 5 | 4 | 4 | 5 | 3 | 4 | 4 | 5 | 2 | 4 | 2 | 4 | 4 | 5 | 4 | 3 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 3  . 8 | 4  . 4 | 4  . 2 | 3  . 2 | 3  . 6 | 4 | 3  . 6 | 4  . 1  3 |
| 1 | 2 | 1 | 5 | 3 | 1 | 3 | 5 | 3 | 3 | 5 | 5 | 4 | 5 | 4 | 4 | 5 | 3 | 4 | 4 | 5 | 2 | 4 | 2 | 4 | 4 | 5 | 4 | 3 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 3  . 8 | 4  . 4 | 4  . 2 | 3  . 2 | 3  . 6 | 4 | 3  . 6 | 4  . 1  3 |
| 1 | 3 | 2 | 5 | 3 | 2 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 1 | 3 | 1 | 4 | 5 | 5 | 3 | 4 | 5 | 5 | 5 | 5 | 3 | 4 | 5 | 5 | 5 | 5 | 4 | 3  . 8 | 4  . 6 | 2  . 8 | 4  . 4 | 4  . 4 | 4  . 8 | 4  . 5  3 | 3  . 7  3 |
| 1 | 3 | 3 | 5 | 3 | 3 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 1 | 3 | 1 | 4 | 5 | 5 | 3 | 4 | 5 | 5 | 5 | 5 | 3 | 4 | 5 | 5 | 5 | 5 | 4 | 3  . | 4  . | 2  . | 4  . | 4  . | 4  . | 4  . | 3  . |

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| 1 | 3 | 4 | 5 | 1 | 2 | 5 | 5 | 4 | 4 | 4 | 2 | 5 | 5 | 5 | 4 | 5 | 4 | 4 | 5 | 5 | 5 | 5 | 3 | 3 | 5 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 5 | 5 | 4 | 4  . 4 | 4  . 2 | 4  . 6 | 4  . 2 | 3  . 8 | 4  . 4 | 4  . 1  3 | 4  . 4 |
| 2 | 3 | 1 | 5 | 2 | 1 | 4 | 3 | 3 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 3 | 4 | 5 | 5 | 5 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 3 | 3 | 3  . 8 | 4  . 2 | 4  . 4 | 4  . 2 | 4 | 3  . 8 | 4 | 4  . 1  3 |
| 2 | 3 | 2 | 5 | 1 | 2 | 4 | 3 | 3 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 3 | 4 | 5 | 5 | 5 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 3 | 3 | 3  . 8 | 4  . 2 | 4  . 4 | 4  . 2 | 4 | 3  . 8 | 4 | 4  . 1  3 |
| 1 | 3 | 3 | 5 | 2 | 3 | 4 | 5 | 5 | 5 | 4 | 1 | 3 | 3 | 1 | 3 | 2 | 2 | 4 | 4 | 3 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 4 | 4 | 3 | 3 | 3 | 4  . 6 | 2  . 2 | 3 | 2  . 6 | 2  . 8 | 3  . 4 | 2  . 9  3 | 3  . 2  7 |
| 1 | 3 | 4 | 5 | 1 | 2 | 4 | 4 | 5 | 4 | 4 | 5 | 3 | 4 | 4 | 5 | 4 | 4 | 4 | 3 | 4 | 5 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 3 | 5 | 4 | 5 | 5 | 4 | 4 | 4  . 2 | 4  . 2 | 3  . 8 | 4  . 2 | 4  . 6 | 4  . 4 | 4  . 4 | 4  . 0  7 |
| 2 | 3 | 1 | 5 | 2 | 1 | 5 | 4 | 5 | 5 | 4 | 3 | 5 | 5 | 3 | 5 | 4 | 3 | 4 | 4 | 4 | 3 | 4 | 3 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 4  . 6 | 4  . 2 | 3  . 8 | 4 | 4  . 2 | 3  . 6 | 3  . 9  3 | 4  . 2 |
| 2 | 3 | 2 | 5 | 1 | 2 | 5 | 4 | 5 | 5 | 4 | 3 | 5 | 5 | 3 | 5 | 4 | 3 | 4 | 4 | 4 | 3 | 4 | 3 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 4  . 6 | 4  . 2 | 3  . 8 | 4 | 4  . 2 | 3  . 6 | 3  . 9  3 | 4  . 2 |
| 2 | 3 | 3 | 6 | 2 | 1 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 4 | 5 | 5 | 3 | 5 | 5 | 5 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 4 | 5 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |

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| 1 | 3 | 4 | 6 | 1 | 3 | 3 | 4 | 4 | 4 | 3 | 4 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 3 | 3 | 4 | 3 | 3 | 3 | 4 | 5 | 3 | 3  . 6 | 3  . 4 | 3  . 2 | 3  . 6 | 3  . 4 | 3  . 6 | 3  . 5  3 | 3  . 4 |
| 1 | 3 | 1 | 6 | 2 | 2 | 4 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 4 | 5 | 4 | 1 | 4 | 2 | 4 | 3 | 4 | 3 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 4  . 2 | 4  . 4 | 3 | 3  . 6 | 4  . 2 | 4  . 2 | 4 | 3  . 8  7 |
| 1 | 3 | 2 | 6 | 1 | 1 | 4 | 4 | 4 | 3 | 5 | 2 | 4 | 5 | 3 | 4 | 4 | 3 | 4 | 4 | 3 | 4 | 3 | 3 | 4 | 4 | 4 | 5 | 4 | 1 | 5 | 5 | 4 | 4 | 4 | 5 | 4 | 3  . 6 | 3  . 6 | 3  . 6 | 3  . 8 | 4  . 4 | 3  . 9  3 | 3  . 7  3 |
| 1 | 3 | 3 | 6 | 3 | 2 | 4 | 5 | 5 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 1 | 4 | 2 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 5 | 4 | 5 | 4  . 4 | 4  . 8 | 3  . 2 | 4  . 2 | 4  . 2 | 4  . 4 | 4  . 2  7 | 4  . 1  3 |
| 1 | 3 | 4 | 6 | 2 | 1 | 4 | 4 | 5 | 5 | 5 | 2 | 4 | 5 | 5 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 5 | 5 | 5 | 3 | 5 | 4 | 4 | 4 | 5 | 5 | 4  . 6 | 4 | 3  . 8 | 3  . 6 | 4  . 6 | 4  . 4 | 4  . 2 | 4  . 1  3 |
| 1 | 3 | 1 | 6 | 1 | 2 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 4 | 4 | 4 | 3 | 3 | 5 | 5 | 5 | 5 | 4  . 6 | 4 | 4  . 4 | 4  . 3 | 4 | 4  . 6 | 4  . 3 | 4  . 3  3 |
| 1 | 3 | 2 | 6 | 3 | 1 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 4 | 4 | 4 | 3 | 3 | 5 | 5 | 5 | 5 | 4  . 6 | 4 | 4  . 4 | 4  . 3 | 4 | 4  . 6 | 4  . 3 | 4  . 3  3 |

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| 1 | 3 | 3 | 6 | 2 | 2 | 5 | 5 | 5 | 5 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 2 | 2 | 4 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | 3 | 5 | 4 | 3 | 4 | 4 | 4 | 4  . 8 | 3  . 8 | 3 | 3 | 4 | 3  . 8 | 3  . 6 | 3  . 8  7 |
| 1 | 3 | 4 | 6 | 1 | 3 | 3 | 4 | 4 | 3 | 4 | 5 | 4 | 4 | 2 | 4 | 4 | 2 | 4 | 4 | 4 | 5 | 5 | 3 | 4 | 4 | 4 | 5 | 3 | 1 | 4 | 4 | 4 | 4 | 5 | 5 | 3  . 6 | 3  . 8 | 3  . 6 | 4  . 2 | 3  . 4 | 4  . 4 | 4 | 3  . 6  7 |
| 2 | 3 | 2 | 6 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 5 | 4 | 5 | 4 | 4 | 3 | 4 | 4 | 4 | 5 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 4 | 3 | 4 | 3  . 2 | 4  . 4 | 4 | 3  . 8 | 3  . 6 | 3  . 8 | 3  . 7  3 | 3  . 8  7 |
| 2 | 3 | 3 | 6 | 2 | 3 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 3 | 5 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 4 | 3 | 5 | 5 | 5 | 4 | 5 | 4 | 5 | 4 | 3 | 4 | 3 | 4  . 2 | 4 | 3  . 8 | 3  . 8 | 4  . 6 | 3  . 8 | 4  . 0  7 | 4 |
| 1 | 3 | 4 | 6 | 1 | 3 | 4 | 5 | 5 | 4 | 5 | 5 | 5 | 3 | 4 | 4 | 4 | 3 | 4 | 3 | 5 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 4 | 3 | 4 | 5 | 5 | 5 | 4 | 4 | 4  . 6 | 4  . 2 | 3  . 8 | 4  . 4 | 4  . 2 | 4  . 6 | 4  . 4 | 4  . 2 |
| 1 | 3 | 2 | 6 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 4 | 3 | 3 | 2 | 2 | 2 | 2 | 4 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 2  . 6 | 3 | 3 | 2  . 4 | 2  . 8 | 3 | 2  . 7  3 | 2  . 8  7 |
| 1 | 2 | 3 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 5 | 4 | 5 | 5 | 3 | 4 | 2 | 4 | 4 | 4 | 2 | 4 | 4 | 4 | 4 | 4 | 2 | 5 | 4 | 5 | 5 | 5 | 5 | 3  . 8 | 4  . 4 | 3  . 6 | 3  . 6 | 3  . 8 | 4  . 8 | 4  . 0  7 | 3  . 9  3 |