

A descriptive study of time management models and theories

Nongmeikapam Jinalee¹ and Dr. Amit Kumar Singh²

¹Ph.D Scholar, Dept. of Management, Mizoram University,
Mizoram, India

²Assistant Professor, Dept. of Management, Mizoram University,
Mizoram, India

Abstract

The importance of time management has been felt and empirical studies on it has been gaining popularity in the decades. To ensure a systematic management of time various models and theories have been designed by many researchers. Since the new generation is born in a digital era, digital media has taken major parts in one's life and so time has been spent on such media which can act like a time wasting activity. The way people spend their leisure time affects their behaviour, growth and life, proving the need to manage free time. The present study has been designed to bring out an overview of existing time management models and theories. It has tried to draw the importance and practical implications of the models and theories under study. The study shows the need to include time management skills to reduce psychological stress resulting from untimely completion of responsibilities and tasks.

Keywords *Time management, model, theory, overview, matrix, efficiency*

1: Introduction

Time management is an ability to manage one's personal time along with working time. In this age of advanced science and technology, learning patterns of students have changed as they are born in the digital environment. It would not be wrong to call them "Digital Natives" or "Gamer Generation" (Hernandez- Linares *et al.*, 2016). As a result of it, there is a need to change from traditional lecture-based teaching to learner centred approaches. According to Covey (1999) time management involves identifying tasks and recognising demands on time. People have the habit to look for effectiveness and consequences rather than the methods and efficiency of time management. Covey opined that the key to success is to

concentrate on highly important but not urgent issues.

Macan (1994) suggested that learning time management behaviours lead to greater perception of control over time. Macan's (1994) process model of time management behaviour included three attributes: setting goals and priorities; the mechanics of time management behaviour and a preference for organisation. Time management can be considered as a cluster of skills that are significant to academic success and include activities performed by students like advance planning, work prioritization, preparation for test and following schedules (Sansgiry *et al.*, 2006). According to Powell (2004) higher academic performance was to be achieved by balancing time management and study techniques effectively. In general, time management has positive effect on the academic success of students.

Students need to prioritize all their activities so that there will be more room for other important activities. Time management is one of the techniques to facilitate better use of time. Doing activities in an organised manner and setting priorities can help in accomplishing tasks successfully (Eid *et al.*, 2015). To utilise time effectively, one must be able to predict how much time is required for the activity to be performed (Kelly, 2002).

2: Literature review

Modern concepts of management like time management has their origin in the Indian Vedanta in terms of self control. Self management and self development have been highlighted in the Ancient Indian Scriptures. Three disciplines: Brahmacharya (Self- Control), Ahimsa (Non- Injury) and Satyam (Truthfulness) are the fundamental eternal values for regulation of physical, mental and intellectual layers of personality. When the three disciplines:

Brahmacharya, Ahimsa and Satyam are followed, one can effectively improve self- management. Time management draws more values from Brahmacharya: Self Control (Satija and Satija, 2013).

Different environments impose different demands and determine how the concept of time is perceived (Nadkarni and Chen, 2014). The concept of time can be taken as a clock or systems. As a clock, time can be regarded as an instrument to measure moments or activities of a day. As a system, time can be regarded as cultural rules used to arrange set of experiences in significant ways (Lustig and Koester, 2006). Time system consists of three types: technical, formal and informal. The technical systems are precise and scientific measurement of time. Formal time systems refer to the ways in which a cultural group describes and distribute units of time. Informal time systems refer to making assumptions about how much time should be used. It should not be wrong to say that time is a cultural variable and its usage may vary significantly across traditions because of behavioural differences in cultures of different nations (Brodowsky *et al.*, 2008).

On the basis of time management people can be divided into three groups. The first group takes time management necessary for achieving success, the second group takes time management as an unnecessary intervention and the third group likes to change something in life but lacks concentration and hard work. These three groups can be observed among students. What to do, when to do and that to do thinking allow students to perform necessary work qualitatively. Carrying out timing continuously for continuous optimization of life and improvement of personal time management can provide high quality development of future profession (Kirillov *et al.*, 2015).

Models and techniques of time management can be categorised into four stages in general. The first stage is concerned with what should be done. Marking tasks and activities are included in the first stage. In the second stage, schedules are attached to particular tasks and activities putting the question, when to do. How can a particular task be completed falls in the third stage. Strategies for completion of tasks and defined purposes are part of the third stage. Finally, the fourth stage is all about the emotions, sensations and moods of the individual. Efforts are laid to achieve balance between understanding and accepting the strategies and priorities. The fourth stage is not only directed to tasks and activities but towards achieving balance between reason and emotions. Planning and organisation of time are important factors for achieving goals, completing tasks and maintaining balance between reasons and emotions. A

successful time management system should provide opportunity for analysis of actions, priorities, experience and feelings. This will enhance coordination between individual actions and motivation for achieving goals (Panayotova *et al.*, 2015).

Development in society meant that role of free time is becoming very important and leisure time plays significant roles in the lives of children and adolescents. The way in which young people spend their leisure time affects their behaviour, growth and life. Thus, it is necessary to take care of one's free time (Gajewska & Piskrzyńska, 2017).

3: Significance and scope of the study

Despite the importance of time management, relatively little scientific studies have been focused on the way in which people manage their time and on the processes involved in managing time. The last two decades have witnessed a growing recognition of the importance of time in the field of scientific research (Molaei *et al.*, 2014). A comprehensive review of time management literature (Classens *et al.*, 2007) found three dimensions of time management behaviour: time assessment behaviour, planning behaviour and monitoring behaviour. A fourth dimension called executive behaviour has been added by a subsequent research (Classens *et al.*, 2009). Time assessment behaviour consists of awareness, analysis and estimation. Planning behaviour consists of goal setting, planning, prioritising and scheduling. Monitoring behaviours are evaluating, decision making and resetting. Executive behaviour influences ongoing activities.

The study has covered only eight time management model and theory. The research findings and observations are subjected to a descriptive analysis of the eight models and theory discussed in the study.

4: Research design

4.1: Statement of the problem

As the significance of time management is gaining popularity, it is necessary to study the nature and contribution of the existing time management models. The study is an effort to bring out the practical importance of the existing models and theories of time management.

4.2: Objective of the study

The objective of the study is:

To have an overview of the selected time management models and theories

4.3: Research methodology

The study undertaken is a descriptive study. It is a documentation of the time management models and theories covered in the study. It is based on secondary

data only. Secondary data collected from journals, books, e- resources etc. have been utilised for undergoing the study.

5: An overview of time management models and theories

5.1: ABC Model of Time Management

ABC model is based on three fundamental ideas which can be broadly explained as under:

a) Awareness

Every second and moment can be an opportunity if one is aware of its significance. The activities to be performed in a day can be grouped into four levels/ quadrants as indicated below:

Particulars	Urgent	Not urgent
Important	1 Exam preparation	2 Exercise
Not important	3 Unimportant phone calls	4 Watching TV, Gaming

Fig 5.1: Four quadrants of ABC Model

The first tasks that one has to do are the important and urgent one. The second tasks to be done are the important but not urgent. The third tasks to be done are the urgent but not important tasks. The fourth tasks to be done are not important and also not urgent.

b) Believe

Once a person is aware of time and its value and importance for aim in life, one is half way down the road to success. Focussing and following the four quadrants will create a habit of doing things on time and confidently.

c) Continuation

Some tools or techniques are required to put awareness and belief into real practice. Continuation of using time management tools and techniques will bring success in personal and professional life (Chowdhury, 2013).

5.2: Pareto’s Principle- The 80- 20 Rule

The Pareto’s principle is named after the Italian economist- sociologists Vilfredo Pareto (1848-1923). The 80- 20 Rule can be used in many aspects of organisation and business management. This theory offers a quick and easy way to understand clearly what are important and what are unnecessary (Reh, 2018). The 80- 20 Principle requires the following steps to be taken:

- 1) Identifying 20% that is considered vital, which would probably enable at least 80% of productivity, performance, effectiveness etc. is required.
- 2) One should retain this 20% and nothing else, unless it serves a crucial point

3) It should be then tested for effectiveness and implications of the reduced range/ holding

4) It must be then referred to aspects of change management and project management as considered appropriate.

In simple way, the 80- 20 principle says that 20% of activities will account to 80% of the results. Each task may take the same amount of time to accomplish, but doing one or two important tasks will contribute five or ten times the value as any one of the others.

Productive people always discipline themselves to start on the most important task which is set before them. They force themselves to complete the important one first under any circumstance.

Time	Effects
20% most important task	Up to 80% Achievement
80% Secondary affairs	Only 20% Achievement

Fig 5.2: Pareto Principle in Time Management

This principle allows maximum results in minimum time. It offers the opportunity to increase personal effectiveness.

5.3: Covey’s Time Management Grid

The Covey Time Management grid is an effective method of organising priorities. It consists of four quadrants (Covey, 2013).

Particulars	Urgent	Not urgent
Important	Quadrant I Urgent and important activities	Quadrant II Not urgent but important activities
Not important	Quadrant III Urgent and not important	Quadrant IV Not urgent and important

Fig 5.3: Covey’s Time Management Grid

Source: Stephen Covey, 7 Habits of Highly Effective People

Quadrant I signifies immediate and important deadlines.

Quadrant II is to plan long term strategies and development programmes.

Quadrant III is for time pressured distractions. They are not really important but some people want them immediately.

Quadrant IV consists of those activities that yield little value. These activities are often used for taking a break from pressured tasks.

Many people find that most of their activities fall under quadrants I and II. Quadrant II is often not used but it is exceptionally important because one needs to work tactically and strategically at the same time. The common outcome of using this grid is to find ways for expanding the activities in quadrant II (Mueller, 2017).

How to use the grid

The first and most obvious use of the grid is to take the current ‘to- do’ list and sorting all the activities into the appropriate grid. One has to assess the amount of time required to complete the lists and if necessary, the activities can be reallocated.

The second approach of using the grid is a one week assessment strategy. One has to make six copies of the grid and to use one copy of the grid each day of the week, listing all activities and time spent on the activities. At the end of the week, the five individual day data has to be combined onto one summary grid i.e., grid number 6 and the percentage of time in each grid has to be calculated. Finally evaluation has to be done to find out how well time has been spent on the activities and whether the workloads need to be reorganised or not.

5.4: Eishenhower Matrix

The Eishenhower Matrix is almost similar to the Covey’s Time Management Grid. The difference is that according to Eishenhower Matrix quadrant IV has to be deleted as it is considered as a waste of time but Covey has noted that the activities covered here are refreshment or recreational activities, which are sometimes necessary to relieve pressures from hectic duties.

	Urgent	Not urgent
Important	1 Do	2 Decide
Not important	3 Delegate	4 Delete

Fig 5.4: Eishenhower Matrix

US former president D. Eishenhower in 1954 in a speech classified his activities into two categories: important activities and urgent activities. According to him important activities lead us to achieve goals and urgent activities need immediate attention and are generally associated with someone else’s goals. But people often concentrate on urgent activities because the consequences of

not complying with them are immediate (Fowler, 2012).

Based on these ideas, Eishenhower matrix has been designed and it consists of four quadrants, which are explained as under:

1) Important and urgent

Planning ahead and avoiding procrastination can help in avoiding last minute rush. If there are many urgent and important activities, one has to make a list of similar activities which can be done in similar ways.

2) Important but not urgent

These activities can help us achieve professional and personal goals. One should make sure that there is enough time to accomplish such activities.

3) Not important but urgent

Such tasks prevent one from achieving goals. It is generally associated with other people. Saying ‘no’ politely and explaining why we cannot do it can help us to stop others from bothering us.

4) Not important and not urgent

These activities are distractions, so best way is to avoid them.

5.5: Parallel Programming Model

Parallel Programming Model has been designed by Zohreh Molaee, Dr. Hasan Azadzadeh and Dr. Fariborz Dortaj by combining cognitive, metacognitive, physical, emotional, skills which tries to manage all roles and tasks in a parallel way at the same time. The logic behind the model is that man is an integrated whole who cannot be successful in all areas, if he couldn’t be in peace with all the realms (Molaee *et al*, 2014). A person who faces many conflicts or who is not satisfied with oneself cannot be successful even though he has the potential to do so. This model is designed to check the academic achievement of married women.

This theory explains that time management has mostly been discussed in work areas, but it is equally important in other aspects of life. Time management can be focussed on educational aspects, especially those who have multiple roles to play like the married women continuing their studies.

5.6: ALPEN Method

A= Activities	Noting down assignments, activities, appointments
L= Length estimation	Estimating the duration of activities to be performed
P= Planning ahead	To plan buffer times
E= Establishing priorities	To make decisions about which activities to be done first
N= Next Day	To recheck

Fig 5.6: ALPEN method

ALPEN method is one of the simple yet effective time management techniques. It is a method to plan daily/weekly tasks by splitting complex task into parts. To follow ALPEN method the following steps are to be considered:

1) A- Activities

A list of activities, tasks or appointments for the day/week has to be prepared first. Related tasks can be grouped together and coding can be done for similar tasks. As for instance, M for meeting, C for phone calls. It should be made sure that all activities are included in the list. Noting down all the tasks makes it easier to sort the tasks.

2) L- Length estimation

Duration for each task should be estimated and effort should be made to give more time to important activities.

3) P- Planning ahead

In general 60 percent of available time should be reserved for completing the planned tasks/activities. Remaining 40 percent of the time should be treated as a reserve for untold circumstances. This 40 percent of the time reserved can be used for recreational activities. Sticking to 60/40 rule will help one in getting rid of stress. If one's average day is predictable and usually there is less or no emergency, one can plan time in 80/20 rule.

4) E- Establishing priorities

After the first three steps, the next step is to prioritise activities and delegate action. Prioritisation allows one to focus on the most important tasks.

5) N- Next day

An important thing to keep in mind is keeping track of the progress made so far. One has to verify completed tasks and move any unfinished tasks to the top of the next time table if possible. At the end of the day, it should be checked if all the objectives are fulfilled successfully or not and if the tasks are completed within the estimated time frame or not. Knowing the results will improve prediction and ability to plan ahead in future.

When using the ALPEN method, all the five steps have to be kept in mind for building a positive habit of time management, which in turn can help reduce stress and improve efficiency (Panayotova *et al.*, 2015).

5.7: Mind Map

The term 'mind map' was first introduced by psychologist Tony Buzan but the use of diagrams that visually map information using branching and radial maps can be traced back to centuries. The introduction of the term 'mind map' began during a 1974 BBC TV series called 'Use Your Head' hosted by Buzan.

Mind maps can be used for creative thinking. Mind maps can be used to generate, visualize, structure

and classify ideas. A mind map can help in organising information, problem solving, decision making and in studies. Mind's productivity can be increased 3 to 5 times with the help of mind maps (Panayotova *et al.*, 2015). The model could be applied in analysis of problems from different aspects. A mind map has certain advantages as under:

i) Creative thinking is encouraged

ii) Helps in generating more ideas

iii) Large amount of information can be summarised easily

iv) Areas/activities which rely on keywords and images are reflected in the presentation of the map

In addition to the direct uses, data retrieved from mind maps can be used for other purposes.

5.8: Pickle Jar Theory

One must be quite familiar with the story of pickle jar. It is simple but quite a good solution for better time management. Like everything in life has a purpose, everything in the pickle jar also has a purpose for existence. The pickle jar is comparable to our life. Sand, pebble and rocks inside the jar have their own meanings. The rocks represent the major important task that has serious consequences if not accomplished on time. The pebbles represent the daily tasks with average importance. The sand represents unimportant tasks like phone calls, e-mails, social media notifications. The sand thus denotes distracting activities.

If the jar is filled with sand first, there will be no space for the pebbles and rocks. If the jar is filled with pebbles, there is some space for sand but no space for the rock. If the jar is filled with rocks first, pebbles second and sand at last, there are rooms for all the three. This denotes a simple lesson that if one fulfils the major tasks first, there will be room to complete other tasks as well as get time for leisure (Mulder, 2017).

6: Discussion

The theories and models under study have focussed on making list of activities to be performed and prioritisation of activities. The models are more or less similar. The models and theories have highlighted the need to divide activities/ tasks into important, urgent, not important and urgent, important but not urgent and neither urgent nor important task. People have the habit to get indulged in neither important nor urgent activities. Time management theories and models have been developed to focus on important activities and to draw oneself away from those wasteful activities which are neither important nor urgent. When the principles and values incorporated in the time management models and theories are understood, what becomes important is how much one puts

weight on those and how much practical applications they have. A balance has to be brought on the emotions and moods of individuals in accepting the priorities and strategies of time management that one has understood. One should develop the habit of re-examining all the processes involved in the mental activities done regularly like problem solving, reasoning, understanding concepts, learning process, making meaning of what one observes etc. Following time management techniques will help in reducing stress and improve efficiency.

7: Conclusion

One should develop the habit to check if all the objectives are accomplished on estimated time or not. The time management models developed so far are more or less similar. It is really a high time to develop theories and models compatible to this era of fast growing technology where people are much indulged in social media and digital gaming, which are one of the time wasting factors in new generation. Following time management techniques will make enough room for productive work as well as social interactions. Time management can help in improving prediction about work completion and also enable ability to plan ahead in future. Time management models and theories should be designed to focus on improving management skills and reducing psychological stress resulting from untimely completion of responsibilities and tasks.

References

- [1] Brodowsky, G. H., Anderson, B. B. & Schuster, C. P. (2008) 'If time is money is it a common currency? Time in Anglo, Asian and Latin Cultures'. *Journal of Global Marketing*, 21 (4), 245- 57.
- [2] Classens, B., Erde, W., Rutte, C. G. & Roe, R. A. (2007) 'A review of time management literature'. *Personnel Review*, 36(2), 255-76.
- [3] Classens, B., Roe, R. A. & Rutte, C. G. (2009) 'Time Management: Logic, effectiveness and challenges'. In R.A. Roe, M. J. Waller & S. R. Clegg (1 ed.) *Time in organisational research*, pp. 23- 41. Newyork: Routledge.
- [4] Covey, S.R. (1999) *Restoring the character ethic*. London: Simon & Schuster.
- [5] Covey, S.R. (2013) *The 7 Habits of Highly Effective People: Powerful Lessons in Personal Change*. Newyork: Simon & Schuster.
- [6] Chowdhury, M. (2013) 'The ABC model of effective time management'. Online: <https://www.textiletoday.com.bd/the-abc-model-of-effective-time-management/> [accessed May 2018].
- [7] Eid, N. M., Safan, S. M. & Diab, G. (2015) 'The effect of time management skills and self esteem of students on their grade point averages (GPA)'. *IOSR Journal of Nursing and Health Science*, 4(1), ver (1), 82- 88.
- [8] Fowler, N. (2012) 'App of the week: Eishenhower, the to- do list to keep you on task, venture Village'. Online: <http://the-heureka.com/app-of-the-week-eishenhower> [accessed May, 2018].
- [9] Gajewska, P. & Piskrzynska, K (2017) 'Leisure Time Management'. *Forum Scientiae Oeconomia*, 5(1), 57-69.
- [10] Hernandez- Linares, R., Sanchez, H., Agudo, J. E. & Rico, M. (2016) 'Chronos: A tool to develop time management competence among engineering students'. Online: <https://doi.org/10.1002/cae.21780> [accessed April 2017].
- [11] Kelly, W. E. (2002) 'No time to worry: the relationship between worry, time structure and time management'. *Personality and Individual Differences*, 35, 1119- 26.
- [12] Kirillov, A. V., Tanatova, D. K., Vinichenko, M. V. & Makushkin, S. A. (2015) 'Theory and practice of time- management in education'. *Asian Social Science*, 11(19), 193- 204.
- [13] Lustig, M. W. & Koester, J. (5th ed.) (2006) *Intercultural competence: Interpersonal Communication Across Cultures*. Boston: Pearson Education Inc.
- [14] Macan, T. H. (1994) 'Time Management: Test of a Process Model'. *Journal of Applied Psychology*, 79, 381-391.
- [15] Molaei, Z., Azadzardeh, H. & Dortaj, F. (2014) 'Parallel Programming: a model for time management, improving the academic achievement'. *Procedia- social and Behavioral Sciences*, 112, 333-41.
- [16] Mueller, S. (2017) 'Stephen covey's Time Management Matrix explained'. Online: <http://www.planetofsuccess.com/blog/2015/stephen-coveys-time-management-matrix-explained/> [accessed November 2017].
- [17] Mulder, P. (2017) 'Pickle Jar Theory'. Online: <https://www.toolshero.com/time-management/picke-jar-theory/> [accessed May 2018].
- [18] Nadkarni, S. & Chen, J. (2014) 'Bridging yesterday, today and tomorrow: CEO temporal focus, environmental dynamism, and rate of new product introduction'. *Academy of Management Journal*, 57(6), 1810-33.
- [19] Powell, D. H. (2004) 'Behavioral treatment of debilitating test anxiety among medical students'. *Jllin Psycholl*, 60(8), 853-65.

- [20] Panayotova, S. B., vasic, Z. & Yordanova, M. (2015) 'Time management- models and techniques for application'. *Infotech- Jahorina*, 14, 393-96.
- [21] Reh, F.J. (2018) 'Understanding Pareto's Principle- The 80- 20 Rule'. Online: <https://www.thebalancecareers.com/pareto-s-principle-the-80-20-rule-2275148> [accessed 19 May, 2018].
- [22] Sansgiry, S., Bhosle, M & Sail, K (2006) 'Factors that affect academic performance among pharmacy students'. *American Journal of Pharmacy Education*, 70(5), 104.
- [23] Satija, S. & Satija, P. (2013) 'An insight with Indian Perspective'. *SMS Varanasi*, 2, 115-34.