

Feasibility of Flexible Working

In the Government of Dubai

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Abstract

Purpose: The paper examines the feasibility of implementing flexible working in the government of Dubai, taking into consideration the technical, organisational/cultural, political/legal, project/schedule, and economical elements of the feasibility.

Methodology: The study consisted of interviews with HR seniors of 4 government departments, a survey distributed to 185 employees, and official government documents. The feasibility study elements were used as a guideline to validate feasibility.

Findings: The results indicate that the implementation of flexible working is a trump card. It is feasible in terms of all the elements investigated. The government has the technical capability for flexible working, there is an enormous support from the government and staff, there are no legal or political restrictions, there are no time or money constraints, and, finally, the benefits outweigh the costs.

Limitation: A limitation for this research is the small number of surveys distributed, interviews done, and that some of the results might be context specific. Future research is needed to understand precisely how to measure costs and benefits of flexible working.

Originality: This paper undertakes one of the few assessments of flexible working systems, taking account of five different feasibility elements, and can aid in validating the feasibility of flexible working in general.

Keywords: Flexible working arrangements, government of Dubai, feasibility study

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Chapter1 Introduction

1.1 Overview

The emergence and empowerment of society in the last century have forced management to comply with staff needs and expectations by employing innovative work alternatives in the work environment. It was led—from one side—by pressure exerted by the employees, their awareness of their rights and labor unions, and—from the other—by the rough contention and the advantages employers sought in order to survive. According to Alvesson (2000), work patterns were “implemented to respond to competitive pressures and stay ahead of the competition—in effect, a ‘countermove’ designed to retain the high loyalty of organisational members through instrumental means”.

Young (1980) defines work patterns as spatial locations of time blocks of work and leisure in a given period. This period is represented by segments of time such as the day, the week, the year, the life cycle, and their associated control systems that are operated by the administration management and/or the staff and the workforce. It refers to the schedule of the starting and finishing work time that a person on duty has in association with the control system; that is, punch clocks and computer-based schedule tracking systems governed by legal frameworks, or administrative courtesy law defined by the management and/or the employees. The most widespread work patterns are classic fixed working hours, flextime, shift hours, part-time, compressed week, and teleworking. There are also other less notable work patterns such as annual working hours, phased retirement, joint appointment, flexyear, and job sharing (see Young, 1980; Hohl, 1996; Burdetsky & Katzman, 1982).

Work patterns vary significantly in their suitability for specific type of jobs and the different employee occupations, in the length of working hours, the number of working days, the number of shifts, the systems that control them, and their flexibility. Management hopes that by implementing those work patterns, it will improve operations speed, production, and quality as well as reduces costs, turnover, and absenteeism. From the perspective of the employees, the managements anticipate that by implementing those patterns, it would reduce employees’ stress, make them more satisfied, and improve their morale and work-life balance (see Hill et al., 2001; Skyrme, 1994; Welch & Gordon, 1980).

Interest in the topic of flexible work has initiated a considerable amount of research; the majority focuses on flexible and innovative work patterns on employees and organisations in the Western world. Flexible working is a relatively new phenomenon in the United Arab Emirates. The interest in this new work arrangement among practitioners, government policymakers, and organisations in the UAE is triggered by social and cultural changes that have occurred in recent

years. These changes include a raise in the number of dual-career families and the number of females in the workforce, which make it more vital for the government to think of ways to give more flexibility employees' work requirements. According to the Minister of Social Affairs in the UN assembly in March 2008, the number of females in the workforce had risen to 22.5% from 13% in 2004 and only 5% in 1980 (Abouzeid, 2008, cited in Erogul & McCrohan, 2008). It was also prompted by the pressure of infrastructure in recent years. "Traffic jams result in annual financial losses to the Emirate of Dubai in the order of AED 4.6 billions", according to Mattar Al-Tayer, chairman of the board and executive director of the Dubai Road and Transport Authority (Gulfnews, 2007). Flexible working could be an innovative way to distribute the starting and ending working hours to help employees reduce commute time by reducing traffic jams. Additionally, it can be a pioneering approach used by the government and organisations to attract and retain skilled staff (Champan et al., 1995). Flexible working arrangements represent a work option that allows for some flexibility in how and when people perform their work.

This study was conducted to investigate the feasibility of implementing flexible working arrangements among government employees of the Emirate of Dubai. The government of Dubai is committed to ensure high flexibility for their employees; it sees those arrangements not only as a way to have a life-work balance but also a way to create a more productive, satisfying environment for its 70,000 employees (Sambidge, 2009; GOD, 2008). Research focusing on flexible arrangements is a must due to the following factors: 1) the growing number of dual-career families; 2) the change in the work environment; 3) the major role they undertake in Dubai's effort to pursue its 2015 plan, and 4) the government commitment to balance the work-life of their employees. Thus, through an examination of the feasibility of implementing flexible working arrangements of the government of Dubai, this paper aims to make a considerable contribution to asset the viability of the proposed project.

To inspect the feasibility of implementing flexible working arrangements for the government of Dubai, this paper first presents a background of the city, the government and its initiatives, and then highlights some of the key characteristics associated with each flexible working arrangement and their effects as defined by the literature. The paper then examines the art of conducting a feasibility study and finally validates the study, taking in the Organisational/Cultural, Technical, Political/Legal, Project/Schedule, and Economical elements of the feasibility.

1.1 The Emirate of Dubai

The Emirate of Dubai is part of a federation of seven states forming the United Arab Emirates. The UAE is a Middle Eastern country on the Arabian Gulf. Until 1971, the seven emirates were known as the Trucial States due to a truce between Britain and those sheikhdoms in the 19th century. The constitution of the United Arab Emirates was drafted on 2 December 1971 when it announced its

union and independence from Britain. The Supreme Council is formed by the seven Emirates rulers. They elect the president of the UAE, who appoints the prime minister (see Abed & Heller, 2001).

Since the establishment of the United Arab Emirates, Dubai has developed a distinct identity as a modern and dynamic emirate. Dubai now benefits from its global reputation as an economic hub and an excellent investment location. As the worldwide atmosphere becomes more competitive and challenges grow, Dubai needs to make sure that it continues to keep up its accomplishments through proper planning and strategy development. It has enjoyed tremendous growth and prosperity. As the Emirate develops and as the universal environment observes rising competition and change, Dubai will need to modernize its government continuously. A world-class government marked by greater transparency, accountability, efficiency, equity, and superiority in consumer service is vital in supporting Dubai's progression and development. Dubai has stepped forward in enhancing public sector performance in recent years. It succeeded in modernizing operations, introducing e-government initiatives, and promoting the use of advanced technologies. Noteworthy improvement has been made in setting up performance management systems for individuals and departments and implementing accountability. These improvements were made possible mainly through the worthy contributions of government employees. The Dubai Government chart is depicted in Figure 1.

According to the Dubai Strategic Plan (Government of Dubai, 2007), the government seeks to support, maintain, and develop its status by focusing on developing its mission of achieving comprehensive development and building human resources, promoting economic development and government modernization, sustaining growth and prosperity, and protecting national interests, public interest and wellbeing, and providing an environment conducive for growth and prosperity in all sectors. The government of Dubai is committed to development of five major sectors: 1) economic development by the adoption of free market economy principle, innovation in launching initiatives, speed and accuracy in project execution, unique relationships and partnerships with the private sectors; 2) social development by protection of national identity, culture and way of life, development of national human resources, promoting social justice and equality and openness to the world while maintaining uniqueness; 3) security, justice, and safety by ensuring justice and equality for all, maintaining security and stability, and protecting human rights; 4) infrastructure, land, and environment by the provisioning of world-class infrastructure designed to suit the requirements of all users, and preserving the environment in line with international standards; and, finally, 5) public sector excellence by transparency, sound financial performance and effectiveness, accountability and a result-based culture, excellence in customer service, development of human resources, and working effectively within the federal framework.

In this crisis—the worst since the Great Depression in the 20th century—the government of Dubai is testing itself in front of the whole world. Flexible working can be used as a tool to reduce costs by using innovative approaches and yet retain employees in those tough times.

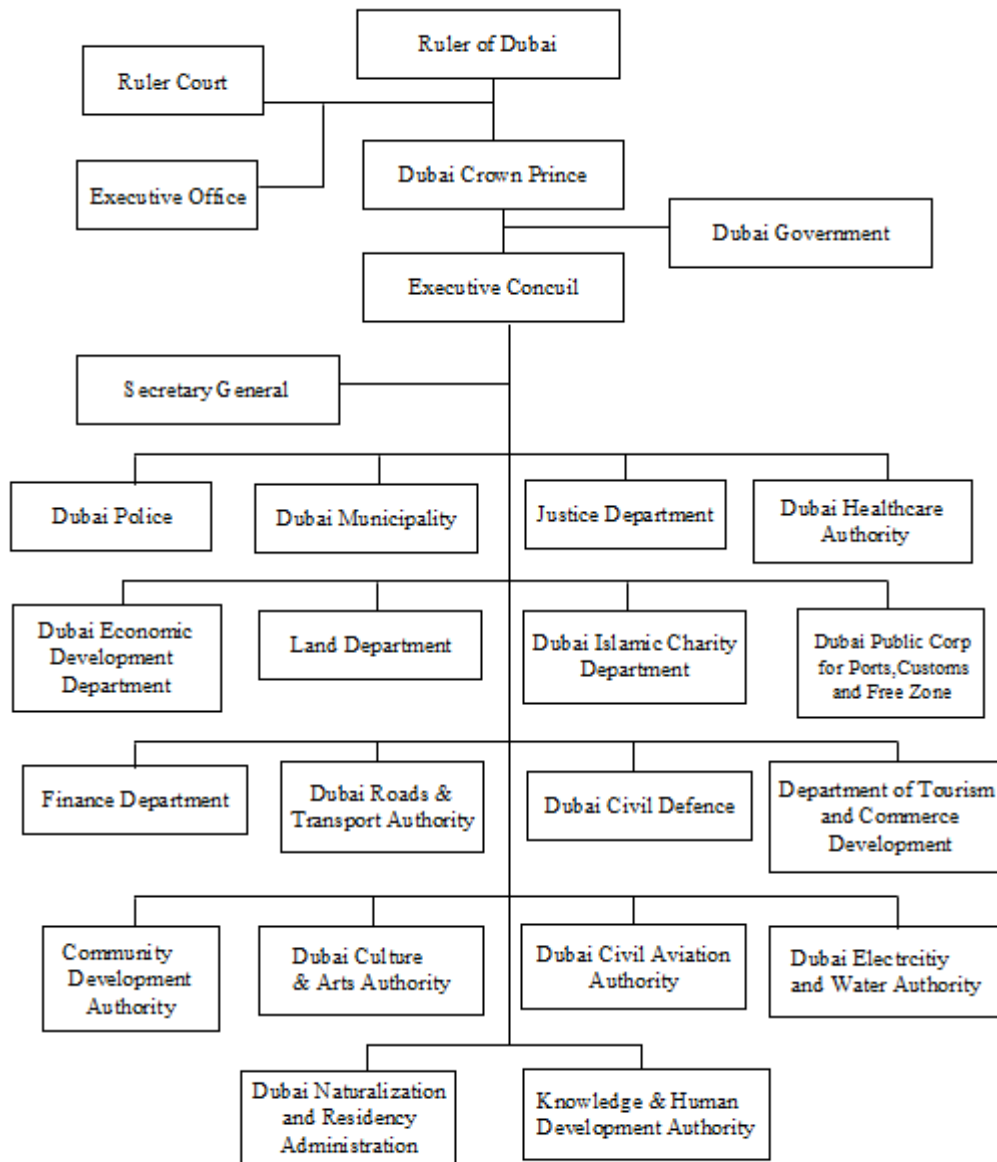


Figure 1: The Government of Dubai

Chapter2 Literature Review

2.0 Literature Review

Several factors influence the decision to implement flexible working arrangements and the degree of work pattern flexibility. In general, organisations seek to improve their workers' productivity as well as reduce absenteeism and turnover by balancing the work-life environment so they can have more satisfied employees. Donnelly (2006) states that flexible working arrangements are implemented because their tangible benefits are of considerable interest to organisational members, yet it involves little cost to the firm and gives the firm the ability to reduce accommodation costs. Donnelly states that the economic conditions influence the degree of temporal and locational flexibility in the sense that during periods of high demand, employees are likely to be offered increased temporal and location flexibility to recruit and retain their specialist skills in the face of intense competition.

Several characteristics determine the probability of whether a certain employee will have flexibility, their ability to have a higher degree of control of their starting and finishing time, or whether they can work from home or a remote location:

1. Personal characteristics such as gender, marital status, and age.
2. Human capital characteristics such as education level or attending college in conjunction with work.
3. Job characteristics such as the occupation and industry of employment or self-employment status.
4. Work hours status, such as having full-time or part-time job status, actual average duration of weekly hours, working on a non standard (non-day) shift time schedule, and having variable workweek lengths. (Golden, 1999)

While access to flexible work patterns has grown, most workers remain insufficiently privileged to be offered such arrangements, and in most of the cases, they are being offered those arrangements involuntary as a job requirements—that is, working shifts—than for voluntary reasons like taking care of family (see Golden, 1999; FWI, 1998, as cited in Golden, 1999). Involuntary flexibility—such as nonstandard, shift, or rotating work hours—is associated with low wages, poor job security, and health risks. Professionals and managerial staff are more likely to have access to voluntary flexible work than lower-wage employees. Men and blue-collar workers are more likely than women and white-collar workers to work other than normal daytime schedules (See Presser, 2003, as cited in Liechty & Anderson, 2003; Hohl, 1996). In all cases, the degree to which these patterns are actually available to employees depends on the direct manager (Powell & Mainiero, 1999). Table 1 summarizes some of the flexible working arrangements in the literature.

Table 1: Common Flexible Working Arrangement

Work Pattern	Definition	Suitable Workers	Notes	References
Flextime	Flexible starting and finishing hours per day including core hours where everyone should attend, and working the agreed number of hours per week unless the hours are credited or debt to the following weeks or from previous weeks.	Professionals such as architects, engineers, analyst, and lawyers. Administration officers and staff and most management and administrative jobs except front desk jobs.	<ul style="list-style-type: none"> Most flexible pattern used after part-time. Least controversial and has the most positive results. Not suitable for jobs that need presence at a certain time or front desks such as doctors, teachers, tellers, receptionists, supervisors, and so on. 	Young, 1981 Kuhne & Blair, 1978 Welch & David Gordon, 1980 Hill et al., 2001
Compressed Week	Working full-time (usually 40 hours) in less than a five-day work week. It would be 4 days or even 3.5 days.	Suitable for most of the jobs but mainly depends on extending the working hours of the organisation. Examples are assembly lines, receptionists, supervisors, and nurses. Usually what is suitable for shift work can be suitable for compressed week.	<ul style="list-style-type: none"> Gives freer weekend time. Can cause headaches and stress because of the longer hours. Can affect productivity negatively if not managed well. 	Smith & Wedderburn, 1998 Hohl, 1996 Hung, 2006
Job Sharing	Two people sharing one full-time position, including the sharing of paid benefits.	Can be used for frontline or repetitive and routine jobs such as supervisors, or any job that is suitable for a part-time job or jobs that can be divided.	<ul style="list-style-type: none"> Causes conflicts of interests and priorities. Miscommunication between job sharers. Is seen as another variation of part-time. 	Brosnan, 1989 Branine, 2004
Part-Time	Working less than half time on a regular basis (usually less than 20 hours a week).	Suitable for almost all office jobs and usually used by women and students who have other responsibilities. It can be used for cashiers, receptionists, and so on.	<ul style="list-style-type: none"> A full-time job can be divided into two part-time jobs. Usually has the perception that it does not help a career track. Usually chosen if there was no alternative or if job is not a priority. 	Nesbit, 2006 Peterson, 1993 Young, 1981

Table 1 (continued): Common Flexible Working Arrangement

Shift Working	An employment practice designed to make use of the 24 hours of the clock rather than a standard working day. The term <i>shift work</i> includes both long-term night shifts and work schedules in which employees change or rotate shifts.	Applied to jobs that require 24/7 presence such as supervisors, doctors and nurses, police patrols, maintenance, and so on.	<ul style="list-style-type: none"> ▪ Affects work-family balance. ▪ Usually involuntary. ▪ Difficulty in managing different sleeping/waking times. 	Smith & Wedderburn, 1998 Young, 1980
Annual Hours	Calculating the number of working hours on annual basis instead of monthly basis, which results in varying working hours across the year, depending on demand.	There is no restriction on the applicability, but there are jobs that are more suitable such as sales.	<ul style="list-style-type: none"> ▪ Usually applied on a department level and not individually. ▪ Reduce working hours in slow months and increase them in demanding months. 	Blyton, 1995 Gall & Allsop, 2007 Gall, 1996
Teleworking	Working outside the office, usually at home and communicating with the office by telephone, facsimile, computer, or a combination.	Accountant, engineer, agent financial analysis, Web page designer, word processing, architect, journalist, writer, auditor, lawyer, consultant, programmer, computer scientist, psychologist, data entry clerk, telephone-intensive tasks, data analysis scientist, researcher, and so on.	<ul style="list-style-type: none"> ▪ The most expensive work arrangement to implement, so the vital question is whether those expenses outweigh the benefits. ▪ Teleworking does not mean that they work outside their office all the time. ▪ Not suitable for jobs that require face-to-face interaction such as receptionists, doctors, and so on. 	Nilles, 2000 Hohl, 1996 Solomon & Templer, 1993 Chevron & Primeau, 1996
Joint Appointment	One person working for two different departments or supervisors in single organisation.	Jobs that do not require specialization and have similar tasks, such as administrative jobs in small companies that can be shared like admins, assistants, secretaries, and so on.	<ul style="list-style-type: none"> ▪ Usually causes conflicts among departments. ▪ Reduces performance. ▪ Reduces costs. ▪ Difficulty in coordinating priorities among managers. ▪ Popular in small companies. 	Hohl, 1996

2.1 Flextime

Flextime is one of the most well-known and widespread flexible work arrangements. According to Young (1981), it was first introduced in West Germany in the late 1960s and then spread to other European countries, where it came popular. Its main aim when first applied was to offer basic flexibility to employees, operational needs of the enterprise, and social needs of the workforce (Young, 1981). Under a typical flextime arrangement, staff have a varying degree of control of their working hours where there is led a “compulsory hot core time” where all staff should be present, which is between two optional quiet times, without affecting the number of the standard working hours. Employees can also accumulate daily or weekly department or credit hours depending on whether they work less or more than their weekly contract hours (see Young, 1981; Welch & Gordon, 1980; Kuhne & Blair, 1978).

For example, the core time is between 9 am to 12 noon, the number of working hours is 8, and the facility operates from 5 am to 5 pm. The staff should be present during those core hours from 9 am to 12 noon, while having the option of starting between 5 am to 9 am and finishing between 1 pm to 5 pm, thus working the agreed 8 working hours unless they want to credit or debit their working hours, as explained earlier. An electronic recording system is usually implemented to monitor the number of hours; such systems are punching cards, Web-based applications, or biometric fingerprints. The system should facilitate monitoring by the Human Resources department toward those who step outside the flextime arrangements.

There are conflicting views about flextime. Some suggest that it alleviates rush-hour traffic, reduces absenteeism, improves productivity and employees’ attitudes, allows employees to attend to personal matters, and expands full-time work opportunities for homemakers. Opponents believe that it create problems in assembly- line operations, adversely affects employee scheduling and supervision, increases energy costs by requiring facilities to remain operational over a longer period each day, and makes conformity to wage and hours laws difficult (see Welch & Gordon, 1980; Hill et al., 2001; Hohl, 1996). It should not be surprising because it does not make sense to have flextime in an assembly line because staff has to be present at a fixed time. Scheduling is also easier now considering the development in technologies that automate all the scheduling and monitoring processes. Facilities remaining operational for a longer period could be seen as an opportunity to serve clients, increase marketability, and skill level (Hohl, 1996). Additionally, benefits should be weighed against costs to see if it is worthwhile or not. In a study conducted by Burdetsky and Katzman (1982) and Hohl (1996), more than 80% reported improvements because of flextime. Flextime was the least debatable alternative with the most optimistic results.

The high demand for flextime stems from three main reasons:

1. The continued infringement of work into what had been typically non-work hours of the day such as weekends or evenings.

2. The rising annual work hours among families.
3. The absence of supporting institutions in the workplace or labor market for workers to attain balance among commitment that require time almost each day. Golden (1999)

Finally, the fact that flextime policies exist does not necessarily mean that employees feel the option is truly available due to lack of awareness from staff, work pressure, and rejection by the immediate manager. About 2/3 allow their employees flextime while only 1/4 allow it on daily basis, as shown in a study of about 1,000 U.S. companies (Hill et al.,2001).

It is also important to refer to a related concept called “laxtime” (Lee, 1980). It is an informal flextime arrangement where there is tolerance by management of late arrival, early departure, and extended launch breaks to attend healthcare appointments or deal with family issue. This is a compensation for working exceptional hours to meet operational crises or peaks in workload. If they work late, then they might start late the following day. If they work off-site and arrive home late, they might take some time off to balance their work hours.

Lee (1980) undertook research throughout the first 9 months of 1979 of implementing flextime in his company. The company employs more than 500 people on two sites and had a classic housing system for all employees. In reality, not all staff abided with the standard working hours. The company has three employee categories: administrative management, clerical and secretarial, and scientific and technical. The latter group most enjoyed an informal flextime arrangement (laxtime). Not only was this resented by the lower level clerical and secretarial staff, but it also made the administrative management—particularly the Human Resource department—concerned about lack of control over the situation. Clerical staff, seeking to gain the benefits of flextime, suggested the idea to management without involving the scientific staff. The Human Resources director saw it as an ideal control arrangement, giving those on fixed time more freedom but ensuring that the Human Resource department’s influence spread throughout the company and offered a simple monitoring system that could be used to control laxtime.

A survey carried out six months after the implementation concluded that most employees liked the system. There was no noticeable change in productivity, but overtime payments went down. However, the Human Resource director had a problem with the scientific and technical staff and some managers. They were ignoring flextime rules such as arriving or leaving within core hours, and they were not using the recording system. This forced the Human Resource director to ask for explanations and even issue warnings. This was supported by the clerical and secretarial staffs, who also suggested improvements in the recording system. It is understandable that clerical and secretarial staffs were supporting such a system because they were not enjoying such flexibility before, unlike the scientific and technical staff that had a more flexible working style than they were having under flextime. This suggests that there are arrangements more suitable to certain jobs than others; therefore, a careful assessment is needed to decide what job is suitable to what arrangement.

2.2 Compressed Week

Long shifts are spreading at the same times as shorter working weeks (Valverde et al., 1997, as cited in Smith & Wedderburn, 1998). This can be exhibited in what is called a *compressed workweek*. In a survey done by Hohl (1996), a compressed week was considered one of the most popular work patterns after part-time and flextime and equal in popularity to joint appointments. Compressed workweek is an innovative work pattern that can help the management increase its daily operational hours while maintaining the number of weekly hours for staff.

While the typical workweek is usually five days, a compressed workweek is an arrangement where work is compressed into 4, 3.5, or even 3 days—typically, 10 hours of four days but it can be 8.5 or even 12 hours (Young, 1981). In this regard, a compressed week could be seen as another variation of shift working, and attention should be given to scheduling, staffing, and allocating employees to departments. The fact that a compressed week staff works typically four days a week does not mean that the organisation will be operational only those four days. It could operate on 24/7 basis while granting their employees a 4-day 10-hour arrangement. For that, Lankford (1998) says there is the option of adding additional staff by assigning employees from other departments or hiring temporary staff during the transition. He says that even though recruiting more staff is an option, he did not recommend it because it means additional cost. He instead recommends cross-training for the entire staff to provide a safety net for absences caused by illness, vacation, or training sessions. Note the case study later in this chapter.

According to Hohl (1996), a compressed week is usually offered to repetitive and routine jobs such as nurses in hospitals. This could be because their job does not require a continuation in what they do and is not considered a job where knowledge is the core such as the work of programmers, lawyers, analysts, and so on. A compressed week arrangement is good in simplifying the scheduling to two shifts only plus giving the staff more free time. Hohl reports that compressed workweek improves staff efficiency. According to the study done by Hung, compressed week are able to reduce commuting and labor cost under some circumstances (Hung, 1996, 2006). However, while it offers several advantages such as reducing overhead and commuting time and having longer free time, it also raises the dilemma of the productivity and quality of working longer hours (Smith & Wedderburn, 1998). The goals of productivity must be stated so that all workers understand their priorities; therefore, specific performance expectations should be applicable to the participants. This should be done by setting objectives and measurable performance standards for employees so they understand what is expected of them by management. Management should also offer more guidance and support (Lankford, 1998).

Smith and Wedderburn (1998) compiled a list of the potential disadvantages and advantages of a compressed week. The potential negatives are fatigue errors, impact in structure of hours, use of free time, introduction of weekend work, communication, continuity and isolation at work, and

impact of those failing to cope. The potential positives are reduced number of shifts worked, reduced travel time and cost, reduced overtime hours, reduced impact of work on weekends, and increased employment opportunities. Young (1981) agrees that there are considerable advantages for employers (reduction in overheads and absenteeism, easier maintenance), for employees (longer weekends and fewer journeys), and for the economy (additional demand for goods and services in the leisure industry); however, the question remains whether a compressed workweek, per se, denotes genuine progress for society.

Lankford (1998) investigated a case of compressed week application in the Analytical Central Call Management group at Hewlett Packard. The call centre was experiencing scheduling difficulty due to the problems of estimating the productivity requirements with employee demands. A proposal took in consideration the corporate guidelines of the flexible workweek schedule were sent to corporate. The project was approved, and a pilot group was formulated to test a compressed week schedule of four 10-hours workdays for two months in 1994. Only 5 members out of the 17 in CCM participated in the pilot that was implemented. The goals were to improve productivity and service and reduce overtime and absenteeism. The result was astonishing for both the management and staff. About 88% (15/17) said that they would like to work a 4-day 10-hour week but, according to the management, making it permanent would require meeting the initial goals.

For the call centre to operate, it was required that there should be minimum of six employees to answer incoming calls to satisfy customers at any given time. The dispatch group needed a minimum of three employees to work effectively, while the order-processing group needed two employees. The problem was that the 4/10 plan had no “safety net” for additional absences and vacations. Another problem was the rivalry between the 4/10 and the 5/8, who thought that 4/10 were working less, even though they were working the same number of hours. This can be justified since the 4/10 employees could not fill all the positions in the call centre because they were specialized in one working area. The operating and answering incoming calls staff could not fill the dispatch group. The same is true about filling the other jobs. On the other hand, the 4/10 group thought that although it was a real benefit for them, they would not benefit from the overtime hours that the 5/8 enjoyed.

To solve the staffing problem, the call centre thought of cross-training so that all staff can fill the jobs in all sections, which would result in a safety net for staff going on unexpected leave. The cross-training would pay off even if 4/10 plan were not implemented because work would be evenly distributed, and unproductive time would be reduced. This would also reduce tension between the two groups. The fact that 15 out of 17 wanted 4/10 by themselves could solve the problem of the rivalry because everyone will be working on 4/10. This case was limited by the small number of staff participating in the pilot study. It is understood from this case that a compressed week can be widely applicable into routine, supervisory, and customer service jobs;

however, each case needs to have its unique administrative arrangement.

2.3 Part-Time

It is generally considered that part-time work involves an employee working fewer hours than a full-time employee (Nesbit, 2006). It is usually less than the typical 20 hours worked in a reduced workweek and the typical 40 hours for normal working hours. In this regard, job sharing can also be considered a part-time job. It was estimated that part-time workers make up almost 20% of the total workforce in the UK and 40% of the women workforce in arrangements such as part-week or part-month (Young, 1980). Shortages on the labor market motivated employers to create part-time work. The strong supporters of part-time see its growth as an outcome of changing preferences of employers and of economic changes (Tilly, 1992). The reason behind choosing this work pattern from the perspective of the employees is the need for cheap and flexible workers who do not usually get the benefits of full-timers. Secondly, staff utilization prevents paying full-time workers for idle hours. Thirdly, it meets the preference of workers such as women with young children or elders (Allaart & Bellmann, 2007).

“Peak part-time” refers to a strategic utilization of part-time workers to cover surges in demand across the day and week in a range of economic sectors (Jenkins, 2004). It was utilized because of organisational-specific factors that include sectoral competition and the use of new technologies. The restructuring process was related in part to the change of working patterns with particular attention being paid to numerical flexibility.

Many workers reported a desire for greater flexibility in work hours at their current job and reduction of their work hours even for reduced pay, on temporary or indefinite bases (Golden, 1999). In survey of four New York City agencies, 22% of the respondents now make use of the available options including a part-time work option in flexible working patterns, usually for a limited time period, to obtain a degree, implement a phased retirement program, or manage childcare responsibilities (Brosnan, 1989). In general, the profile of organisations showed a noticeable gender difference between the full- and part-time workforces. It is an opportunity for a growing number of students, women, and for a group of men, to combine their needs for work and income with those of an education or taking care of a family (Peterson, 1993). Part-time also has been attached to women, particularly married women with the primary responsibility for home and child care (Berk, 1987, as cited in Brosnan, 1989). Unfortunately, part-time is often associated with lower working standards and conditions. While there are good part-time jobs, part-time is concentrated in bad secondary jobs as a rule (Kalleberg et al., 2000). The shift in established economies from manufacturing to service-based—where part-time work is most frequently located—increased the demand for shorter and differing work contracts, so there is a contradictory situation as employers are eager to exploit part-timers and achieve greater flexibility and then tend to stereotype them as less stable and less committed (Hunter et al., 1993). Historically, growth in

organisations had been met by full-time employees working overtime along with a limited number of part-time staff and short-term seasonal workers; however, in recent years, the flexibility policy had moved increasingly to employing part-time staff (Jenkins, 2004).

Jenkins (2004) covered several case studies in his research. One was Courier Direct, a publicly owned organisation specialising in collecting, processing, distributing, and delivering mail. The local council was involved in a process of restructuring the company, which resulted in 1,000 redundancies because of central government rate-capping to reduce public spending. The author interviewed 22 employees of which 7 were female. Thirty interviews were conducted, 8 with part-time employees. Courier Direct embarked upon a program of radical restructuring by increasing numerical flexibility at the shop-floor level to support employing females. This work level was historically dominated by males who constituted 87.5% of the workforce. However, the recent policies have increased the profile of women workers. Although men outnumbered women in full-time professions, female part-time employees comprised 41% of the overall number of staff.

Courier Direct employed its part-time staff on peak part-time. The competition and the council pressure to reduce costs forced the organisation to decrease labor costs and synchronize fluctuations in service demand with staffing hours. All of the part-time staff worked on the 5-to-9 pm shift and carry out duties that were comparable to, but not similar to, those of the full-time male staff. This tended to segregate female part-time workers in the workplace. Furthermore, correlating the content of work with workers' personality was a major trait in the utilization of peak part-timers. In the workplace, the increased use of part-time work was highly contested by the union. The nature of this work caused management to gender previously non-sex-typed work by accentuating the gender characteristics of the work content. The timing of the shift from 5 to 9 pm was seen suitable for women with children. The work involved sorting A4-sized mail, such as magazines. Even though men and a few number of women arranged other mail, the categorization of larger mail became sex-typed as suitable for women.

2.4 Teleworking

When the term *teleworking* was first coined by Nilles in 1975, it was seen as a cure for organisational and social ills of that time (Bailey & Kurland, 2002). To define teleworking, we need to understand the difference between teleworking and telecommuting:

Teleworking is any form of substitution of information technologies facilities such as computers or cellular phones for work-related travel; moving the work to the workers instead of moving the worker to work is the substitution of information technology for the commute to and from work, i.e., period work out of the principle office, one or more days per week either at home, a client's site, or in a telework centre. Telecommuting is a subset of teleworking, once the distance to work is great enough to make regular commuting impractical, the term *teleworking* takes over. (Nilles, 2000)

Teleworking has several classifications according to the teleworking location. It is either a satellite work centre where company employees work in the same location irrespective of their job to save on commuting time and costs, neighborhood work centres where employees from different organisations work in the same place or work at home where all equipment for the job is supplied (Lindstrom & Rapp, 1996). On a study of 1,000 Canadian companies, the three common uses of teleworking involve management information system, clerical work, and special projects (Solomon & Templer, 1993). Pratt (1984) categorized groups interested in teleworking as self-disciplined full-time female clerical workers seeking income but at reduced personal expenses, managerial and professional mothers wanting to nurture their youngsters without dropping behind in their careers, and male managers or professionals who value part-time integration of work and family more than they do competition for advancement. Indeed, when teleworkers were asked why they prefer teleworking, they said that they prefer to look after children or sick relatives or study for a degree (Crossan & Burton, 1993). Teleworking has been lauded as a strategy to help organisations decrease real-estate costs and respond to employees' needs for healthy work/family balance. It has also been promoted as a way to reduce air pollution and traffic congestion (see Shamir & Solomon, 1985; Egan, 1997; Mathes, 1992; Handy & Mokhtarian, 1995, as cited in Bailey & Kurland, 2002).

The number of teleworkers has grown from about 7 million in the United States in the mid-1990s to 19 million in 2001 (Siha & Monroe, 2006). However, the number is considerably less than expected. Pliskin (1997) describes what she calls "the teleworking paradox," which is, despite enormous improvements in IT, the prevalence of teleworking is lower than expected and is mostly used on weekends and evenings to complement rather than substitute at the workplace. Indeed, this is the case, which points out that technology is mostly seen as an enhancing means to facilitate work. She adds that perception from staff toward teleworking and organisational issues plays the main part in not utilizing this work pattern.

Luce and Susan (1984) compiled a list of the negatives and positives associated with this working arrangement. The advantages for implementing teleworking range from personal growth and learning experience, productivity, resource contention to a sense of control, a big-picture perspective, professional growth, and job satisfaction. The disadvantages are the workplace misconception about telecommuters, structuring time, physical limitations, workspace, distractions, and isolation. There is a concern about the isolation of teleworkers to the point of becoming invisible because they work at home and, as a result, lose out on chances for promotion. Fleming, a company director, says that the opposite can be true because, if properly managed, there can a gain in independence and productivity, so teleworkers became more visible (Solomon & Templer, 1993). He also says that most teleworkers spend between one and three days at the office, thus avoiding total isolation from events at the company. There is also the problem of supervising and monitoring teleworking which, according to Friedman et al. (1998), can be solved by moving away from a face-

time business culture to a result-oriented business culture.

Crossan and Burton (1993) examined a successful application of teleworking in a company called Information Access Company (ICA), which is responsible for producing indexes to articles in more than 3,000 magazines, journals, and newspapers. Those indexes were used to create databases made available in print, on CD-ROM, videodiscs, microfilm, and online. Information Access Company is predominantly an office-based company. It set up the teleworking scheme to retain highly skilled workers who could no longer work in an ordinary office environment because of family commitments or a wish to pursue other interests.

IAC estimated that the cost to recruit and train a new staff member to a fully productive level is more than £25,000 (AED 150,000). That is why teleworking was seen as a better, more efficient, and cheaper option. Teleworkers visit the office once a week to meet with their supervisors and put the finishing touches on their assignments. They also have the option of splitting their working week between home and office. This case has shed light on opportunities in teleworking as an optimal option. However, it is mostly used as a strategy to retain skilled employees rather than thinking of it in a holistic way not only to retain skilled staff but also to reduce other costs such as office costs, electricity costs, and space costs.

2.5 Annual Working Hours

The emergence of annual working hours has been seen by some authors as one of the most notable recent developments in temporal flexibility in Europe. It was considered the antidote to both the long working hour's culture and a means of meeting public demand for work-life balance and family-friendly working arrangements while maintaining economic productivity (Gall & Allsop, 2007). Gall and Allsop (2007) explain that in annual working hours, "the basic principle is that, instead of defining working time on the basis of the standard working week, for example 37 to 39 hours, working hours are distributed out over the whole year according to worked-out plans". The calculation of annual hours is based on the number of working weeks in the year multiplied by the number of working hours per week excluding holidays. Employees are paid on a weekly $1/52$ or monthly basis $1/12$ of their annual salary, regardless of the actual number of hours worked that month. In some schemes, reserve or banked hours are used, similar to flextime.

There are two main types of annual working hours (Gall & Allsop, 2007): The first may be described as a *fixed variability system* where annual hours arrangements are designed to reflect a known pattern of output or demand variation. Under these agreements, employees' work schedules vary at different times of year with longer work hours during periods of peak demand and shorter ones during slacker period; typically, under such schemes, earning is equalized throughout the year. The second agreement involves an element of floating variability. Under this form, the number of shifts rostered for each individual in the annual hours' schedule is less than the individual's agreed annual working time. The difference represents reserve hours during which employees are

effectively “on call” and can be brought into work to cover for illness, emergencies, housekeeping duties, and unanticipated peaks in demand (Blyton, 1995).

The basic objectives of employers introducing this work pattern are to minimize unit labor costs, increase productivity, and enhance labor flexibility. The advantages include better-structured and organized working time, reductions in work hours, more usable and increased leisure time, more holiday time, improved basic pay, harmonization of conditions between manual and white-collar workers, stability of earnings through the year, and increased job security. Employees stand to gain additional free days, lower travel costs, and less time spent journeying to and from work. Management potentially gains, among other things, simplified shift structures, fewer shifts change-over, and extended periods of cover. The disadvantages are the inconvenient working shifts to cover the reduction in number of hours, not being able to arrange childcare and domestic responsibilities, loss of overtime, inflexible shift rotates, restriction on holiday choice timing, short-notice calls, and additional voluntary hours (see Gall, 1996; Gall & Allsop, 2007; Blyton, 1995).

The cases in this study are examined by Blyton (1995) about annual working hours. At South Wales paper mill, an annual hour's agreement with a degree of floating variability was introduced in 1992. This agreement was decided on to accommodate an agreed reduction in working time and control overtime working to comply with contractual hours set at 1,740 ($145 * 12$ hours shifts) per year. However, the annual production hours are 1,684, where 24 hours are reserved for training and the remainder are used for absence and/or housekeeping. The annual hours schedule included a five 18-day rest periods per crew. The production operates on a continuous 7/24 bases excluding three shut-down periods, two of which are short (three days), with a longer shut-down over the Christmas and New Year period. Excluding reserve hours, the time system involves 7 sets of 4 shifts (2 by 12-hour day, and 2 by 12-hour night shifts); 6 of these are followed by 4 rest days, the 7th being followed by an 18-day rest period.

The second case is a glass manufacturer that introduced annual hours as part of a strategy to implement a working time reduction, replace a four-crew with a five-crew shift system, eliminate routine overtime working, and harmonize working time and other conditions across different worksites. Under this annual hours scheme, employees work four 12-hour shifts (2 days followed by 2 nights), followed by 6 rest days. During the year, two 11-day breaks are included in the schedule as well as an 18-day break during the summer months. In addition to the shifts, employees can be on call upon to work committed (reserved) shifts. An additional 72 hours (six 12-hour shifts) are built into the 1,800 total annual hours to cover these committed shifts. Payment for working these committed shifts is already incorporated into wages, and if at the end of the year, not all reserve hours have been used, they are written off.

The last case is about implementing fixed working hours scheme that has been introduced in a number of consumer electronics companies in the United Kingdom. At Matsushita, an agreement

was reached for 1,500 out of the 1,800 employees to work different-length workweeks at different times of the year. Hours are transferred from the slack to the busy period range from 86 to 91 per annum to reflect a product market where 60% to 65% of demand occurs during from September to December (Christmas/New Year period). The main benefit this arrangement gave to the employees is a number of additional free days provided in the non-peak period. The lower work hours between January and April are achieved by Fridays being taken as free days. Likewise, daily shifts in the August to December period are extended by 45 to 60 minutes, which is an equivalent to 4.75 hours increase over the 39-hour workweek. The main disadvantage of the scheme from an employee's point of view, however, is the loss in overtime earnings that constitute 20% of their overall earning.

2.6 Job Sharing

Job sharing as a work pattern is not as widespread as the other well-known work patterns such as flextime, but it can be useful in specific situations. The earliest-known institutionalised experiments on job sharing was first applied in the 1960s in America when a department hired 50 women to fill 25 full-time social worker positions, but it was only in 1973 when a New York organisation created a catalyst for new work patterns defining *job sharing* (Young, 1981). Job sharing is a work-pairing pattern where two people divide the responsibilities and the time of a position by placing full-time career path positions on a part-time basis to allow them have free time without sacrificing the involvements and benefits of those full-time mainstream positions (Hohl, 1996). On a survey of the top 1,000 Canadian companies, 31% said that they have job-sharing arrangements (Solomon & Templer, 1993). According to the State of New York study on part-time/shared job project surveying more than 3,300 employees, more than 50% of supervisors and personnel officers responded to the study with very favorable ratings to the job-sharing arrangement (Brosnan, 1989).

Job sharing can be seen as a type of part-time job where two share the job of one. Job sharing working patterns can be divided either horizontally (where both employees are responsible for the total job requirements) or vertically (where each employee is responsible for a distinct half) and can range from working a two-and-a-half day week, alternate weeks, or working six months a year (Young, 1981). Usually, mandated employment benefits—such as social security and worker's compensation taxes—are handled the same as for traditional part-time employees. The most important thing when it comes to the relations between the partners is the need to maximize their relationship, as a team, for the entire operation through the communication and staff interaction essential for building and maintaining a unified directorship. Job sharing requires more coordination and administration expertise than any other specific management area (see Brosnan, 1989).

Job sharing as a work pattern enhances flexibility in terms of working hours, retention of skilled employees due to reduction in turnover, increased skill range in one position, a broader recruitment pool, reduction of absenteeism, increased energy levels, continuity of performance, and option for older workers as well as others whose time available for employment is limited.

However, there are issues raised about the characteristics of job sharers: They must have a strong foundation of mutual respect, be well organized, cooperative and flexible, as well as willing to engage in extensive and open communication (Schwartz, 1989). According to Barnine (2004), the most noteworthy disadvantage of job sharing from the point of view of the job sharers is not being able to obtain the benefits of full-time positions, the lack of communication with management and colleagues in full-time employment, the difficulty in attending meetings, low income, and the possible conflict of ideas and work attitudes with partners.

Brosnan (1989) investigated a job-sharing case in January 1975 where the Young Women's Christian Association (YWCA) in New York initiated this arrangement for the position of the executive director. The reason for applying the job sharing arrangement was that they required more commitment of time and energy from the executive director while accommodating women's needs to balance their work and family commitments. The two women were responsible for managing the organisation's \$200,000 annual budget as well as the professional staff of more than 30 full- and part-time employees. They were accountable to a volunteer board of directors and shared the position for five years. The final arrangement required that each partner work three days a week with benefits prorated on a 3/5 basis, which gave the organisation a 6/5 time executive director presence.

There were several reasons for this kind of arrangement. Both partners regularly attended staff and board of directors meetings as well as occasional special meetings requiring the attendance of both. Wednesday was the usual day for both partners to be in the office. Responsibility was held in two ways: First, if the issue was of a specific interest to one partner, she becomes the primary staff contact; if not, the partners alternated attending meetings of general concern. Day-to-day issues, including staff assignments or routine problems, were handled by the "executive of the day". Any major staff problems requiring personal consultation were scheduled for the day when both executives were in the office. The schedule had little variation week to week. However, the flexibility that such an arrangement provided was a major factor in the success of the venture. Holidays were divided equally, and vacation time was accrued on a 3/5 schedule.

Neither of them participated in the retirement and health insurance plans because they thought that it was better to establish their private retirement accounts and use health insurance benefits available through their husbands' employers. Communication between the two executives was carried on by keeping a written account of all necessary information regarding the day's activities. There was also communication by telephone as necessary. Performance appraisals and evaluations of the co-executives were conducted by a special committee of the board of directors. The co-executive team was evaluated based on the performance of the organisation. They were also evaluated based on their individual performance as a member of the team.

2.7 Effects of Flexible Work

The previous section discussed each work arrangement separately and their roles in balancing work and life, reducing absenteeism and turnover, increase productivity and satisfaction, and reduced traffic jams and costs. This section will accumulate related advantages and disadvantages together and discuss them further based on each category.

FWA to improve family-work balance, improve retention, satisfaction and performance and reduce turnover and absenteeism.

There is contradiction between efficiency and flexibility as firms need to decide if they want efficiency by minimizing labor costs and the current level of production over flexibility in labor input responses when changing their production levels (Golden, 1999). In general, those patterns are positively correlated with satisfaction, performance, and retention when they are applied voluntarily but negatively correlated with them when applied involuntarily (Jacobs & Gerson, 2004). According to Hohl (1996), with the exception of joint appointment and job sharing, flexible work arrangements increase employee morale and retention, reduce tiredness and absenteeism, and improve the quality of services. The reason for the exemption of joint appointment and job sharing might be the conflict those arrangements cause among the involved parties.

A study conducted by Hill et al. (2001) concludes that about half the employees had difficulty in their family-work balance. Their sample reveals that perceived flexibility is strongly and positively correlated with work-family balance. Donnelly's (2006) research indicates that organisations have to exhibit their commitment to such a scheme by assisting their own employees in achieving a work-life balance. The literature indicates other benefits of flexible work arrangements in the family-work balance which include less marital conflict, better monitoring of children, and increased period of breastfeeding of an infant and less depression (Hill et al., 2001). The 1997 National Study of the Changing Workforce, sponsored by the Families and Work Institute in the US, indicates that employees with flextime are more satisfied with their jobs, more likely to want to remain on the job, and show more initiative than workers with no access to these policies (Galinsky & Johnson, 1998).

Some arrangements, such as teleworkers, did not give more family-work balance than those who do not apply it in their work, according to Hill et al. (1996). This might be because teleworkers tend to procrastinate and do not know how to separate their life activities from work. However, the worry about the reduction in productivity in telecommuting is inexistent (Solomon & Templer, 1993). An empirical study conducted by Hartman & Weaver (1977) indicates that firms which adopt compressed week experience higher productivity and job satisfaction and lower absenteeism and turnover. This is not the case in another study where compressed week seems to harmfully affect satisfaction, performance, and cause stress because it involves longer working hours (Smith

& Wedderburn, 1998). There are some conflicting views about the effects of flexible working arrangements but, overall, the results are positive. Caution is needed, however, when applying those arrangements.

FWA and Cost

Costs in flexible work arrangement or any other system must be weighed against the benefits derived from implementing it (Mantei & Teorey, 1998). Staff having the opportunity to adjust their time schedules to correspond to periods of fluctuating workloads would reduce idle time and increase productivity. A natural outcome of all these elements is typically a sharp reduction in overtime and, as a result, reducing costs. Furthermore, it can help employers reduce the costs associated with employee attrition by providing an alternative for employees who might otherwise leave firms as it reduces overall turnover rates and the costs associated with recruiting and hiring staff (Robinson, 2005). The difficulty in flexible working derives from the fact that many of its benefits are intangible monetarily (Hyde & Wilson, 2004). Things such as work-life balance, reducing traffic, satisfaction, and so forth, are difficult to quantify.

According to Hohl (1996), with the exception of teleworking, “the cost of implementing and administering most arrangements appeared negligible, even among those organisations using three or more arrangement types”. Teleworking is a costly alternative. The organisation’s cost to provide hardware, software, and all the accessories needed to telework should be measured against reduction of overheads and accommodation costs. Additionally, flextime has the potential of increasing electricity and administrative costs because of the increased usage of office facilities and the initial costs of system installation (Kuhne & Blair, 1978). Flexibility and costs will be covered in more detail in the economical feasibility section and the cost-benefit analysis.

FWA to Reduce Traffic and Traveling Time

The nature of flexible work arrangement is based on the scheme that different people have different working hours even if they work in the same organisation. This is the central idea that flexible work arrangements offer to reduce traffic jams. It is most visible in flextime where staffs have different starting and ending working hours, which distribute the traffic to longer hours. Moss & Curtis (1985) argue that because employees working on arrangements such as flextime adjust their work schedule to avoid rush hours, it will decrease rush-hour congestion, which will eventually result in social benefits for both the employees and their employers by reducing commuting time and give them more free time. The same can be said about compressed week and telecommuting.

According to Hung (1996), although reducing traffic is not the main drive to implement compressed hours, it may be the case in the future. The number of days commuters have to travel would be significantly less than if they had to work in their organisation’s office every day (see Solomon & Templer, 1993). In a study in telecommuting, the savings range from 30 to 45 person-

miles, with an average across studies of 36.1 person-miles per telecommuting occasion (Mokhtarian et al., 1994). The effects of flexible working arrangements should not be underestimated, especially if you take into consideration that, on average, 25% work in a non-typical work arrangements such as shifts (Jamal, 1981). Joint appointment is used to take advantage of the available workforce without employing more staff. Part-time, job sharing and compressed week usually have different working hours than the standard working arrangements. They all can indirectly but significantly reduce traffic.

2.8 Feasibility Study

Feasibility study is a set of multi-disciplinary work for defining and assessing a project so that the decision to carry it out can be taken (Cano, 1992). Drucker (1985) and Thompson (2003a) define a feasibility study as “a controlled process for identifying problems and opportunities, determining objectives, describing situation, defining successful outcomes and assessing the range of costs and benefits associated with several alternatives for solving a problem”. It is a study to find out if the project is possible and justifiable, provide the management with enough information to know whether the project can be done, whether the product or service will benefit its intended users, and the alternatives and the preferable plan, if any (Easterbrook, 2005).

The initial feasibility is required by most organisations to do rough estimates for the costs and benefits, the feasibility of the project, and any major risks (Merrifield, 1997). Some organisations, however, require more detailed analyses of costs and benefits as well as more detailed risk assessment during or toward the end of the analysis phase; it is only then that all the necessary information and data will be available (Cano, 1992). The feasibility study comes before the business plan and is considered an integral part of the business development lifecycle. It includes recommendations that can be reflected against the study capacity to exhibit the linkage between the analysis and the business plan (Hoagland & Williamson, 2000). After conducting the feasibility study, management makes a decision on whether to precede with the project or not. If the project goes forward, the next step is the business plan. The information gathered in the study will support the business plan; hence, this will reduce the research and cost of the business plan and is considered a relatively inexpensive way to safeguard any wastage of further investment (Gofton, 1997).

In the government sector, the fundamental concern when taking a feasibility study and a cost benefit analysis is to complement financial calculations with measurements of the costs and benefits to its consumers and to society as a whole (Feldstein, 1963). Those techniques have to be retained because they provide the information necessary for planning, controlling, and auditing the actual flow of payments and receipts associated with a project. It is worth bearing in mind that those techniques, however, are insufficient in the public sector (Benito & Flip, 1996). The fundamentals

in the private sector are to satisfy shareholders, and the measure of success is the profit earned. The government role is bigger than that in the private sector; the public sector role is to provide the greatest benefit possible to the society. According to Feldstein (1963), applying commercial criteria to estimated money costs and receipts may lead governmental institutions to select projects that are less than optimal. He believes that a project can be an inadequate guide for public investment decisions, especially if it is related to Human Resources issues. In this case, social benefits that do not produce revenues to the public body incurring the capital expenditure should be separately evaluated and included in the final investment decision—taking into consideration that while it might not be profitable in economic terms, it will serve the global purpose of the strategic plan (Feldstein, 1963).

Feasibility Study Outline

Feasibility study outlines vary significantly between sectors, businesses, and organisations, so some elements suitable for one segment are not necessarily suitable for another (Cano, 1992; Jaafari, 1990). Additionally, organisations might have different needs and expectations from a feasibility study, so while some want a cost-and-benefit analysis to be part of the feasibility, others might consider it a separate phase. In general, a feasibility study starts with an overview of the organisation, its goals, structure, functional units, stakeholders, users, its authority, duties, relationships, policies, functions, and objectives. Next, the study describes the problems, inconsistencies, and inadequacies in the current system. It describes the new system, its key components, and what will it offer to overcome such complications, its advantages, and disadvantages and alternatives available (Easterbrook, 2005). There are generally five agreed elements to be addressed in the feasibility study:

1. Technical element.
2. Legal/political element.
3. Organisational/cultural element.
4. Project/schedule element.
5. Economical element. (Abou-Zeid et al., 2007; Cano, 1992; Jaafari, 1990; Thompson, 2003b).

Of these, the most often studied is the economic element followed by technical element; others are often overlooked (Cano, 1992). Because of the nature of the project as a Human Resource initiative, more emphasis will be needed on the organisational/cultural element.

Elements of the Feasibility Study

According to Easterbrook (2005), the elements of the feasibility study are the following:

1. Technical element. The feasibility study validates whether this technology is available,

mature enough to be used, proven, whether staff have the technical knowledge and skills, provide further technical information about the product/service, and describes any additional technical information about the product/service.

2. Legal/political element. This type of feasibility investigates whether trade practices or industrial relations permit this type of agreement/contract and whether unions will oppose it or not, its regularity, political issues, and laws that need to be modified or changed to tackle such implementation.
3. Organisational/cultural element. This element explores whether the culture of the organisation is going to allow a radically different way of organizing workflow, how end-users will feel about it, how any resistance will be overcome, and if the system requires that the management support such system.
4. Project/schedule element. The study considers if the project schedule is realistic, if the number of staff is sufficient, the major events and phases completion, project deadline constraints, and the consequences of the project overrun.
5. Economic element. This factor tests whether benefits outweigh the costs and if so, on what time period. It asks other questions such as if the investment is good for the organisation's capital, and the economic and political assumptions that need to be made. It is usually represented in the cost/benefit analysis, which is an estimation, and comparison of costs and benefits of an undertaking.

Cost Benefit Analysis

Although investments in a Human Resources project such as flexible working arrangements differ from commercial projects, both still need proper evaluation of the cost versus the benefits of the proposed project. King and Schrems (1978) list four possible major costs:

1. Procurement.
2. Start-up.
3. Project-related.
4. Ongoing costs.

Cost-benefit analysis (CBA) is the ideal tool to give better measures of the economical feasibility of a project. The methods normally used in CBA are: Return On Investment (ROI), Net Present Value (NPV), Payback Analysis, Internal Rate of Return (IRR), and Average Return on Book Value (Morgan, 2005). Regardless of the methods used, the most important thing is the identification of an appropriate cost-and-benefit component, taking into consideration the social value of such a project. Feldstein (1963) states that a number of things must be included in the calculation of social costs and benefits, although they do not contribute to the money costs or receipts of the project. The benefits and cost are divided into three categories:

1. Criteria directly expressible in monetary terms such as hardware costs, training costs,

and communication costs.

2. Criteria indirectly expressible in monetary terms such as productivity and absenteeism.
3. Criteria not expressible in monetary terms such as satisfaction. (Gareis, 1998)

Risk Assessment

Risk assessment is part of the decision-making process, usually the final element that is addressed in the feasibility study. Although not compulsory, a risk assessment is encouraged to avoid and be aware of such risks. It is composed of risk analysis followed by risk management. Risk analysis defines the scope of the risk assessment, identifies assets, and identifies and prioritizes risks to the assets. Risk management involves making decisions to control unacceptable risks; those decisions are either to transfer the risk, ignore the risk, or reduce the risk via selection of appropriate safeguards (see Cano, 1992). Sallis et al. (1995) describes techniques that are commonly used to identify risks:

1. Assumptions.
2. Decomposing the project into appropriate subsystems where it can be looked at in detail.
3. Seeing dependencies that may not have been evident at the higher levels of analyses.
4. Experience.
5. Compound risks.
6. Winners and the losers in the project.
7. Other common techniques such as SWOT Analysis, Porters Five Forces, or Pest Analysis. (Thompson 2002a, 2002b)

Finally, risk assessment methods may be quantitative or qualitative (Colema & Mark, 1998).

Qualitative methods produce descriptive estimates for risks (e.g., very high risks) whereas quantitative methods produce numeric exposure estimates for risks, often measured in a currency, (for example, annual loss exposure).

Chapter3 Methodology

3.0 Methodology

The paper is an attempt to gain some understanding of the viability of implementing flexible working arrangements in the government of Dubai. We first inspect the current working arrangements in the government of Dubai and how the Human Resource Management Law complements those arrangements. We also check the government strategy when it comes to implementing flexible working arrangements and the government future plans in this regard. Then we explore the working environment the government provides for its employees, the implementation challenges and what the government offers to ensure a sound relation between the staff and superiors. Next, we investigate the employees' perception on those arrangements and the government support. After that, we examine the government technological infrastructure to apply the arrangements and project constraints, if any. Finally, we assess the viability of the project in economical terms. The specific processes used to gather the data will be analyzed in each element of the feasibility.

To examine those issues, interviews with Human Resource governmental officials were conducted in March 2009 along with surveys distributed to the government staff. The interviews and surveys were designed to gather data to help validate the technical, legal/political, organisation/cultural, project/schedule, and economical elements of the feasibility study. The managers chosen for the interviews were selected in relation to their direct involvement in their departments' Human Resources policy. Surveys were also distributed in those organisations. The departments chosen were the executive council to give a strategic point of view about flexible working arrangements, and several governmental departments; namely, the Road and Transports Authority, Dubai Police, Dubai Municipality, Dubai Electricity & Water Authority, Department of Naturalization & Residency, and Dubai Health Authority. Those departments were chosen because they employ most of Dubai government employees and have a variety of working arrangements. Official governmental documents were also used as a data source to support the findings. It took from one week to a month to get permissions from the relevant departments, and DEWA rejected it altogether. We had to call and pay visits several times to get those permissions.

The interviews were carried out between the 5th and the 20th of March. All the interviews were recorded using a cellular phone to improve accuracy and reliability, and to prevent the loss of data. Interviews were then transcribed for analysis. The interviewers adopted a semi-structured approach to ensure that the issue of flexible working arrangements is central, while avoiding constraining participants in terms of the issues they believe to be relevant and important (Bryman, 1989). An interview guide was designed to assist in the interviews, with a focus on having a relaxed conversation. The interviewers allowed contributors some degree of autonomy in the content of

their answers, allowing them to give any comments. The questions has been pre-tested and covered different subjects: the current and future plans of flexible work arrangements, the working environment and culture, information and communication technologies, challenges and barriers to flexible working, and its economic benefits. Information will be subsequently referred to about research participants with respect to their working areas. However, the need for confidentiality and anonymity prevent their names from being cited.

The major departments with the most variety of job professions and types and the department who had some form of flexibility have been surveyed. The target group for the survey was staff who are either clerical, administrative, or professionals from all levels plus the management staff. A four-page survey designed by the author with anonymous responses was distributed onsite. The survey consisted of 40 questions, structured protocols designed to facilitate ease of response and reduce the time required from distribution to return of the questionnaire. It addresses five major issues: demographic background, nature of their job, work arrangements currently used, how they perceive flexible working arrangements, and what they think the management would feel about it. The demographic and career variables was developed by Suliman & Abdulla (2005).

Chapter4 Results, Analysis and Recommendations

4.1 Organisational/Cultural Element

The interviews and the survey have shed the light on some elements of the organisational culture of the government of Dubai. We first looked at the plans the government has in terms of flexible working. We explored the challenges that may arise when implementing flexible working arrangements and the employees' perception of the whole idea, their interest in flexible working, and why they would want those arrangements to be implemented.

Sample Characteristics

The survey was distributed onsite to 400 government staff with 200 responses, thus yielding a response rate of 50%, which is a little bit lower than the norm of 56% for studies utilizing a questionnaire survey (Baruch, 1999). As can be seen in Table 2 that about 15 questionnaires were not fully completed; thus, only n=185 were suitable to be used for the study. Of the research sample, about 49% are male and 51% are female. Approximately 54% of the respondents are married, and 56% of the respondents have university degrees (12.9 % higher diploma, 37.2% bachelor's degree, and 5.95% with a master's degree or above). The respondents are of a young age (28% below 25, and 54% are between 25 and 35). About 78% of the respondents are Emirati nationals. Going to the job level, 52% of the respondents are in administrative and lower management jobs, 18% of the samples are professionals, while 15% are seniors. Finally, 38% of the respondents have been working between 2 to 7 years in their department. The sample size is small to justify statistical analysis of the findings; therefore, we suggest that caution be exercised in generalizing the results.

Table 2: Distribution and Demography

	Road & Transport Authority	Dubai Municipality	Department of Naturalization/Residency	Dubai Police	Total
Responses	67	44	24	50	185
Male	16	28	7	39	90
Female	51	16	17	11	95
Married	31	33	10	27	101
Unmarried	36	11	14	23	84
Emirati	52	24	23	46	145
Non Emirati	15	20	1	4	40
Age Below 25	26	8	7	11	52
25 < Age < 35	33	19	15	33	100
36 < Age < 46	7	11	1	5	24
Above 47	1	6	1	1	9
High School	4	11	8	19	42
Diploma	29	9	7	18	63
Bachelor	31	20	9	9	69
Masters and Above	3	4	0	4	11
Senior	12	5	2	8	27
Administrative	31	22	17	31	101
Professional	15	16	1	1	33
Technical	9	1	4	10	24

Interest in Flexible Working

The spark of flexible working was initiated by Dubai Municipality when it implemented flextime in January 2007. The success of implementation has made the General Secretariat of the Dubai Executive Council (DEC) circulates a letter to the governmental departments, asking them to conceptualize and study the applicability of the implementation of flextime. A few months later, the Department of Naturalization & Residency implemented it temporarily during the holy month of Ramadan. The Road and Transports Authority suggested starting the work between 5 am to 7 am and divide the starting working hours between the departments. In December 2008, the executive council officially issued part-time as its first official policy, applied optionally to anyone who wanted to choose this pattern, taking into consideration the needs of the government department. Until the writing of the research, none of the departments applied part-time. The executive council also said that teleworking is not on their radar right now as a formal policy but that they would urge the government departments to apply such initiatives. There was a trace of some jobs where two share the job in some departments, but there was neither formal policy nor different working hours.

From the study sample, when asked if they knew what flexible working arrangements are, about 70% said that they did. While the majority (84%) indicated that the current working hours are suitable for them, 95% said that they are interested in the application of flexible working arrangements. There was a good dispersion of the types of flexible working application desired by the respondents. In all, flextime was by far the most popular, followed by teleworking, compressed week, job sharing and part-time. Table 3 and Figure 2 summarise the results.

Table 3. Flexible Working Arrangements Popularity

Type of Arrangement	Number	Percentage*
Flextime	144	77.84%
Compressed Week	33	17.84%
Shift Working	10	5.41%
Teleworking	41	22.16%
Part-Time	14	7.57%
Annual Working	8	4.32%
Job Sharing	22	11.80%

* Participants can choose more than one arrangement.

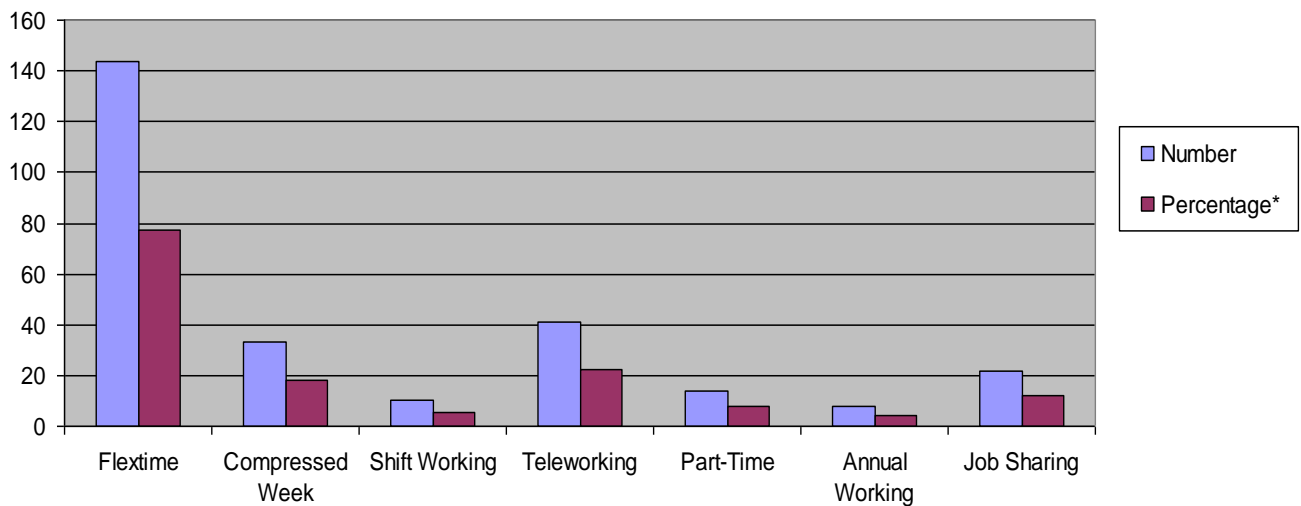


Figure 2: Flexible working arrangement

Organisational Culture

The executive council stressed that a change in the management style and working practices will take five years to fully support. The council saw line managers as the main challenge in implementation. Dubai Municipality believes that flextime should not be applied randomly and that there should be a common and comprehensive framework of this system. It also said that flextime is not an employee's right but can be used to empower them in a way that does not affect the nature of the department and the work system. Furthermore, coordination between the staff and line managers is necessary to avoid any difference in the course of action, and the choice of the time should not be left to the employees alone without the approval of the management, especially because some sections require attendance on a pre-scheduled basis. Additionally, front desks and other sensitive sections cannot apply such systems because they deal with the public, and there should be a high level of coordination between the different departments to manage the applicability of such system.

The study sample covered employees' perception regarding several issues in flexible working implementation. About 80% thought that they have to be present the whole working day and 26% thought that their job did not require them to be available on all weekdays. The majority of the staff had strong faith in their management. Approximately three-quarters (74%) of the studied sample said that they believe that higher management and line managers will support flexible working arrangements. Only 12% of the respondents said that they were against implementing flexible working for others if it was not applicable to them.

Why Flexible Working Arrangements?

The executive council urged the departments to implement flextime as a clear response for the development requirement of the governmental work and for the general interest of the government of Dubai and its employees. According to them, the system aims to provide a positive and ideal environment and to reconcile the interests of agencies and the needs of clients. It also

assists employees in reconciling between their career and family responsibilities. Further, it aims to improve their skills and productivity in a way to strengthen the economic competitiveness of the Emirate of Dubai. The Road and Transports Authority said that they expect a 30% decrease in traffic if flextime were implemented. The results of implementing flextime in Dubai Municipality were astonishing. It was able to reduce the number of absenteeism and delay hours in the HR department from 7,392 to 2,200 hours. It also increased the number of work units produced by 9% due to increase of the working hours, and the delay has decreased from 80% to 20%.

Respondents were asked to indicate why they would choose flexible working arrangements. Education was the main reason for about 57% of the study sample, followed by 36% for taking care of children, and 29% to have free time for hobbies. Others included avoiding traffic and starting their private business. Table 3 and Figure 3 summarise the results.

Table 4. Why Flexible Working?

Reasons for the Implementation	Number	Percentage*
Taking Care of Children	68	36.76%
Education	105	56.76%
Health of an Ill Child or Elderly	38	20.54%
Hobbies	54	29.19%
Other	23	12.43%

* Participants can choose more than one reason.

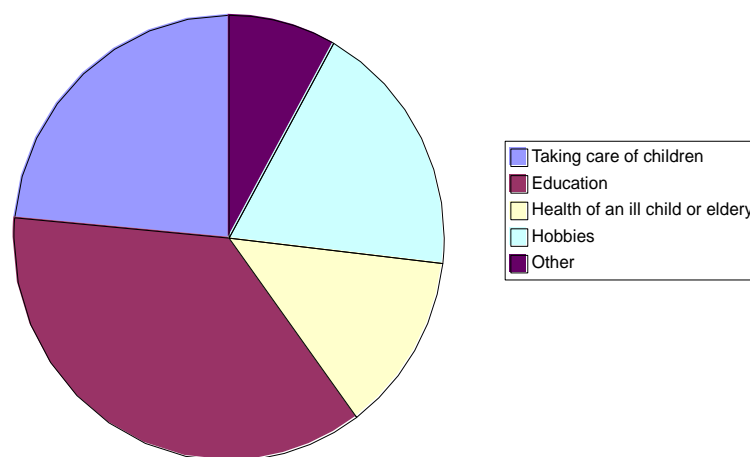


Figure 3. Why flexible working?

Every department has its priority when implementing flexible working; while the Road Transport Authority sees it mainly as a way to reduce traffic, Dubai Municipality used it as a practice to improve productivity and reduce absenteeism. The results have shown that the

government of Dubai is open toward implementing new initiatives if it means better results for the government and its employees. This commitment came from the highest levels of the government represented by the executive council. The government is also aware of the problems that need to be dealt with and that a change in the management style requires a long adjustment period. The part-time policy, although official in December 2008, has so far benefited no one. This is due to the bureaucratic nature and heavy centralization in the government department. The author was a victim of this bureaucracy in his attempt to interview governmental officials for this study, as it took a long time to get the permission to gather data. The other problem is the managers and their emphasise on the importance of practicing full control over the actual working process in their departments, which can a major organisational barrier, especially if this means shift of responsibility from the manager to the flexible worker (Illegems et al., 2002). This emphasis was drawn from the Dubai Municipality remark that flextime is a privilege and not a right. Face-to-face interactions and direct supervision should be replaced by coordination based on mutual trust and increasing the adoption of management techniques such as “management by objectives” (NUTEK, 1997). Nevertheless, the results of the implementation were credible, which encourages its application government-wide.

The results indicate that interest of flexible working arrangements is gradually becoming more widespread even though the application is still minimal. The reason the 84% said that working hours are suitable to them may be due to the relaxing working hours comparing to the private sector, yet their willingness to have flexible working (95%) proves that there are always ways to comfort the staff. It was surprising that 70% said they already knew about flexible working. This could be because of the recent attention from several departments. It could also because respondents mixed between flextime as a working pattern and flexible working arrangements as a concept. This may possibly explain why flextime got the vast interest of about 78% of the respondents. The author speculates that if the percentage of professionals is higher, there will be a higher choice of other flexible arrangements because of their different job nature. The higher percentage of employees seeking flexible working to pursue education (56.76%) and the relatively lower percentage of employees looking to take care of their children (37.76%) is probably because 82% of the respondents are younger than 35, and 44% are single. The high percentage of respondents believing that they have to be present all day hours and all weekdays contradict the basic principle of 21st century working environments (Nilles, 2000) and show that the government needs to work to implement more innovative working practices. Eligibility tests can also be used to see what jobs suit what requirements on a case-by-case basis. The fact that 88% support flexible working even if they did not benefit from it demonstrates negligible cultural negativity from non-flexible timers. The higher management and line managers are not seen as obstacles to applying flexible working as indicated earlier from the staff point of view. This faith should be translated in the way the staff and the management deal with each other and accordingly help smooth the application of flexible

working arrangements. In the long term, the application of flexible working from an organisational and cultural standpoint is feasible.

4.2 Technical Element

The literature reviews answers the questions of the availability of the technology and if it were mature enough to be used. From the interviews, we were able to investigate if the government has the basic supporting infrastructure to implement flexible working arrangements. We examined the current arrangements used by the governmental departments, the starting and ending hours, the time monitoring systems, and means of communications (Table 2).

Table 5: Working Arrangements, Record Keeping System, Comments

Department	Arrangements	Attendance Recording	Comments
Dubai Police	Rigid working Shift working	Web-based attendance application	
Department of Naturalization & Residency	Rigid working Shift working Flexitime	Biometrec punching	Flexitime was applied temporarily in Ramadan
Dubai Municipality	Rigid working Shift working Flexitime Teleworking Part-time	Cards punching	Part-time is yet to be approved. Teleworking was applied temporally for three months.
Dubai Healthcare Authority	Rigid working Shift working	Cards punching	
Road & Transport Authority	Rigid working Shift Working	Biometric Punching	

With the exception of Dubai Healthcare Authority, which has their typical working hours from 7 to 3:30, all other departments covered in the study have their working hours from 7:30 to 2:30. Shift working depends on the nature of the job. Police patrols, doctors, nurses, parking inspectors, emergency, and so on, work on two or three shifts depending on the department and public needs. Dubai Municipality alone has 104 different working rotations but mainly revolve on different shift times. The typical shifts are from 8 to 4, 4 to 12, and 12 to 8. Flexitime has been applied in four departments in Dubai Municipality since September 2007. The open time is between 6 to 8:30 and 1 to 3:30, and core time from 8:30 to 1:00. The application of flexitime in Dubai

Municipality does not allow debt and credit between days and weeks. The Department of Naturalization & Residency applied an advanced shift working that is a system between flextime and shift working. Employees had the privilege to choose between three starting working hours, either from 9 to 2, 10 to 3, or 11 to 4. The number of working hours is reduced to 5 hours in Ramadan; hence, there are less working hours in those shifts. Dubai Municipality is the only department that applied teleworking. They had a pilot program for three months to test the arrangement. They stopped temporarily for evaluation and improvements.

The government is aiming to centralize its Human Resource information and implemented the Government Resource Planning (GRP), an oracle database system. All governmental departments covered in this study are connected to this system. GRP is used as a database for all Dubai government staff. It includes their name, their ID number, their salary, leaves, etc. Oracle Time and Labor (OTL) is an extension of the GRP system that includes functions for the attendance record-keeping process. It provides an intuitive Web-based interface for time entry and approval and adheres to organisational time management rules. It allows entering time via Web browser, mobile device, or even offline using a timecard template that can be uploaded later. It defines rotation plans based on shifts and work plans. The majority of the staff has access to a PC and the standard communication equipment to access the Internet depending on their need using Local Area Networks and Wide Area Networks. The internal network Web site (intranet), e-mails, Blackberry cellular phones, Simple Messaging Service (SMS), official letters, and meetings are used as means to communicate between management and staff.

Our results suggest that government of Dubai already has the basic Information and Communication Technology (ICT) infrastructure to implement flexible working arrangements for both temporal and locational flexibility. This is not surprising, as the government is committed to implementing the latest standards and technologies to be competitive and ease the work for both its employees and the public. Teleworking would be possible even without ICT; however, its application will be limited to jobs that do not need communication such as programming, system analysis, word processing, and so on. Although technology is not vital in implementing temporal flexibility, the process would be otherwise costly and time consuming.

Oracle Time and Labor (OTL) seems like the ideal software to define any flexible working hours rotation. It defines the starting and ending working hours, the number of daily, weekly or monthly working hours, core time and open time, and many other functions that can help in the timely record-keeping process. The government is already planning to connect all the departments to the Government Resource Planning (GRP) and OTL; therefore, monitoring the working hours for flexible workers would not be a problem. Training will be needed for the attendance monitoring staff about the specific rotation information to be applied on the system. For teleworking or any other locational flexible arrangement, only basic ICT are needed with low skill requirements

(Illegems et al., 2000) which the government already has. There are no technical barriers to connect teleworkers with their departments. Any specific or specialized requirement can be provided on case-by-case basis. From the results obtained and the literature, technology-wise, the implementation of flexible working arrangements in the government of Dubai is feasible.

4.3 Political/Legal Element

This section aim to analyze and understand the laws and policies that govern working pattern issues in the government of Dubai to validate the legal feasibility of flexible working. We inspect the limitation, barriers, and supporting issues for implementing flexible working arrangements in the Dubai government. The data was gathered from the Dubai Human Resource Management Law and an interview with the executive council.

The Dubai Human Resource Management Law, issued in 2006, applies to Dubai government employees with an aim to implement best practices and make huge changes in HR concepts, fairly and consistently among employees to create a performance-driven and progressive culture for Dubai government employees. The law states that typical working hours for governmental employees is 35 hours from Sunday to Thursday and can be extended to up to 48 for shift working. The law affirms that every Emirati employee is enrolled in the pension plan of the General Pension and Social Security Authority. There are four types of contracts: full-time, part-time, temporary, and special contracts. In their newly issued part-time policy, employees work on an hourly basis and are given 20% more of the hourly rate while compensating other benefits such as annual holidays and tickets. However, the policy emphasises that part-time employees are eligible to be enrolled in the government pension fund and guarantee their rights in being trained and promotions. Part-time employees do not necessarily work daily, and their working hours are not necessarily the same throughout the week. Until the writing of this study, only part-time policy was issued. The law offers different kind of leaves: sick leaves, paternity leaves, idda and compassionate leave, pilgrimage leave, and exceptional leaves to accompany relatives for treatment, attend cultural programs, or sport occasions. When asked about any limitation or restriction in the current law, the executive council and all governmental departments interviewed say that there are not any. They said, however, that they welcome feedback and will implement best practices when it comes to Human Resource management. The HR committee meets on regular basis to review the law and form policies.

After analyzing the legal and political aspects by going through Dubai HRM law, the Pension and Social Security law, and Dubai Government Part-Time policy, it is clear that there are no clauses that forbid or prohibit flexible working. While it is understandable that there should be guidelines for the number of working hours, the law should go beyond that and refer to working arrangements that are not constrained by the number of hours, that focus on task orientation, and are managed by objectives. There should be a reference to other working arrangements so that it not

only legalises such practices but also encourages its implementation. We encourage the government to implement regulation that boosts the execution of flexible working than limiting those regulations to reducing the existing barriers, especially when the practice matures in the following years. In general, the Dubai Government Human Resource Management law does not limit or restrict the application of flexible working arrangements; it is appropriate to say that legally, the implementation of flexible working is feasible.

4.4 Project/Schedule Element

Data derived for this element is based on the observation of the interviews, the survey questionnaire, flextime experiment of Dubai Municipality, and the literature. Because there is neither a real project taking place nor we can measure how realistic the implementation schedule is, this section intends to look into issues that might accelerate or slow down the process and then estimate a timeframe for implementing flexible working, taking into consideration the author's observation of the government capabilities.

From the examination of the previous elements, we found the following issues: Because there is no collaboration between the executive council and the government department, every process takes a long time, especially considering that the government strategy is only into issuing policies from a high level—that is, part-time policy—and then let each department implement it on their own without giving them a framework. Although it is not a must, the government will need to unify its ICT system and install the Government Resource Planning and Oracle Time and Labor system, since it is the platform currently used. All governmental departments should work on the same standard and can bring their analyses and experience together, which will also take time to implement. Departments should be given loose deadlines and guidelines to be put into practice flexible working. We have to be aware of the implication of the losses of not implementing the project in the long run. We should also understand that flexible working is not a mere project that is done once for all but rather an ongoing Human Resource process that needs commitment and care. While implementing flexible working and training staff about the technical issues and policies will not be a long process, infusing a culture that appreciate such work styles will take longer to mature and yield real results. The government commitment toward its Human Resources and the non-existence of money constraints all play a part in speeding the execution of flexible working. Thus, generally, the implementation of flexible working is feasible over the long term.

Every project has three dimensions—scope, time, and money—represented respectively in work breakdown structure, Gantt Chart and schedule, and cost-benefit analysis (Fleming & Koppelman, 1998). The scope of a project is the total of all of its tasks and requirements or features (PMBOK, 2004). It mainly relates to defining and controlling what is or is not included in the project. It provides a framework for the development of the overall planning and control, and it forms the basis for dividing work into definable augmentation where statement of work can be

developed and technical, schedule, cost can be established (Jung & Woo, 2004). We propose a work breakdown structure of flexible working arrangements followed by a timeframe in the following paragraphs. A Gantt chart is available in the appendices section. The work breakdown structure and schedule elements were derived from Flexible Working Handbook (Selby et al., 2001).

Introduction to the Model

The subsequent model (Selby et al., 2001) is suggested as guide for the introduction and execution of new forms of work in an organisation. It has been effectively useful in many organisations implementing teleworking, one form of flexible working. Although this guide is used mainly for small and medium enterprises, it can be useful as a general guideline for the government; even in these organisations, the different phases and tasks apply in principal. The phased model expresses a staged introduction of flexible working in six periods, each of which has a typical length and a clear set of actions and tasks to be carried out. Figure 4 illustrates the Work Breakdown Structure of flexible working arrangements. Table 5 shows the period for implementing

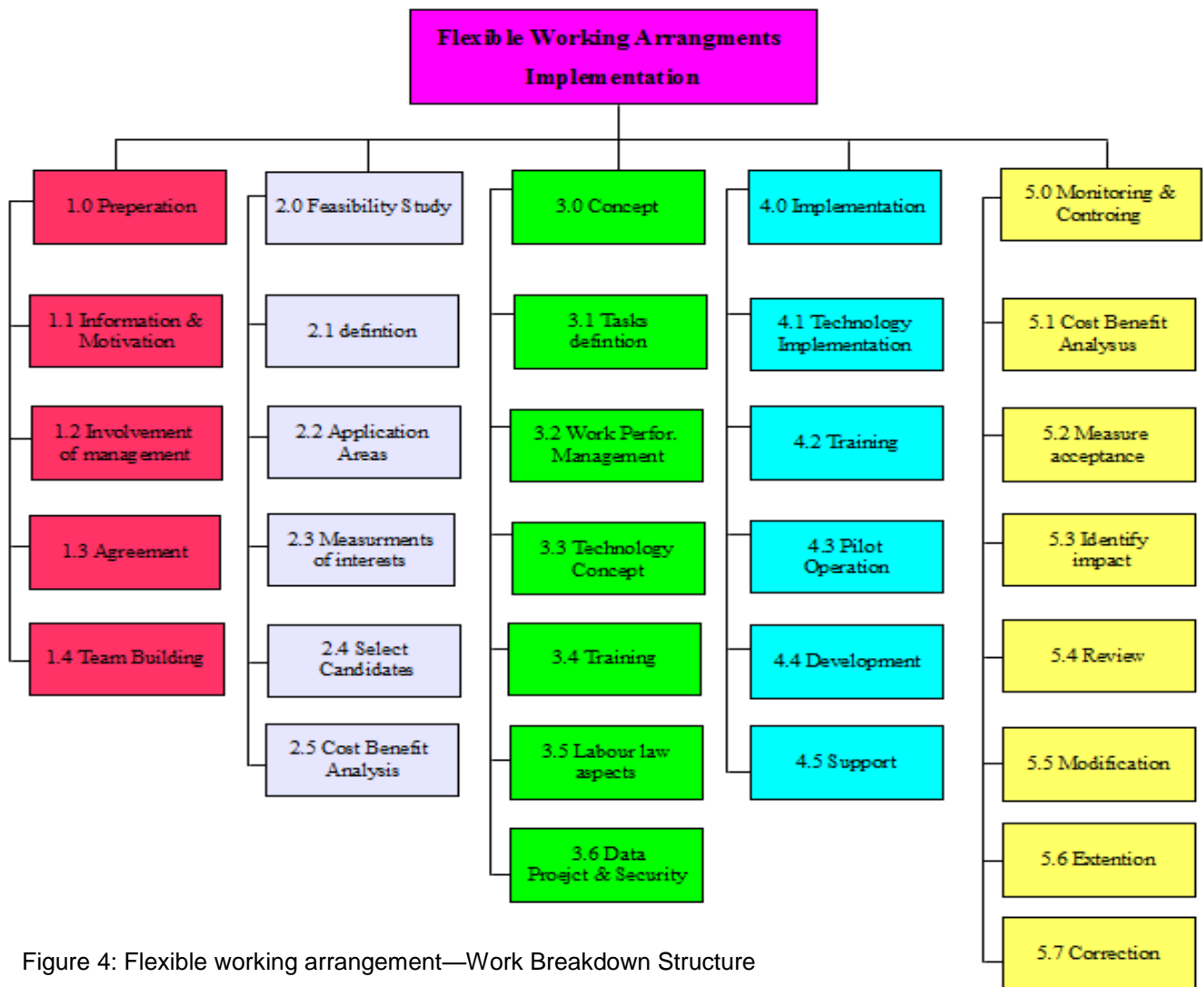


Figure 4: Flexible working arrangement—Work Breakdown Structure

Table 6. Flexible Working Introduction Schedule

Phase/Step	Duration	Tasks
Preparation	Month 1	<ul style="list-style-type: none"> • Information and motivation • Involvement of top-management, middle-management, works council • Secure agreement of all parties • Project team building
Feasibility Study	Month 2 –4	<ul style="list-style-type: none"> • Decision on and definition of flexible working model • Identification and selection of application areas for flexible working • Measurement of interest in and willingness for flexible working among employees • Selection of suitable candidates for flexible working • Cost-benefit analysis (ex-ante)
Concept	Month 5–8	<ul style="list-style-type: none"> • Definition of tasks and work procedures • Management and control of work performance • Technology concept • Training • Labor law aspects • Data protection and security
Implementation (and Pilot Operation)	Month 9–15	<ul style="list-style-type: none"> • Technology implementation • Training • Securing pilot operation • Further development of technological and organisational solutions • Support for flexible workers, managers, colleagues, and other employees
Monitoring and Controlling	Parallel	<ul style="list-style-type: none"> • Cost-benefit analysis (ex-post) • Measuring acceptance of and satisfaction with flexible working for all parties concerned • Identification of socio-psychological impact • Critical review of technological and organisational solutions • Identify any modifications and/or corrections resulting from experience in pilot phase
Extension	> Month 15	<ul style="list-style-type: none"> • Extension of flexible working in other areas and/or for further employees
Corrective Phase	> Month 16	<ul style="list-style-type: none"> • Implement necessary corrections.

Source: Selby et al., 2001.

4.5 Economical Element

For a project such as flexible working to be feasible for both the organisation and the employees, benefits should outweigh the costs; otherwise, it is unlikely that an organisation would implement a project if it were not beneficial. For an entity as large as a government, a cost-benefit analysis using appropriate tools is required to any change in working practices to support decision-making. Because traditional cost benefit analyses are limited in that they are based on quantitative measure criteria expressible in monetary terms and are derived from data provided by the organisations controlling department, qualitative measures will be overlooked. Flexible work is an arrangement not aimed at short-term profits but at long-term sustainable culture through a boost in employee

morale and flexibility. This section will measure the associated costs and benefits of implementing flexible working, taking into consideration the social nature of the project.

How to Measure Costs and Benefits

The accustomed method to assess real costs and benefits consists of a combination of traditional capital spending accounts and benefit value analyses. The latter's alternate is a non-dimensional scale for monetary quantities. The procedure is as follows in the following paragraphs and in Figure 5 (Selby et al., 2001):

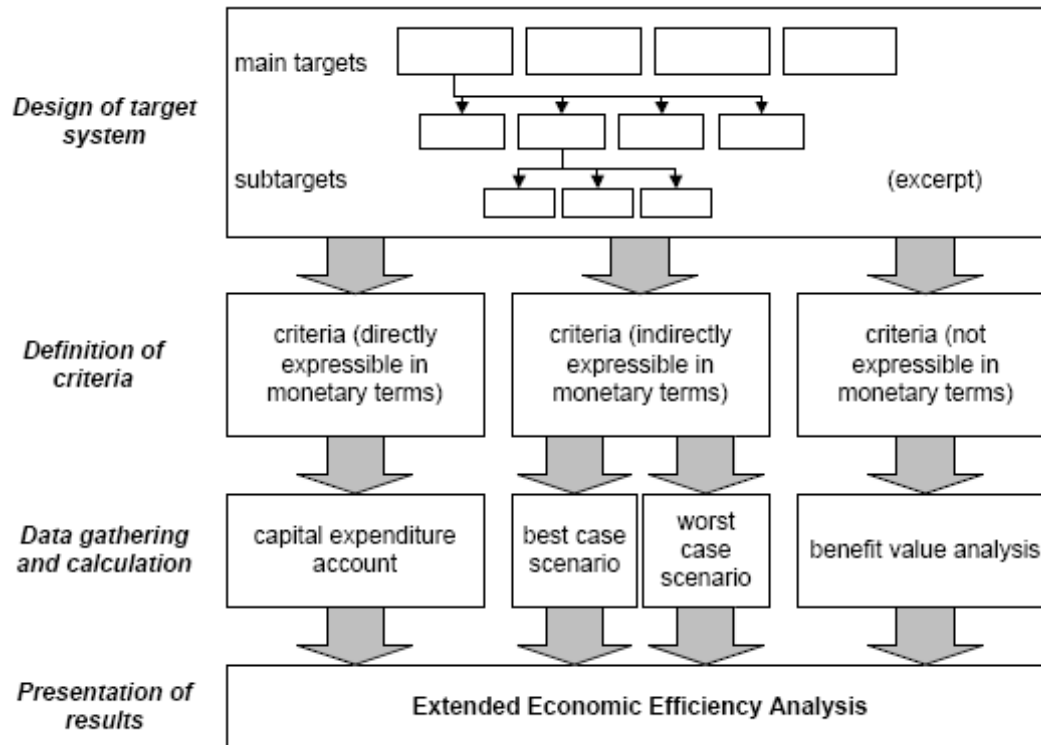


Figure 5: Cost Benefit Analysis for HR projects

Source: Gareis, K. (1998), as cited in Selby et al. (2001)

1. The system of targets plus the relevant sub-targets of the measure should be defined and the criteria suitable to measure each sub-target for the success of the introduction of flexible working. It is important to choose criteria that are self-sufficient. The key targets of the project should be defined by top management to be in line with the corporate strategy. Characterization of the lower job levels of the target system should also include middle management to meet the standards of the subordinate.
2. The top management, flexible timers, supervisors, and colleagues should be directly involved in setting up the relative importance of the targets and sub-targets.
3. Costs and benefits need to be collected in three differentiated criteria: 1) directly expressible in monetary terms such as equipment costs, operational costs and savings; 2) criteria only indirectly expressible in monetary terms such as changes in productivity and

time savings; and 3) criteria not at all expressible in monetary terms such as employee satisfaction and morale. With the latter, the persons concerned should be asked for their judgment. Questions take the form of “What effect has the measure—i.e., introducing compressed time—had on a certain variable such as employee morale?” Figures 6 and 7 illustrate an overview of the potential costs and benefits of flexible working (Selby et al., 2001), and Table 5 places them in their respected categories.

4. The criteria values for the three components are summed separately. Criteria that are directly expressible in monetary terms, operational, and spending account are calculated. Criteria that are indirectly expressible in monetary terms are mostly being calculated based on assumptions. Because of that, it is desirable to calculate best-case and worst-case scenarios to prevent counterfeit objective results. Criteria that are not at all expressible in monetary terms are given degrees of changing. For example, +5 is very satisfied, and +2 is small improvement. These values can then be added up.
5. Finally, the results of the 1) capital expenditure account and operational cost, 2) calculation of costs and benefits not directly measurable in monetary terms, and 3) of the benefit value analysis can be integrated.

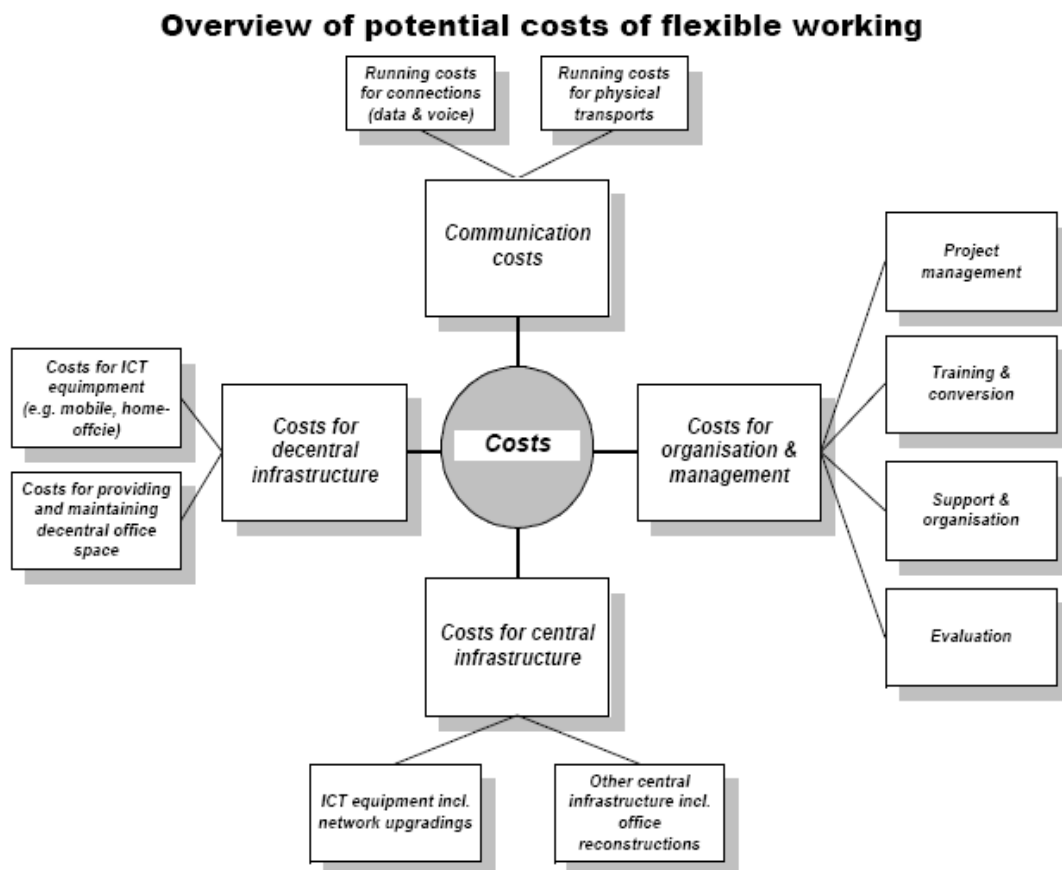


Figure 6: Overview of potential cost of flexible working

Source: Selby et al., 2001

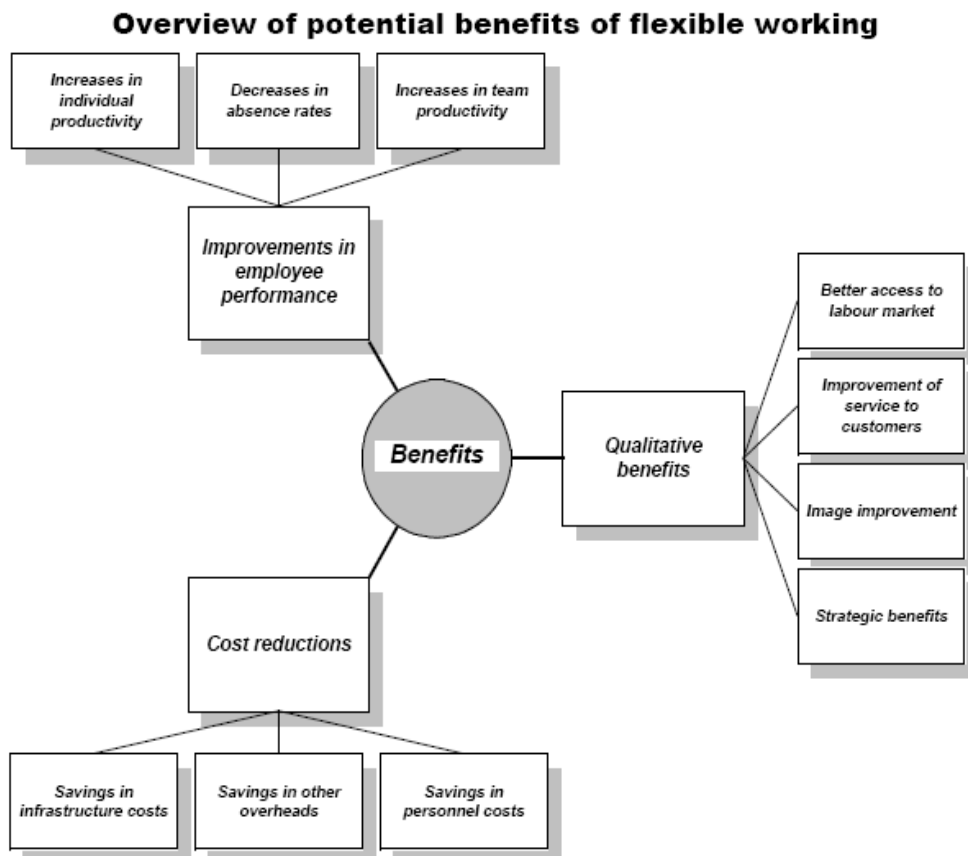


Figure 7: Overview of potential benefits of flexible working

Source: Selby et al., 2001

Table 7: Example of Flexible Working Criteria Divided into Categories

Criteria Directly Expressible in Monetary Terms	Criteria Indirectly Expressible in Monetary Terms	Criteria Not Expressible in Monetary Terms
Communication Costs	Productivity	Satisfaction
Organisation Costs	Absenteeism	Work-Life balance
Central Infrastructure	Lateness	Morale
Decentral Infrastructure Costs	Turnover	
Overhead Costs		
Personnel Costs		

Cost Benefit Analysis

Before conducting a cost benefit analysis, assumptions are needed based on the survey, interviews, and the literature:

Table 8: Assumption for Cost-Benefit Analysis

The Working Arrangement	Assumption
Teleworking	<ul style="list-style-type: none"> • 10% of the staff of the government telework • Staff work home 3 days a week • Reducing the number of desks by 3.3% (10% telework, go to office 2 days a week requires 2 desks for every 3 staff; therefore, there will be a reduction of 3.3% of the number of the total desks in the government).
Compressed Week	<ul style="list-style-type: none"> • 10% of the staff work on compressed week basis • Increase the number of working hours from 7 to 9
Flextime	<ul style="list-style-type: none"> • 20% of the staff work on flextime • Increase the number of working hours from 7 to 9
Job Sharing, Part-Time	<ul style="list-style-type: none"> • 5% of the staff work on either part-time or job sharing • The difference between compressed week and flextime is who is eligible to have the arrangement.

Notes:

- The percentage of flexible worker depended on the survey answers.
- This analysis was based on a number of staff equal 70,000, average work hour of 1,820, and an average pay of AED 75 for the hour.
- No major centralization equipment because the government already have the system.
- All numbers in AED UAE Dirham.

Table 9: Cost Benefit Analysis for the Government of Dubai

		Capital Costs	Years Depreciated	Other Setup Costs	Per Annum Costs	
Costs						
						Revenue Capital
	Infrastructure setup					
	• ICT centralization equipments					
	Teleworking					
	• Office reconstruction					700,000
	• ICT decentralization equipment	21,000,000	3			7,000,000
	• Home office	6,000,000	5			1,200,000
	• Communication costs					2,100,000
	Organisation and management costs					
	• Project Management					500,000
	• Training					3,000,000
	• Support and organisation					3,000,000
	Total setup costs	27,000,000		6,500,000		33,500,000
	Total cost	27,000,000		6,500,000	2,800,000	36,300,000
Alternative per annum costs						
Total per annum costs						17,900,000
Benefits						Per annum
	Employee performance					
	• Productivity					47,250,000
	• Absenteesim, lateness					47,250,000
	Cost reduction					
	• Infrastructure cost saving					2,520,000
	• Extended office hours					3,480,000
	▪ ICT decentralization equipment	14,000,000	3			
	Qualititative benefits					
	• Better access to labor market					
	• Improve customer service					
	• Image improvement					
	• Strategic benefits					
Total benefit per annum						112,232,000

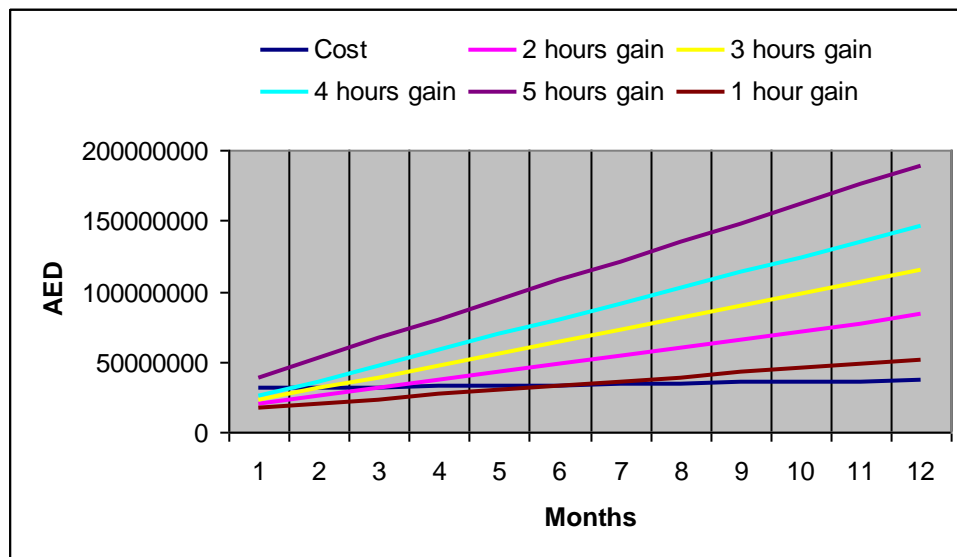


Figure 8: Cost Benefit Analysis based on different calculations

The cost benefit analysis shows that most of the cost is from the ICT decentralized equipments needed by teleworkers to perform their work such as laptops, printers, and scanners. The major direct benefit is from the savings of not buying PCs for those teleworkers. The qualitative criteria can be measured only when the implementation of flexible working start. The employee's performance was calculated on the basis that on average, every employee earns an additional 3 hours every month due to the reduction in absenteeism, lateness, and improving their productivity. Figure 9 shows the difference in break-even point and the payback from about 5 months for an earned of one hour, less than 3 months for the 2 hours, less than 2 months for 3 hours and about a month for 4 hours. The analysis shows that a very strong case can be made for flexible working on an enduring base and that payback on the total spending would take less than 6 months in worst cases. Therefore, initially, the project is economically feasible. Further detailed cost-benefit analysis is needed in the business plan.

4.6 Risk Assessment

As with every project, flexible working has inherent risk. The risks presented in this paper are based on experience gained from the author observation, from conducting the interviews, and the survey plus the literature. Risk assessment is undertaken in the subsequent two phases: 1) risk identification, and 2) risk measurement. In the feasibility stage, risk assessment is only a means to be used to have a basic understanding about the project risk.

Risks Identification

During the planning of the project, it is not possible to identify straightforwardly the risks in the different stages or monitor how they are interrelated. Thus, at the feasibility stage of the project, a base case identification model is developed to predict the risks associated to flexible working. The risks associated with flexible working are poor planning, lack of support, an ineffective top management sponsor, slow management review/decision cycle, too much formality (bureaucracy),

tasks taking more time than expected, project running out of money, project having staffing problems, unrealistic deadlines, end users dissatisfied with the project, end users who do not provide support for the project, and unstable software design.

Risk Quantification

The risks that have been identified in the previous section will be measured and quantified given a probability of occurrence and their impact to the project. A ranking will result by dividing the impact by the probability that shows the least important risks and the most important ones. Table 10 shows the procedure.

Table 10: Risk Assessment

Risk	Impact	Probability	I*P	Ranking
Poor Planning	5	2	10	2
Lack Of Support from Top Management	5	1	5	3
Slow Management Review/Decision Cycle	3	4	12	1
Too Much Formality	3	4	12	1
Tasks Taking More than Expect	1	4	4	4
Project Run Out of Money	4	1	4	4
Project Having Staff Problem	3	1	3	5
Unrealistic Deadline	1	4	4	4
End Users Unsatisfied by the Project	4	1	4	4
End Users Do Not Provide Support for the Project	5	1	5	3
Unstable Software Design	1	2	2	6

Legend: I= Impact; P=Probability

The number from 1 to 5 shows from least to most.

The above results have shown that the most important risks are organisationally based. The excessive of paperwork, formalities, bureaucracy, and the slow management review/decision cycle top the list of the most significant threats that can affect the implementation of flexible working in the government of Dubai. Next comes poor planning, lack of support from top management, and end users not supporting the project. Other less-important risks are tasks taking longer than expected, project running out of money, staffing problems and end users who are unsatisfied by the project or do not provide the support needed. Overall, with the exception of the organisational risks mentioned earlier, other risks are insignificant and their likelihood of occurrence is minimal. Risk management and mitigation is necessary in the conceptual phase. A profound risk analysis will be needed in the following stages of implementing flexible working and risk mitigation. In general, the key risks mentioned can delay the execution of flexible working, but a failure of the project is unlikely, especially that the government is committed to implementing such innovative working patterns.

5.0 Conclusion

The present study used qualitative and quantitative approaches to examine the feasibility of flexible working, validating the technical, organisational/cultural, legal/political, project/schedule, and economical elements of the feasibility. The results indicate that the project is feasible in terms of all the elements investigated. The government is ready in terms of infrastructure to support flexible working and have the technological requirements from employee's record-keeping software and skilled staff to run advanced communication channels such as the Intranet, e-mails, and SMSs. Even though there is too much formality and change in the organisational culture take a long time, the enormous support for the project from both the management and the staff will make its application much easier. There are no legal restrictions in implementing flexible working; however, future formal laws should be issued to promote and boost their execution. Introducing flexible working will take about 15 months from the preparation phase, extensive feasibility study phase, conceptual phase, implementation and pilot operation phase, and monitoring and controlling phase. The project is economically feasible and will take less than 6 months to payback in a worst-case scenario.

Because the outcomes of this study are based on a sample of only five government departments, it can be considered a basic exploratory case study. The small number of the people surveyed in each department also limits the study. The author did not have access to all employees working in those departments. Some departments limited the access to certain sections while others did not allow the distribution of the survey questionnaires. It is likely that some of the results in the organisational/cultural element will be slightly different. In addition, because it is difficult to quantify the intangible cost and benefits of flexible working, the result might not be accurate even though it can give a general indication of flexible working feasibility.

Further, the findings here offer new directions for flexible working research, taking into consideration five different elements of the feasibility that were not used before, which will expand the possibilities in covering aspects of issues surrounding flexible working. In the intervening years, it has become noticeable that more interest for flexible working has surfaced in the region and particularly in Dubai. Therefore, understanding gained in this feasibility study is relevant to a range of participants and organisations. It has particular value for organisations where skilled personnel are in short supply as well as those seeking to utilize available Human Resource talents to the advantage of all concerned. Further research would be of a great value, focusing on creating different criteria elements for the cost-benefit analysis and how to measure it for flexible working.

Chapter6 Appendices

To "Whom It May Concern" letter



12 March 2009

To whom it may concern

This is to certify that Mr Salem Mohammad Al Suwaidi (ID: 70073) is a registered full-time student on the MSc – Project Management programme in The British University in Dubai, from October 2007.

Mr Al Suwaidi is currently working on a dissertation as part of our programme requirement. His research topic is **"Feasibility Study of implementing Flexible Working Arrangements in the Government of Dubai"**.

We kindly request you to provide him with any possible support he requires in gathering information for his dissertation.

This letter is issued on Mr Al Suwaidi's request.

Yours sincerely,


Nandini Uchil
Head of Student Administration



Interview questions:

The purpose of this study is to investigate the feasibility of flexible working arrangements

الهدف من هذه الدراسة هو التحقق من جدوى تطبيق نظام العمل المرن في حكومة دبي

The researcher assures you that no individuals will be identified from their responses and there are no requests for confidential information included in the questionnaire. The results of the analysis will be strictly used by the researchers for study purposes only. Quotes might be used when applicable !

يؤكد لكم الباحث بأنه لن يتم التعريف أو الإشارة إلى الأفراد من خلال الإجابات المقدمة ولن يكون هناك أية إجابات تستوجب السرية يتضمنها الاستبيان. سيتم استخدام نتائج التحليل من قبل الباحثين لأغراض الدراسة فقط. الاقتباسات ستستخدم في المكان المناسب

The feasibility will consist of several elements:

- Technical elements
- Political/legal elements
- Cultural/operational elements
- Project/schedule elements
- Economical elements

We refer to (check the paper) when we say FWA

تنقسم دراسة الجدوى إلى عدة عناصر:

- الجانب السياسي والقانوني
- الجانب التقني
- الجانب الثقافي والعمليات
- جانب المشاريع والجدول
- الجانب الاقتصادي

Political/Legal

- Based on what has been said earlier, what is..... view on flexible working arrangements?
- Does currently have any flexible working arrangements as previously outlined? If yes, please give me an outline of what they are and for how long have you had them implemented? If no, why it haven't been applied?
- To what extent would you say your HR policies and procedures congruent with flexible working arrangements? Briefly explain the ways in which they complement each other.
- Given the current global economic recession which is facing industries, in what ways will FWA help to promote the longevity and sustainability of your organization?
- Will your organization be seeking to incorporate FWA as a part of its strategic growth plan in the future? If so, what aspects of FWA will you seek to incorporate in that plan?

- وفقا لما تم الحديث عنه سابقا، كيف ينظر إلى نظم العمل المرنة؟
- هل لـ أية نظم عمل مرنة مطبقة؟ إذا كان الجواب نعم، هل من الممكن أن تعطينا خلفية عن هذه النظم وكيف يعمل كل نظام وعلى من يطبق ومنذ متى تم تطبيقها؟ إذا كان الجواب لا، لماذا لم يتم تطبيقها؟ (كل نظام على حده)
- إلى أي مدى تتسجم سياسة الموارد البشرية وإجراءاتها في مع نظم العمل المرنة؟ هل من الممكن أن تشرح لي هذا الاتساق؟ كيف يتم التزاوج بين قانون الموارد البشرية العسكري والمدني ونظم العمل المرنة؟ هل يسمح لكم القانون بهذا؟
- نظرا لهذه الأزمة المالية الحالية، كيف يمكن لنظم العمل المرنة أن تدعم طول عمر واستدامة المؤسسة؟
- هل تقوم بإدراج نظم العمل المرنة في خططها الاستراتيجية المستقبلية، إذا كان الأمر كذلك، ما هي الجوانب في نظم العمل المرنة التي يسعى إلى إدراجها في هذه الخطة؟

Cultural/Operational

Employee feedback, their ability to make suggestions, and informal agreements between them and their supervisors are all a part of an organization's culture and all impact on the success of FWA. How do these or any other aspects of your organization's culture support the implementation of FWA.

We can appreciate the challenges that may arise if one were to implement such arrangements in an organization. What are they? What is/would be HR strategy for addressing such challenges?

FWA have the ability to positively influence employee satisfaction, productivity, reduce absenteeism and turnover and improve retention. What has been experience in this regard. Do you have any studies about that?

- التغذية الراجعة، فتح المجال للاقتراحات، والتفاهات غير الرسمية بين المسئول والموظف كلها تعبر عن ثقافة المؤسسة، كيف يمكن لهذه الجوانب وغيرها دعم تطبيق نظم العمل المرنة؟
- نحن نقدر التحديات التي قد تنشأ من تطبيق هذه النظم، ما هي هذه التحديات وما هي خطة الموارد البشرية للتعامل مع هذه التحديات؟
- لنظم العمل المرنة قابلية إيجابية على التأثير على مستوى الرضا الوظيفي، الإنتاجية، خفض معدلات الغياب، دوران العمل

ورفع معدلات البقاء في العمل، كيف هي تجربة في ذلك؟ هل لديكم أية دراسات في هذا الجانب؟

Project/Schedule

- Initially when your organization implemented FWA, what were some of the constraints such as time, money, or any other resources faced?
- What are the most important phases in implementing FWA?

بداية، عندما تم تطبيق نظم العمل المرنة، ما هي المعوقات التي واجهت من ناحية الميزانية، والوقت أو أي موارد أخرى؟

ما هي أهم مراحل تطبيق هذا النظام؟

Tehchnical

- How does currently track and record employee working hours?
- Describe your internal communication process and systems
- What systems do you use to communicate vital information to employees who may be offsite and what systems have been made available to them to communicate with the organization whenever they are offsite.

كيف يقوم متابعة حضور و غياب الموظفين؟

هل من الممكن أن تشرح لي بطريقة مبسطة أسس ونظم الاتصال الداخلي في؟

ما هي النظم المستخدمة للاتصال مع الموظفين الذين هم خارج مقر العمل؟

Economical

- What were some of the costs and cost drivers identified for the implementation phase?
Trainning, tracking employees !
- As with any project, there has to be an identifiable payback period that the project should take to recoup the initial cost outlay. Having implemented FWA at, how has its feasibility been substantiated in terms of its ability to function appropriately and yield the required results and within what time period?
- What is the economical feasibility when implementing FWA? Don't you think that there is any?

ما هي التكاليف المصاحبة لتطبيق نظم العمل المرنة؟ مثال التدريب، نظام المتابعة !

مثل أي مشروع، يجب أن تحدد فترة الاسترداد payback لتعويض التكلفة المبدئية. بما أنه تم تطبيق هذه النظم في كيف كانت حدود الاستدامة في قدرة هذه النظم في العمل بشكل مناسب ويحقق النتائج المطلوبة، وكم كانت المدة لتحقيق ذلك؟

ما هي الجدوى الاقتصادية لهذا الموضوع؟ هل تعتقد بأن هنالك جدوى لهذا الموضوع؟

Any documents we can share or studies you have conducted which you can share?

هل هناك أي مستندات رسمية يمكنني الاستفادة منها؟ أو دراسات في هذا المجال؟

Survey:

QUESTIONNAIRE	استبيان
<p>Dear Sir/ Madam,</p> <p>This questionnaire gives you the opportunity to express your views on a wide range of issues related to the work conditions. Please note that there is no right or wrong answer.</p> <p>The questionnaire will be used to collect the primary data needed for a research study. Therefore, we seek your assistance to be as open, fair, honest as possible as you can in your responses.</p> <p>The researcher assure you that no individuals will be identified from their responses and there are no requests for confidential information included in the questionnaire. The results of the analysis will be strictly used by the researchers for study purposes only.</p> <p>The questionnaire compris three parts:</p> <p style="text-align: center;">General information Job Flexible Working arrangements</p> <p>Thank you</p> <p>Researcher</p>	<p>سيدي/سيدتي</p> <p>إن هذا الاستبيان يعطيك الفرصة لعرض وجهة نظرك لمجموعة من المواضيع تتعلق بأجواء العمل. الرجاء ملاحظة أنه ليس هناك إجابة خاطئة أو صحيحة.</p> <p>سيتم استخدام هذا الاستبيان لجمع البيانات الأولية لعمل دراسة بحثية. عليه نطلب مساعدتكم في الإجابة على الأسئلة بكل وضوح وحرية وصدق وأمانة قدر المستطاع.</p> <p>يؤكد لكم الباحث بأنه لن يتم التعريف أو الإشارة إلى الأفراد من خلال الإجابات المقدمة ولن يكون هناك أية إجابات تستوجب السرية يتضمنها الاستبيان. سيتم استخدام نتائج التحليل من قبل الباحثين لأغراض الدراسة فقط.</p> <p>يتكون الاستبيان من ثلاثة أقسام:</p> <p style="text-align: center;">معلومات عامة الوظيفة نظام العمل المرن</p> <p>مع الشكر</p> <p>الباحث</p>

PART ONE: GENERAL INFORMATION Please tick one box for each question:	الجزء الأول : معلومات عامة الرجاء وضع علامة لكل سؤال:
<ul style="list-style-type: none"> Sex <ul style="list-style-type: none"> Male () () Female () () 	أ - الجنس: <ul style="list-style-type: none"> ذكر () أنثى ()
<ul style="list-style-type: none"> Marital Status: <ul style="list-style-type: none"> Married () () Unmarried () () 	ب- الحالة الاجتماعية <ul style="list-style-type: none"> متزوج/متزوجة () غير متزوج/غير متزوجة ()
<ul style="list-style-type: none"> Education: <ul style="list-style-type: none"> Less than high school () () High school () () Diploma () () Higher Diploma () () Bachelor degree () () Masters or above () () 	ج- المرحلة التعليمية: <ul style="list-style-type: none"> أقل من الشهادة الثانوية () الشهادة الثانوية () دبلوم () دبلوم عالي () بكالوريوس () الماجستير أو أعلى ()
<ul style="list-style-type: none"> Age: <ul style="list-style-type: none"> Less than 25 () () 25 - 35 () () 36 - 46 () () 47 - 57 () () 58 or above () () 	د- العمر <ul style="list-style-type: none"> أقل من 25 عاماً () 25 - 35 () 36 - 46 () 47 - 57 () 58 وأكثر ()
<ul style="list-style-type: none"> No. of years worked in current organization: <ul style="list-style-type: none"> One year or less () () 2 - 7 () () 8 - 13 () () 14 - 19 () () 20 years or above () () 	هـ - عدد السنوات التي قضيتها في دائرتك أو مؤسستك الحالية <ul style="list-style-type: none"> سنة أو أقل () 2 - 7 () 8 - 13 () 14 - 19 () 20 سنة أو أكثر ()
<ul style="list-style-type: none"> No. of years worked in the position or job: <ul style="list-style-type: none"> One year or less () () 2 - 7 () () 8 - 13 () () 14 - 19 () () 20 years or above () () 	و - عدد سنوات الخدمة في نفس الوظيفة <ul style="list-style-type: none"> سنة أو أقل () 2 - 7 () 8 - 13 () 14 - 19 () 20 سنة أو أكثر ()
<ul style="list-style-type: none"> Nationality: <ul style="list-style-type: none"> UAE National () () Non UAE National () () 	ح - الجنسية <ul style="list-style-type: none"> (1) مواطني دولة الإمارات العربية المتحدة () (2) غير مواطني دولة الإمارات العربية المتحدة ()

PART ONE: GENERAL JOB INFORMATION Please tick for each question:	الجزء الثاني : معلومات وظيفية عامة الرجاء وضع علامة لكل سؤال:	
• Job Status: <ul style="list-style-type: none"> • Managerial track <ul style="list-style-type: none"> (a) senior, middle management () () (b) lower, administration, secretary () () (c) customer service () () • Professional track <ul style="list-style-type: none"> (d) Professional () () (e) Tehnical () () (f) cleaner, manual job () () • Job title 	ز – المستوى الوظيفي: <ul style="list-style-type: none"> ■ مسار إداري <ul style="list-style-type: none"> ○ (أ) إدارة عليا، إدارة وسطى () () ○ (ب) إدارة دنيا، إداري () () ○ سكرتارية () () ○ (ج) خدمة العملاء ■ مسار فني <ul style="list-style-type: none"> ○ (د) تخصصية (مهندس، طبيب) () () ○ (هـ) موظف فني () () ○ (و) مراسل، عامل يدوي () () ■ المسمى الوظيفي 	
• Does the current work pattern suit you? <ul style="list-style-type: none"> • Yes () () • No () () 	ب- هل تناسبك طبيعة ساعات الدوام الرسمية الحالية؟ <ul style="list-style-type: none"> (1) نعم (2) لا 	
• If you answered No, why? (you can choose more than one answer) <ul style="list-style-type: none"> • Take care of children [] [] • education [] [] • Taking care of ill child or parent [] [] • Family issues [] [] • Long work hours [] [] • Hobbies [] [] • Traffic [] [] • Other [] [] State 	ج - إذا كانت إجابتك بلا، لماذا؟ (يمكنك اختيار أكثر من إجابة) <ul style="list-style-type: none"> (1) للأبناء (2) الدراسة (3) الحالة الصحية لأحد أفراد العائلة (4) مشاكل أسرية (5) طول ساعات الدوام (6) ممارسة الهوايات (7) الازدحام (8) أخرى، حدد 	
• Does your job nature require you to be present the whole working day <ul style="list-style-type: none"> • Yes () () • No () () 	د- هل تلزمك طبيعة العمل أن تكون متواجدا طوال الدوام الرسمي؟ <ul style="list-style-type: none"> (1) نعم (2) لا 	
• Does your job nature require you to be present at all working week? <ul style="list-style-type: none"> • Yes () () • No () () 	د- هل تلزمك طبيعة العمل أن تكون متواجدا جميع أيام الأسبوع؟ <ul style="list-style-type: none"> (1) نعم (2) لا 	
Do you know what are “flexible work arrangements” ? <ul style="list-style-type: none"> • Yes () () • No () () 	و – هل تعلم ما هي أنظمة العمل المرنة؟ <ul style="list-style-type: none"> (1) نعم (2) لا 	
If your answer was No, please read the report with this survey	إذا كانت إجابتك ب لا،الرجاء قراءة التعريف المرفق في الصفحة التالية	

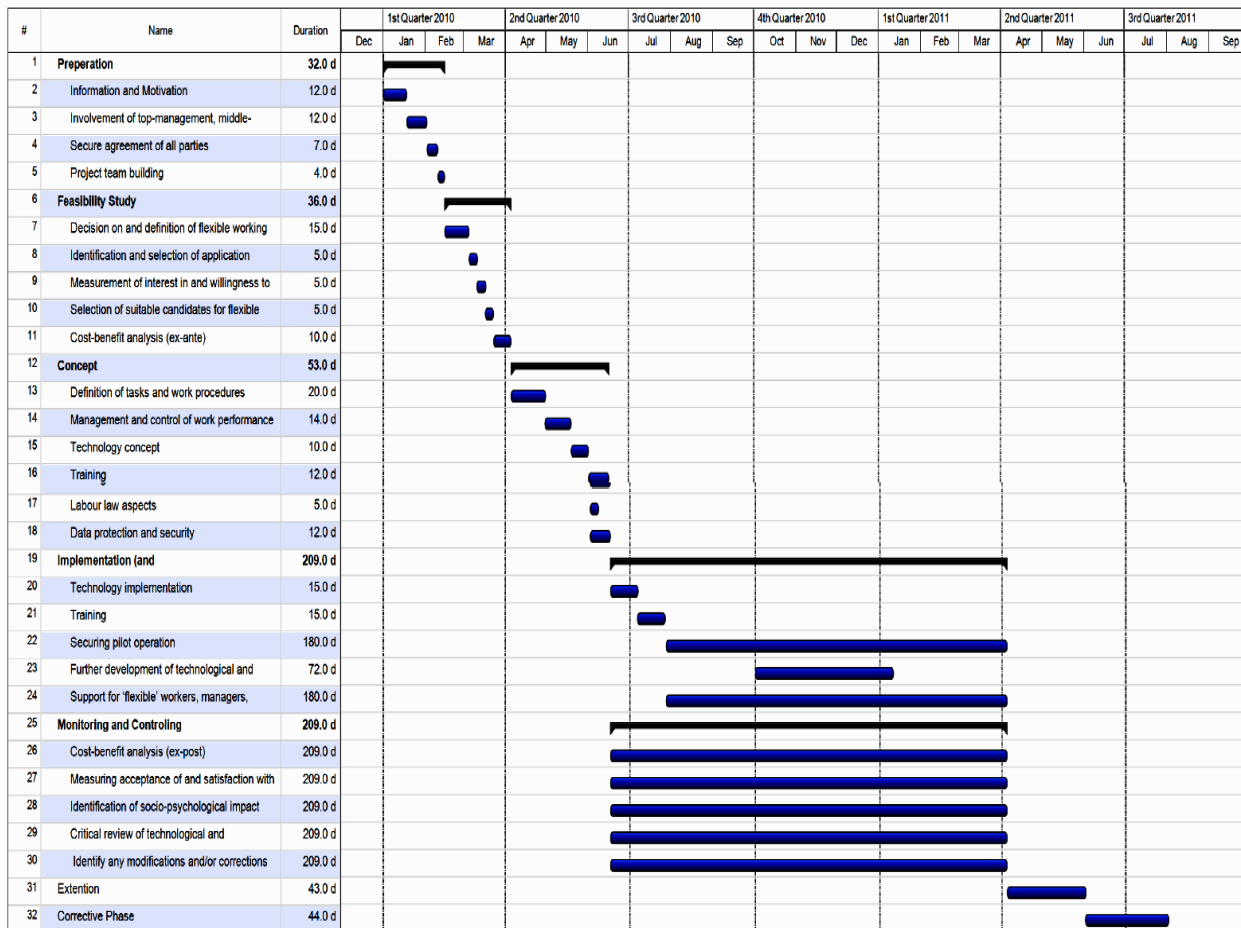
FLEXIBLE WORKING ARRANGEMENTS	نظام العمل المرن
<p>The term flexible working refers to working practices, mutually agreed between employee and employer, which cover working hours, locations or patterns of work. Such arrangements have to comply with the law on working time, including hours, rest breaks and the working week.</p> <p>Flexible working arrangements covered in this research are:</p> <ul style="list-style-type: none"> • Flextime: Flexible starting and quitting times per day, but working a standard number of hours per week or month, on a regular basis (ex: working from 6:30 to 1:30 instead of 7:30 to 2:30) • Compressed work week: working full-time in less than a five-day work week. (working four days a week for example. • Job sharing: Two people sharing one full-time position including the sharing of paid benefits. • Part-time: Working less than half-time on a regular basis. • Telecommuting: Working outside the office, usually at home, and communicating with the office by telephone, facsimile, computer, or a combination thereof. • Annual Working: Calculating working hours in an annual bases instead of monthly bases • Shift working • Joint Appointment 	<p>نظام العمل المرن هو نظام وظيفي تعاقدى بين الموظف ورب العمل ويغطي ساعات العمل، بالإضافة إلى مكان ونسق العمل، هذه الترتيبات يجب أن تمثل مع القانون في ساعات العمل وفسحة الاستراحة وأسبوع العمل.</p> <p>نظم العمل المرنة المغطاة في هذه البحث هي:</p> <ul style="list-style-type: none"> • الساعات المرنة: اختيار وقت بداية الدوام ونهايته مع الحفاظ على عدد الساعات الدوام المتفق عليها. (مثال الدوام من الساعة 6:30 وحتى 1:30 بدلا من 7:30 وحتى 2:30) • الأسبوع المضغوط: العمل بنظام الدوام الكلي بأقل من 5 أيام في الأسبوع، الدوام 4 أيام في الأسبوع مثلا. • المشاركة الوظيفية: عادة موظفان يتشاركان في وظيفة واحدة ويتشاركون في الإمتيازات. • الدوام الجزئي: الدوام بعدد ساعات أقل من الدوام الرسمي • العمل من المنزل: العمل خارج مقر العمل، عادة من المنزل والتواصل مع المكتب بواسطة بالهاتف أو الإنترنت. • الساعات السنوية: اعتماد نظام ساعات العمل سنويا بدلا من شهريا • نظام المناوبات (الورديات) • التعيين من إدارتين

PART THREE: SPECIFIC INFORMATION Please tick one box for each question:	الجزء الثالث: معلومات تخصصية الرجاء وضع علامة لكل سؤال:	
<ul style="list-style-type: none"> Does your organization apply Flexible working? <ul style="list-style-type: none"> Yes () No () 	أ هل تستخدم مؤسستك نظام العمل المرن؟ <div style="display: flex; justify-content: space-between;"> (1) نعم () </div> <div style="display: flex; justify-content: space-between;"> (2) لا () </div>	
<ul style="list-style-type: none"> If your answer was yes, what are the work patterns applied? <ul style="list-style-type: none"> (you can choose more than one answer) Flexible Work Hours [] Compressed Week [] Shifts [] Telecommuting [] Part-time [] Annual Work Hours [] Job sharing [] 	ب- إذا كان جوابك نعم، ما هي الأنظمة المطبقة؟ (يمكنك اختيار أكثر من إجابة) <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> (1) الساعات المرنة (2) الأسبوع المضغوط (3) العمل بنظام المناوبات (4) العمل من المنزل (5) العمل الجزئي (6) الساعات السنوية (7) المشاركة الوظيفية </div> <div style="width: 45%;"> [] [] [] [] [] [] [] [] </div> </div>	
<ul style="list-style-type: none"> Do you support applying it in ur work if it wasn't applied yet? <ul style="list-style-type: none"> Yes () No () 	ج- هل تؤيد تطبيق هذا النظام إذا لم يكن مطبقا حاليا؟ <div style="display: flex; justify-content: space-between;"> (1) نعم () </div> <div style="display: flex; justify-content: space-between;"> (2) لا () </div>	
<ul style="list-style-type: none"> What work patter suit your work ? <ul style="list-style-type: none"> (you can choose more than one answer) Flexible Work Hours [] Compressed Week [] Shifts [] Telecommuting [] Part-time [] Annual Work Hours [] Job sharing [] None [] Others [] State 	د- ما هو النظام المرن المناسب لطبيعة عملك؟ <ul style="list-style-type: none"> (يمكنك اختيار أكثر من إجابة) (1) الساعات المرنة (2) الأسبوع المضغوط (3) العمل بنظام المناوبات (4) العمل من المنزل (5) العمل الجزئي (6) الساعات السنوية (7) المشاركة الوظيفية (8) لا يوجد (9) أخرى حدد <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> [] [] [] [] [] [] [] [] [] [] </div> <div style="width: 45%;"> [] [] [] [] [] [] [] [] [] [] </div> </div>	
<ul style="list-style-type: none"> If your answer was No, do you mind if others benefited from it? <ul style="list-style-type: none"> Yes () No () 	و – إذا كانت إجابتك لا، هل تمنع في أن يتمتع غيرك بهذا النظام؟ <div style="display: flex; justify-content: space-between;"> () () </div> <div style="display: flex; justify-content: space-between;"> () () </div> <div style="display: flex; justify-content: space-between;"> نعم () </div> <div style="display: flex; justify-content: space-between;"> لا () </div>	
<ul style="list-style-type: none"> Do you think the senior manger would support this system? <ul style="list-style-type: none"> Yes () No () 	ز – هل في رأيك ستدعم الإدارة العليا هذا النظام؟ <div style="display: flex; justify-content: space-between;"> () () </div> <div style="display: flex; justify-content: space-between;"> () () </div> <div style="display: flex; justify-content: space-between;"> نعم () </div> <div style="display: flex; justify-content: space-between;"> لا () </div>	
<ul style="list-style-type: none"> Do you think your immediate manager will accept your request? <ul style="list-style-type: none"> Yes () No () 	ح – هل تعتقد بأن رئيسك المباشر سيسمح لك باستخدام النظام إذا تناسب مع طبيعة عملك؟ <div style="display: flex; justify-content: space-between;"> () () </div> <div style="display: flex; justify-content: space-between;"> () () </div> <div style="display: flex; justify-content: space-between;"> نعم () </div> <div style="display: flex; justify-content: space-between;"> لا () </div>	

<ul style="list-style-type: none"> • What will you benefit from Flexible working arrangement (you can choose more than one answer) • Take care of children • education • Taking care of ill child or parent • Hobbies • Others State 	<div> <div>ج- بما ذا سيفيدك النظام المرن (يمكنك اختيار أكثر من إجابة)</div> <div> <div>التفرغ للأبناء</div> <div>التفرغ للدراسة</div> <div>الحالة الصحية لأحد أفراد العائلة</div> <div>التفرغ للهوايات</div> <div>أخرى،</div> <div>حدد</div> </div> </div>
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Gantt chart:

gantt chart : Gantt Chart : Flexible Workig Arrangement



 Phase
  Deadline
  Link

 Task
  Milestone

Chapter7 References

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