The first topic: space planning The second section: standards for designing administrative spaces Section Three: Construction standards for industrial buildings. A recently con ducted survey of 200 corporate decision-makers for Productive Workplaces lists four major ways in which interior design impacts office productivity and efficiency They are as follows: access o comfort o flexibility o privacy od systems, in which various individuals occupy space on the other hand may require an even larger scale like one quarter full size The planner should include as much relevant information on the drawings as possible including door locations and swings, window and partition locations, heights of ceilings, windows and door schedules, electrical outlets, and proposed and existing finishes Modern technology is basically utilitarian, so the question for corporations and other clients is how to integrate the needs of technology with those of the organization. Recent studies show percent of total that the average Fortune 500 company has approximately 25 assets tied up in real estate It is not surprising therefore, that corporations are constantly looking for ways to reduce real estate costs by utilizing their existing space to the maximum While the effective use of space is essential, space flexibility and adaptability to change is becoming increasingly more important than space efficiency. The global competitive marketplace coupled with rapidly rising real estate costs is placing increasing pressure on many American and European firms to reorganize, downsize, and maximize space and, in the process, formulate new space standards. Unfortunately, however, one often finds that rapid project time frames coupled with tight budgets discourage future-oriented planning Nevertheless, rapid technological developments over the last few decades are imposing new challenges to our traditional perception of how we view today's office environment. Other influencing factors include identifying future needs, defining working relationships, including traffic flow of personnel, visitors, and goods; grouping of various systems (plumbing, HVAC, electrical); need for natural light and ventilation; identifying public and private zones and functions; and other issues such as security, etc. This includes the incorporation of sufficient, Data Analysis: Programmatic Concepts Upon substantial completion of the data gathering process, one proceeds with a comprehensive analysis of the information collected. This has been further facilitated by the fact that open spaces offer greater flexibility and are generally easier to handle than cellular or partitioned ones During the earlier programming phase, data was collected, analyzed, interpreted, and finally executed in the form of a written project brief that was approved by the client. While the schematic space plan is being developed, the design team simultaneously works on preliminary design concepts for interior architectural elements, finishes and fur plans lack detailed information regarding the activities and space layout within the organization. The volatility of the global marketplace in the 21st century, with its eternal corporate mergers and acquisitions, makes even the most meticulous planning and forecasting problematic in attempting to predict future needs. Functional elements are located within the space in a format consistent with the program's goals and objectives while retaining the functions planners with reliable data on building performance and essential insight on positive and negative attributes of the building Ideally, the space planner is an integral and contributing component of the design team from the outset of the design process. In either case a comprehensive assessment of the space's prevalent features is necessary both for traits worth preserving (e.g. good view, plentiful daylight, high ceilings and windows), and traits that need addressing (e.g. poor acoustics, small cellular rooms embedded

services, ducts and cabling, lack of natural ventilation). A space planner's early input could greatly enhance the final design by achieving a more satisfactory work setting solution. space, but should also address important issues like the impact of change and evolution on the organization's futuristic needs resulting from increased mobile computing, wireless data networks, the demise of awkward desktop PCs and the electronic meeting place. Despite variations in techniques and terminology, and despite the fundamental impact that new technologies have had on our perception of the modern workplace and how we communicate and process information, the design methodology process has remained intact, consisting essentially of seven sequential steps. A designed space ultimately fails its objective if it is responsive solely to the needs of today while ignoring those of tomorrow