

project managers are paying serious, Nowadays with the advent of global and highly competitive markets This vision has brought success and the attention to providing valuable products to customers with the lowest fees .in order to maintain their authority in the field, acturers to provide quality goods competition has led the manuf Since consumers are also always looking for quality and affordable goods and services and products are provided in continuous improvement and, uality of services and products in addition to improving the q, hot competition fields and is, how to use the methods to balance between the cost and the applications of a product play a fundamental role ]. 1[one of the most important factors of economic development Therefore producers of goods and services trying to, The value of a product is different from different perspectives ways to make additional costs for They are following. obtain customer approval in return for price are presented the goal is to create, Overall. cost methods rather than to have previous methods–removal and replacement of low ]. 1.[components Figure 2 – Algorithm Method Delphi technique ueTechniqNominal Group–4Technique. 4.2 is used because people are not allowed to have verbal contact with each other and find the real"nominal"The word rs face each other on a table and problemsGroup membe–:meanings of the word group and it includes five stages or issues solved together and written decision to each member is given and they should remain silent and Each member to turn an idea to the group when there is the–.without consulting each otherindependent Opinions recorded in the group–.the debate will not begin, and not until all ideas are proposed, ortunityopp Each member independently and secretly grades–.discussion are to be put in concepts to evaluate in the next step ]1. [g would be the highest total score givenGroup decision makin–.beliefs per technique or a controversial ideas and questionsa comparative Scam–5echniqueT.5.2 of initial verbs and ideas that is used in detection and by application and it is verymper is a word composedSca Rather than the person to?What can be replaced:Substitute:This tool is in short.ationseffective in practical situ What:Combine.Etc?What elsewhere?processWhat other?What other material?Rather than what things?whom What else is?adapt:Adapt?Combine the concepts?e ideasDo we combine thes?Mix of units?can be combined ?More time?imizeMax:Magnify?s it offer the same news lastDoe?What other ideas do you suggest?like this the, to change:Modify?Duplicate?To create?Multiply?More value?Thicker?Longer?Stronger?Repeated more Put to other?body and other changes, shape, fragrance, sound, movement, colour, Significant change?new rotation Access?whereApplications else?Other applications?New ways for practical use?other applicationsto have:uses ?Smaller,)low(What differentiation?What do we remove?Shrink?Remove:Eliminate?by other people to change the:Rearrange?Treat small?Simplify?ryptedUnenc?Lighter?Shorter?To lower?Condensation ]1[?Cause and effect move to?Other sequences?Other maps?Other patterns?Components to move?composition Finally the idea of creation Start Problem presented to the group Each member's ideas are recorded Comments sent to the central station Ideas collected and amplified and provided other members Ideas and actions of others New? Yes No920 H. Tohidi / Procedia Computer Science 3 (2011) 917–924 Hamid Tohidi/ Procedia Computer Science 00 (2010) 000–000 Figure 3 – Component technique Scamper 2.6. Technique 6 – FAST Technique FAST technique is a systematic guide map for the task. This diagram of a method for organized search and collection of processes provides a method and step functions and tools needed to achieve. FAST charts

for each set of tasks that are related to each other and work is in fact very broad range of its application are briefly introduced and presented in graphics and drawing functions in the FAST diagram. [1] It includes the FAST technique that could yield a larger system to consider. model nature–7Technique..72 this technique,In fact.Selection of a powerful form of flows of items on laws of nature with choice of images ]1. [cal casespatterns is derived from nature and analysis generalized to practi Quality Home–8Technique..82 The second floor of the.th quality demands and customer needsMatrix is set in the western part of the house wi the dependency matrix,The main floor of the house shows.house is designed into needs quality characteristics ess the relationship between the matrix will expr,In the gable room.design characteristics and customer needs Lower class target values.The matrix analysis is useful and specification design makes style.designs characteristics s areshows designing a product or service compared with what competitor,East.for design parameters are included ].1. [doing DO IT technique–9Technique..92 Chosen because these four words solve this.the name of this technique has been formed from four English words soWe have tried?The question is why there is this problem.first it is necessary to precisely define topic,problem with focus on the topic and understanding it can be more,In this stage.hard to divide it into smaller problems .Among the ideas is the best choice.Question can be seen from different angles.accurate definition of its receipt Weaknesses of each idea are found in this article is how to think them.the analysis is done,Based on ideas gathered ].1. [The idea should become practical solution after evaluating and selecting the best ideas.into strength n of creative technique the illusio–10Technique..102 The assumption is to.Five human sense of reality are understood.is not reality,Very often what we think is reality Things that your eye sees so that it?Is it really so.human environmentgive the report and precise sense of the .Sort of mind work.Eye sees something else that is in mind.is causing this error or illusion,would interpret but it is a summary of the codes through which,images that your mind sees is not copied the direct object,Therefore All individuals in all cases have the same understanding of a subject and the eye.neural network is to reach the brain Sometimes these.alityand brain perception of communication not always leads to a coherent understanding of re ,In fact.it is effectively visible,contrary to previous experience in the subject,On the other hand.two are together wenot what,expectations and previous experiences make us what we would like to see,the desires,most of the time ]1. [really see out there mandatory communication techniques–11Technique..112 The technique of placing two different objects together and try to communicate between them will help to featuresg newfluidization mind and the creative direction cause theories and ultimately cause new products or addin it pays to consider trying to have a,Now with a concise method and its main function]1. [to old products In order to be able to influence the value.permanent place to review the value engineering and manage IT projects we must first component and to the expression of step by step evolution of project,t managementengineering projec Complex project management processes can be organized in five process.introduce a short process,implementation :which respectively are,groups Substitute Combine MagnifyAdapt Modify RearrangeEliminatePut to other usesH. Tohidi / Procedia Computer Science 3 (2011) 917–924 921 Hamid Tohidi/ Procedia Computer Science 00 (2010) 000–000 .This process gives the project recognition and a license is issued to it):Initiating Processes(o Early processes as well as best practices

among other methods, to define and refine goals): sPlanning Processes (o Planning Process .committed to reaching their deals, of operation in order to achieve desired project goals .to coordinate people and other resources for program data: )Executive Processes (o Process Executive the project goals through regular monitoring and evaluation of the): Controlling Processes (o Process Control to implement corrective, plan Regular monitoring processes with the aim to specify deviations from the. processes .actions if necessary and give it to recognize the end of a, implemented, accept the project or phase): Closing Processes (o Process closing ].5[regular point and provides specific guidance This section will try to review the structure of project management processes, "Following my tank" and place value in engineering project management, especially IT projects. can according to the all participants will share and they, Other techniques at this stage Delphi technique is a search after several rounds of reviews about the, In this way. opinions and experience agree or express their disagreement .requirements the end result will be achieved 922 H. Tohidi / Procedia Computer Science 3 (2011) 917–924 Hamid Tohidi/ Procedia Computer Science 00 (2010) 000–000 ed from IModel. two other techniques at this stage can be proposed, In addition to the techniques presented above which provide technical suggestions and new ideas can create new products or make new parts to the, nature .sults of the project in the success of the project preliminary re the technique requires that the communication link, Another technique that can provide better results is the Bulls creating new combination between two or more different technologies and, nd different problems with a new a .better conditions that the community aims to provide, provides newer ideas and a more efficient product in the technical review. ] 1[ns and operations are examined of functi, tools, he technical means T: Technical reviews software requirements and technical, technical product standards for its product, results and products of a project ,lop software on the network how to deve, characteristics of software type of network communication required how users access, review technical specifications and operating system compatibility for them to set up programs in review methodology and a variety of selection processes, user level access to the product technically, technology technical and manufacturing companies or services provided by companies and sales, different projects .review of technical manpower and Chart, equipment and accessories needed, representatives Table 3: Members and Reason suggested members Reasons suggested leader Nobility to the issues in meetings, decision support Technical department 1) of product standards and technical specifications required 2) Assessment of equipment needed Production and technical department Evaluation of selected methods and methodologies in the production process shopping 1) of the company producing 2) review vendors and equipment suppliers 3) review to ensure participants and guarantees the executive sales representative Administrative Organization Section (Involved with the project) 1) of professionals and contractors needed 2) estimated workforce 3) provide organizational chart Value Engineering A training and implementation techniques have been proposed at this stage At this stage members do not have. t can be suggested at this stage is the nominal group technique Technique tha when comments are written it makes it, On the other hand. contact with each other orally and with decisiveness , sons based on their approval or opposition to express the issues raised to concentrate for rea, possible for audiences n examining the financial aspects of projects l: Financial review. and ultimately the opportunity for group decision alysis in the financial review

to determine the and cost and revenue an, investment, such as profitability, finance the amount of fixed, financed resources, total investment plan, working capital, annual operating expenses y the facilities is examined and determining the amount raised and brought b, l, investment and currency ri .]1[ sed on the output stage is done due to the use of value engineering calculation ba, At this stage. Shareholders

Planning Phase..2. 112 , On issues such as project planning phase]1. ineering process in a range of project managements has faced restrictions such as the correct Using value eng the extent and, but the direction of the project, application of standards and rules governing the organization tages of resources and additional costs to the project and to use complexity is greatly enhanced to deal with shor modern methods and practices by management to use resources that are available and the optimum utilization of l the desired file to run a plan to ful distribution of authority and responsibility to be ab, teamwork, human resources Project management has. a value engineering effort is organized in the framework of the project, In fact. manner reventing the consistently sought to use less time spent to value engineering in the final product utilization while p . undue increase of the costs or the quality of work Value engineering is in fact an organized effort aimed at studying and analyzing all activities of a plan since the of the initial thinking to the design and implementation stages with full implementation plan to realize the formation , The project cost categories not only includes the design but also the ownership costs].4[lowest cost and time Application of. and consumption costs throughout the useful life of the project maintenance, including operation value engineering in the project implementation has become according to the complexity of things, especially in big , ate or modify anything that causes unnecessary costs The aim of this method is to elimin. implementation projects , Value engineering is continuously increasing the development of technology. without damage to essential functions . of unnecessary executive costs eliminating the portion of costs that do not play a role in promoting quality in terms attitudes and habits that have been, mainly from past experiences, In traditional methods of cost reduction , identification of problem areas, information, Conversely value engineering. creativity is not observed, repeating proposed and developed methods and initiatives, develop new ideas and perspectives that integrate the all-round, is to be recommended. Value Engineering position in different nations Considering the history and background and looking at the history of this field it can be clearly recognized that the European countries, countries like United States of America cause of the field and engagement in various projects in saving project-and also countries like Japan and India which have a lot of experience in this field are caused by cost suggested 1973 was introduced in which "Value Engineering Society" The fourteenth meeting of. implementations dollars savings in. 534 value engineering projects obtained about, that for every one dollar invested in management nting these Prese. 1973 billion dollars at the end of. 81 These figures show the savings rate of. administrative costs statistics led to the use of value engineering in different industries and governments in America and Canada as the India and even, countries such as Japan, In addition to the Americas. first states in the world using value engineering percent of their 71 about, Japanese companies 698 Among. abia also have special attention in this field Saudi Ar ].4[ value was in engineering products and benefit services and various projects and the amount of, f utilizing value on the one hand The following table shows the rate o . savings made in various projects in the United States of America on the other Table 1. Rate of utilizing value field The considerable 1 Road

Rate of return on investment to 113 dollars per dollar cost in investment and an average of 845 million dollars in 1999 2 Health 24 percent cost reduction in projects related to health in a period of six years in New York 3 Construction Savings equivalent to one billion dollars in 2000 in projects of building highways in the United States 4 Industry Reducing costs in the range between 5% to 100% in different parts 5 Environment In environmental projects due to high costs for using a lot of potential methodologies 6 Government services Average Return on investment rate of 20 dollars per dollar invested 918 H. Tohidi / Procedia Computer Science 3 (2011) 917–924 Hamid Tohidi/ Procedia Computer Science 00 (2010) 000–000 Table 2: Rate of utilizing value Row Percent usage field 1 79.9 Electronics 2 91.3 Transport (road and traffic) 3 90 Production Equipment 4 84.5 Machine Manufacturing Co. and auto manufacturing 5 50 Chemical industries 6 39 Construction Industry 7 37.5 Food industry Looking at the statistics above it can be clearly recognized that the present world is increasingly becoming more complex and with implementation of various projects and creating broader common denominators, combined with the value engineering project management. engineering techniques value V. 1.2 along with the increasing use of, and flexibility in its business plan, Value Engineering Task Force due to relying on and making them closer "needs" and "time", "cost" This tool is trying. project management leads to improve results ]. 1[ to an optimum level Figure 1: Philosophy of value in value engineering methodology Demand Value Technique 1– Mental movement or Brainstorming In this technique all the participants conduct in an environment that is strictly barriers– empty. IT project managers with all the different risks in different IT projects, are trying to minimize errors, to achieve maximum efficiency and through this reduce administrative costs and increase profits and interest productivity in organizations, this way it can increase the quality of organizational processes and to enhance desirable results, but due to the very rapid development of new technologies today it has met on the one hand, and the existence of the company differences with different products in terms of cost, functionality, performance and support ... On the other hand has caused any project done in this area associated with complications, and project management team with decision making problems such as technology selection, selection means, how to do electronic transactions and ... Therefore, value engineering to try this based on the proposed techniques, always analyze any possible problems with a logical and efficient use of collective wisdom and expertise of the best decisions to be taken this way to further reduce potential risk. Tohidi / Procedia Computer Science 3 (2011) 917–924 923 Hamid Tohidi/ Procedia Computer Science 00 (2010) 000–000 phase Closing.. 5. 112 project members, project documentation, at this stage to review the final product production and project evaluation including the proposed solutions can be combined, In this phase. ure declare victory or fail, to estimate performance Using these two techniques can be prominent features in the project as bright spots. and the Delphi technique cited, e concise and accurate troubleshooting projects so that using it can b, identified and examined the reasons for failure .or repeat them in future projects, and this causes possible correct errors in its projects 3. Conclusion The issues are realized to be clearly a high risk in IT projects at national and institutional levels. Hamid Tohidi Hamid Tohidi/ Procedia Computer Science 00 (2010) 000–000 Performance index value is simply the price. ncreased productivity means increased performance worth index I productivity in the, so when increasing the value of index performance, performance ratio of the cost function . ] 3[ increases process of

producing the final product management capabilities with, after nearly half a century since the design of value engineering projects, Today and gained projects performance indicators i, operational growth and expansion has been associated with frequency maximum efficiency in project implementation and made the best and most value for their products and the methods used were value engineering [1]. [to be depicted and expressed The Executive Phase..3. 112 Administrative phase of resources needed by the committee research project is anticipated to begin and the project is .nrequired to be collected and taken according to pla through allocation of resources and manpower in the steps, due to the implementation of activities, At this stage determined program is done and presented in a special technique that is—as a preduties and activities, taken before .not recommended at this stage Phase Control..4. 112 Control and review various issues in different phases of the same issues that must be beginning the project as one of So to control various processes in the project it is. projects taken up and run the key parameters in the process of .recommended to use the Delphi technique H. [roject to be developed and drawna comprehensive p, At this stage and due to, duration of activity if accepted, sequencing activities, defining project activities, defining project scope FAST. more optimal results for phase planning project the systematic nature of the FAST technique could have connections that need to perform transposition when, cause and effect connections, diagram of a system can function erations in the project and are other activities are in line with performance and are based on mechanisms and other op ]. 1. [Performance ratio of output to input is defined in the project to improve the performance outputs, ring is So we can clearly understand that the purpose of applying value enginee project, by having a conceptual approach to value engineering studies along with project management, and Inputs .and value management, value analysis, analysis \* Hamid Tohidi. Technique 3 – Collapsed sociological analysis technique this technique is technically a desired shape and structure of various dimensions for the study and analysis of .Initially existing surfaces and different aspects of the phenomenon seem to develop. development For the various aspects of a topic it can be formed and components compared with the main dimensions and their H. Table 4: Member and Reason suggestion Members Reasons suggested leader Nobility to the issues in meetings, decision support One or more selected customer target community Features, applications, customer price point of view, the number depending on the importance of customer Shopping Section 1) List of tools, equipment 2) check companies producing and selling agents Commercial sector sales and services Study of obtainable in the market share Value Engineering Training and implementation techniques have been proposed at this stage Proposed combination of value engineering team review of market and target In this section, the proposed technique is morphological and sociological analysis. Review of product structure and dimensions in reviews, processing capacity, application, number of transactions, security coefficients, operation volume, space required for creation and communication between server and client, size, weight, dimensions desired for the product , potential customers and how to position products and the results of projects such as personality, mood, income, amount of target age, gender, education level and education, the other dimensions of market, product reviews and results of the project is considered. [the best value through attention to cost and performance increase performance, the purpose of applying value engineering is to implement the projects, d above as was note combining the, In a closely related approach. and reduce

costs in all phases of research and operational projects :o increase productivity can be noted as lifetime value of engineering projects t ].2.Nemati Ramazan, raeesi gholam ali, (2006) "Uncertainty in Value Engineering." 4. Ahmadpur Mojtaba, Agharezaei Maysam, "Range of project management knowledge", Naghoos Publishing.Abdolshah Mohammad, torabi mehdi, Jahan ali, (2000) "studying in the categories of project management value engineering " 2. Jenab Kamran, (2005) "Application of value engineering in the development of productivity paced" 3.E-mail address: H\_tohidi@azad.ac.ir.Procedia Computer Science 3 (2011) 917–924 www.elsevier.com/locate/procedia 1877–0509 c 2010 Published by Elsevier Ltd.Tohidi / Procedia Computer Science 3 (2011) 917–924 919 Hamid Tohidi/ Procedia Computer Science 00 (2010) 000–000 components on concentric circles and twisting the circular posts of different dimensions and compared with ]1.IT projects should be carefully focused on the target community and collecting examples of the target sectors of society affected by the project, the needs and demands of their level, the aim of culture, society, education level, community level access to target, substrates required for benefiting from the project results and ... Identify, as necessary considerations should be done in connection with the performance improvement [6].Rules for this technique are expressed by Dr. Osborne: –Criticism is forbidden, the opposing views should be avoided for a while.Stages before it is unanimity achieved Flow chart that represents how the process is different in the Delphi technique is as follows: 2.3.[includes defining and organizing and preparing the project planThis phase In this phase the required reviews are performed.Also reviews of other market must be noted in the review, market review of strengths and weaknesses, opportunities and chances, the risk of existing problems and eventually providing services to the community.Delphi technique consists of five stages: Each group member independently decides about the subject he writes.We should review information about the list of required tools and equipment for project implementation, companies and organizations that are providing services, how to provide or receive services and goods, both domestic and imported equipment, or how products and services to the community goal are.Organizational level, personal interests, supporters of penetration in different stages of project work and the amount of support that high-ranking person's support of the project, must be carefully examined.doi: 10.1016/j.procs.2010.12.150 c 2010 Published by Elsevier Ltd."The concept, theory and principles of value engineering, "www.hamkelasy.com/branch/value\_engineering.doc" 5.– Compound and modify ideas: each team member in addition to its role in creating their own ideas should suggest how ideas of others help or combine two or more ideas.At this stage it should be necessary to consider about the market, review technical and financial to be done based on the needs and demands of the project and combining it with restrictions there of the best decisions and best planning to be done.About projects, particularly project management and project sponsors of projects that are being implemented, each followed by absorption of a society have a common goal [6].The relationship between dimensions and different status in terms of customers shapes the overall structure and dimensions in the analysis to be done.Open access under CC BY–NC–ND license.Open access under CC BY–NC–ND license.Technique2–Delphitechniq this technique is used for decision making and reaching consensus.Including those stakeholders in a project where information technology can be like: Management, Project Manager, Project sponsor, Project team, Customers, end users, Society.Thus creative ideas are expressed.–Welcome the free rotation the more

ideas out of mind and being more daring, the better.–Quantity is desired.– Written comments to be sent to a central station and the central station collect comments and are reproduced.– Each member comments about others' opinion and perhaps a new awareness of others opinion, and the result will be written to the central station. The main criterion is of people who are stakeholders in the project.[1] In this section, Gary gives two special topics of special effects in his update. Tel.: +983079694. Selection and/or peer-review under responsibility of the Guest Editor. Any idea that is likely to emerge more ideas is effective.– For each member, all the views will be sent. Reviews on how project is very effective. References 1. Second Edition 2005. 2.[1] 2.2.: The starting phase of Project. 1. 112 ] 1. Market review: In this section, and type of customer to review the market. But the most famous is the community goal. The next issue of the review is that special attention should be made to the kind of market. 6