Beginning

1. In this paper, we focus on the need for
2. This paper proceeds as follow.
3. The structure of the paper is as follows.
4. In this paper, we shall first briefly introduce fuzzy sets and related concepts
5. To begin with we will provide a brief background on the

Introduction

1. This will be followed by a description of the fuzzy nature of the problem and a detailed presentation of how the required membership functions are defined.
2. Details on xx and xx are discussed in later sections.
3. In the next section, after a statement of the basic problem, various situations involving possibility knowledge are investigated: first, an entirely possibility model is proposed; then the cases of a fuzzy service time with stochastic arrivals and non fuzzy service rule is studied; lastly, fuzzy service rule are considered.

Review

1. This review is followed by an introduction.
2. A brief summary of some of the relevant concepts in xxx and xxx is presented in Section 2.
3. In the next section, a brief review of the .... is given.
4. In the next section, a short review of ... is given with special regard to ...
5. Section 2 reviews relevant research related to xx.
6. Section 1.1 briefly surveys the motivation for a methodology of action, while 1.2 looks at the difficulties posed by the complexity of systems and outlines the need for development of possibility methods.

Body

1. Section 1 defines the notion of robustness, and argues for its importance.
2. Section 1 devoted to the basic aspects of the FLC decision making logic.
3. Section 2 gives the background of the problem which includes xxx
4. Section 2 discusses some problems with and approaches to, natural language understanding.
5. Section 2 explains how flexibility which often ... can be expressed in terms of fuzzy time window
6. Section 3 discusses the aspects of fuzzy set theory that are used in the ...
7. Section 3 describes the system itself in a general way, including the ….. and also discusses how to evaluate system performance.
8. Section 3 describes a new measure of xx.
9. Section 3 demonstrates the use of fuzzy possibility theory in the analysis of xx.
10. Section 3 is a fine description of fuzzy formulation of human decision.
11. Section 3, is developed to the modeling and processing of fuzzy decision rules
12. The main idea of the FLC is described in Section 3 while Section 4 describes the xx strategies.

13. Section 3 and 4 show experimental studies for verifying the proposed model.

14. Section 4 discusses a previous fuzzy set based approach to cost variance investigation.

15. Section 4 gives a specific example of xxx.

16. Section 4 is the experimental study to make a fuzzy model of memory process.

17. Section 4 contains a discussion of the implication of the results of Section 2 and 3.

18. Section 4 applies this fuzzy measure to the analysis of xx and illustrate its use on experimental data.

19. Section 5 presents the primary results of the paper: a fuzzy set model ..

20. Section 5 contains some conclusions plus some ideas for further work.

21. Section 6 illustrates the model with an example.

22. Various ways of justification and the reasons for their choice are discussed very briefly in Section 2.

23. In Section 2 are presented the block diagram expression of a whole model
of human DM system

24. In Section 2 we shall list a collection of basic assumptions which a ... scheme must satisfy.

25. In Section 2 of this paper, we present representation and uniqueness theorems for the
fundamental measurement of fuzziness when the domain of discourse is order dense.

26. In Section 3, we describe the preliminary results of an empirical study
currently in progress to verify the measurement model and to construct membership functions.

27. In Section 5 is analyzed the inference process through the two kinds of inference experiments...

This Section

1. In this section, the characteristics and environment under which MRP is designed are described.

2. We will provide in this section basic terminologies and notations which are necessary for the understanding of subsequent results.

Next Section

2. The next section describes the mathematics that goes into the computer implementation of such fuzzy logic statements.

3. However, it is cumbersome for this purpose and in practical applications the formulae were rearranged and simplified as discussed in the next section.

4. The three components will be described in the next two section, and an example of xx analysis of a computer information system will then illustrate their use.

5. We can interpret the results of Experiments I and II as in the following sections.

6. The next section summarizes the method in a from that is useful for arguments based on xx

Summary

1. This paper concludes with a discussion of future research consideration in section 5.

2. Section 5 summarizes the results of this investigation.

3. Section 5 gives the conclusions and future directions of research.

4. Section 7 provides a summary and a discussion of some extensions of the paper.

5. Finally, conclusions and future work are summarized

6. The basic questions posed above are then discussed and conclusions are drawn.

7. Section 7 is the conclusion of the paper.

Chapter 0. Abstract

1. A basic problem in the design of xx is presented by the choice of a xx rate for the measurement of experimental variables.

2. This paper examines a new measure of xx in xx based on fuzzy mathematics which overcomes the difficulties found in other xx measures.

3. This paper describes a system for the analysis of the xx.

4. The method involves the construction of xx from fuzzy relations.

5. The procedure is useful in analyzing how groups reach a decision.

6. The technique used is to employ a newly developed and versatile xx algorithm.

7. The usefulness of xx is also considered.

8. A brief methodology used in xx is discussed.

9. The analysis is useful in xx and xx problem.

10. A model is developed for a xx analysis using fuzzy matrices.

11. Algorithms to combine these estimates and produce a xx are presented and justified.

12. The use of the method is discussed and an example is given.

13. Results of an experimental applications of this xx analysis procedure are given to illustrate the proposed technique.

14. This paper analyses problems in

15. This paper outlines the functions carried out by ...

16. This paper includes an illustration of the ...

17. This paper provides an overview and information useful for approaching

18. Emphasis is placed on the construction of a criterion function by which the xx in achieving a hierarchical system of objectives are evaluated.

19. The main emphasis is placed on the problem of xx

20. Our proposed model is verified through experimental study.

21. The experimental results reveal interesting examples of fuzzy phases of: xx, xx

22. The compatibility of a project in terms of cost, and xx are likewise represented by linguistic variables.

23. A didactic example is included to illustrate the computational procedure

Chapter 1. Introduction
Time

1. Over the course of the past 30 years, .. has emerged form intuitive

2. Technological revolutions have recently hit the industrial world

3. The advent of ... systems for has had a significant impact on the

4. The development of ... is explored

5. During the past decade, the theory of fuzzy sets has developed in a variety of directions

6.The concept of xx was investigated quite intensively in recent years

7. There has been a turning point in ... methodology in accordance with the advent of ...

8. A major concern in ... today is to continue to improve...

9. A xx is a latecomer in the part representation arena.

10. At the time of this writing, there is still no standard way of xx

11. Although a lot of effort is being spent on improving these weaknesses, the efficient and effective method has yet to be developed.

12. The pioneer work can be traced to xx [1965].

13. To date, none of the methods developed is perfect and all are far from ready to be used in commercial systems.

Objective / Goal / Purpose

1. The purpose of the inference engine can be outlined as follows:

2. The ultimate goal of the xx system is to allow the non experts to utilize the existing knowledge in the area of manual handling of loads, and to provide intelligent, computer aided instruction for xxx.

3. The paper concerns the development of a xx

4. The scope of this research lies in

5. The main theme of the paper is the application of rule based decision making.

6. These objectives are to be met with such thoroughness and confidence as to permit ...

7. The objectives of the ... operations study are as follows:

8. The primary purpose/consideration/objective of

9. The ultimate goal of this concept is to provide

10. The main objective of such a ... system is to

11. The aim of this paper is to provide methods to construct such probability distribution.

12. In order to achieve these objectives, an xx must meet the following requirements:

13. In order to take advantage of their similarity

14. more research is still required before final goal of ... can be completed

15. In this trial, the objective is to generate...

16. for the sake of concentrating on ... research issues

17. A major goal of this report is to extend the utilization of a recently developed procedure for the xx.

18. For an illustrative purpose, four well known OR problems are studied in presence of fuzzy data: xx.

19. A major thrust of the paper is to discuss approaches and strategies for structuring ..methods

20. This illustration points out the need to specify

21. The ultimate goal is both descriptive and prescriptive.

22. Chapter 2. Literature Review

23. A wealth of information is to be found in the statistics literature, for example, regarding xx

24. A considerable amount of research has been done .. during the last decade

25. A great number of studies report on the treatment of uncertainties associated with xx.

26. There is considerable amount of literature on planning

27. However, these studies do not provide much attention to uncertainty in xx.

28. Since then, the subject has been extensively explored and it is still under investigation as well in methodological aspects as in concrete applications.

29. Many research studies have been carried out on this topic.

30. Problem of xx draws recently more and more attention of system analysis.

31. Attempts to resolve this dilemma have resulted in the development of

32. Many complex processes unfortunately, do not yield to this design procedure and have,

therefore, not yet been automated.

33. Most of the methods developed so far are deterministic and /or probabilistic in nature.

34. The central issue in all these studies is to

35. The problem of xx has been studied by other investigators, however, these studies have been based upon classical statistical approaches.

36. Applied ... techniques to

37. Characterized the ... system as

38. Developed an algorithm to

39. Developed a system called ... which

40. Uses an iterative algorithm to deduce

41. Emphasized the need to

42. Identifies six key issues surrounding high technology

43. A comprehensive study of the... has been undertaken

44. Much work has been reported recently in these filed

45. Proposed/Presented/State that/Described/Illustrated/ Indicated/Has shown / showed/Address/Highlights

46. Point out that the problem of

47. A study on ...was done / developed by []

48. Previous work, such as [] and [], deal only with

49. The approach taken by [] is

50. The system developed by [] consists

51. A paper relevant to this research was published by []

52. []'s model requires consideration of...

53. []' model draws attention to evolution in human development

54. []'s model focuses on...

55. Little research has been conducted in applying ... to

56. The published information that is relevant to this research...

57. This study further shows that

58. Their work is based on the principle of

59. More history of ... can be found in xx et al. [1979].

60. Studies have been completed to established

61. The ...studies indicated that

62. Though application of xx in the filed of xx has proliferated in recent years, effort in analyzing xx, especially xx, is lacking.

Problem / Issue / Question

63. Unfortunately, real-world engineering problems such as manufacturing planning do not fit well with this narrowly defined model. They tend to span broad activities and require consideration of multiple aspects.

64. Remedy / solve / alleviate these problems

67. ... is a difficult problem, yet to be adequately resolved

68. Two major problems have yet to be addressed

69. An unanswered question

70. This problem in essence involves using x to obtain a solution.

71. An additional research issue to be tackled is ....

72. Some important issues in developing a ... system are discussed

73. The three prime issues can be summarized:

74. The situation leads to the problem of how to determine the ...

75. There have been many attempts to

76. It is expected to be serious barrier to

77. It offers a simple solution in a limited domain for a complex

problem.

1. There are several ways to get around this problem.

2. As difficult as it seems to be, xx is by no means new.

3. The problem is to recognize xx from a design representation.

4. A xx problem can trace its roots to xx.

5. xx [1987] used a heuristic approach to simplify the complexity of the problem.

6. Several problems are associated with them.

7. Although some progress has been made in this area, at least two major obstacles must be overcome before a fully automated system can be realized.

8. Most problems in practice are complicated

9. More problem surface here.

10. Hamper effort toward a xx system

11. In order to overcome the limitations due to incomplete and imprecise xx knowledge, a xx program has been developed, which bases its knowledge upon the statistical analysis of a sample population of xx

12. The above difficulties are real challenges faced by researchers attempting to develop

13. This type of mapping raises no controversy to the issue of membership function determination.

14. However, attempts to quantify the xx have met both theoretical and empirical problems.

15. It has become apparent that in order to apply this new methodological framework to real world problems and data, we have to pay attention to the problems of xx and xx.

Chapter 3. Proposed methodology

Assumption

1. In the case when the assumption of a xx seems to be too restrictive or inadequate, the formulation with Fuzzy termination time, i.e. given by a fuzzy set in the space of control stages, may be applied.

2. We assume here the fuzzy constraints to be state dependent, and the fuzzy goal to be the same for all the control states, xx, which stems from the problem's nature.

3. An approach to the solution of this problem is presented under the assumption that the sampling rate Decision can be made prior to the execution of the experiment, as opposed to being made while the experiment is in progress.

4. Another assumption made above is that there are precise odds at which the expert is indifferent.

5. Main simplifying assumptions are:

6. This, in our view, is a questionable assumption.

Outline / Structure / Module

1. An outline of the research

2. Information is incorporated within the scheme

3. Is built into ... structure

4. A nice modular structure.

5. The principles of ... are applied as modularized criteria

Classification

1. A xx system comprises three main components:

2. Must decompose the original .. into a set of ..

3. Consists of the following steps:

4. This is summarized in the following steps:

5. Can be broadly classified into the following areas:

l   Can be characterized by its function of effectively processing the

l   Can allow further breadth of application of ...into more

l   The following steps should be followed

l   xx can be classified by a different ways.

l   Based on the xx, one may classify xx into the following:

l   This catalog may change due to wear, breakage, and purchasing.

System

l   Unlike many conventional program, expert systems do not usually deal wit

h problem for which there is clearly a right or wrong answer.

l   The system consists of both ... and ...

l   The system has a hierarchical modular architecture organized on three levels.

l   expert system domains are area of expertise

l   To develop a xx system for xx, the following factors must be considered:

l   The system has been developed / designed to determine

l   The system has proven to be able to

l   The domain in which an expert system operates is a particular domain

l   The system comprises a ... with

l   The system is [feature-oriented] / based on the ... technique

l   The system environment must be relatively stable

l   The system is utilized to generate, load, store, update and retrieve ...

l   The development of a xx system has two stages: xx stage and xx stage.

l   The most essential part of .. system is the ...

l   The successful developments in ESs have made them an important tool in the development of

l   An automated system was developed for

l   In this case, the system can be considered to be generative.

l   An interactive automatic ... system

l   A .. is commonly thought of as a truly integrated .. system

l   Should be capable of being generated from a ... system

l   xx is an important part of the integrated system.

l   The model consists of four rule bases, each of which addresses a separate problem in the

hierarchy of scheduling decision.

l   The rule bases are linked to each other in a chin like manner in the sense that the consequent of

one rule base constitutes a part of the antecedent of the next rule base.

l   The rule base consists of all possible combinations of the linguistic terms associated with the linguistic variable of the antecedent of a rule.

Computer System

l   The system has been implemented using Prolog language in an MS DOS environment. Prolog was chosen because it offers a well known and flexible environment in which fuzzy reasoning may be easily implemented.

l   The current version of the xx program when compiled with WATFOR77 result

s in an executable code of about 270K bytes. Typical run time, when run on a

XX computer (an IBM compatible machine) operating at 4.77 Mhz with 640K RAM, ranges from 10 min to 2h, depending on the size (or complexity) of the problem.

l   Time consuming procedures have been implemented in C language and directly linked to the Prolog environment.

l   The xx process, once the xx's data has been entered, requires approximately 180 seconds.

l   It should be noted that the computation was done with a 20 Hhz, 80386

209;based microcomputer equipped with a 80387 math co processor.

l   The computer programs used for the analyses, one based on the xx method and the other based on the new method, were written in FORTRAN with a compiler that supports the math co processor.

l   Lisp, Prolog give maximum flexibility but also maximizes development time.

l   Internal representation is the way a model is represented in the computer.

l   An interactive menu-driven procedure is used in this study

l   Shell can be develop very fast at the cost of time fairly severe limitations.

l   While there is no measurable saving of time for the case involving five criteria, the saving is dramatic for the case involving 10 criteria -- the computation time reduces from 10 hr 40 min to about 1 min.

l   This combination is being implemented in an objected oriented programming environment (Smalltalk 80 system) to solve problems encountered in construction xxx.

Method / Approach / Study / Process Model / Equation /Algorithm / Rule / Formula / Technique

l   A discussion is presented of a problem-solving system

l   To improve the efficiency of the method, the following approach may be applied.

l   In order to an investigation was made to find the causes of the

l   Although large collections of rules and equations have been complied, none are generally accepted

l   This approach will be explained and discussed thoroughly in the body of the report.

l   This can be accomplished by

l   This algorithm to compute the total cost can be described step by step as follows:

l   The above preliminary analysis has provided important information

l   Various methods have been proposed for selecting an optimum...

l   These concepts have been applied to

l   On the basis of the concept mentioned above,

- This can be achieved by
- This fact suggests that a new concept
- This was accomplished by taking ...
- The preparatory stage is very time consuming process.
- Test are performed for validity, completeness, and compatibility
- There is little hope of achieving successful ...
- There has been an increasing awareness of the potential of using most ..so far made have not taken this approach, with the exception of
- Only a few studies can be found.
- It is a very tedious process to go through
- It is only when .. has been completed that .. may be effected
- The entire interpretation process is conducted in one's head.
- These approaches are sometimes very tedious.
- Several techniques can be used
- A polynomial parametric model can be written as [the following]/[follows]:
- A xx model is constructed/formulated using xx.
- A xx model represents an xx by its xx.
- A process decision model captures the logic essential to
- From the equation above, xx is equal to the summation of xx times the ...
- The validity of a xx model can be checked using Euler's formula.
- Given a model, one can mathematically determine whether ... or ...
- Equations for xx need to be derived and implemented in the system.
- A number of heuristic rules have been developed for
- Optimum .. techniques can be made more reliable by ... so that
- An algorithm based on the characteristic ... is used to determine
- Euler's formula states the following:
- The completed model should agree with the formula.
- For manufacturing purposes, a detailed and precise model of the object is necessary
- Engineering design models are very well defined; therefore,
- To keep the domain narrow enough to be implementable, yet wide enough to be useful.

Point of View

- from an implementation standpoint,
- From the point of view of this application,
- From this point of view, Zadeh suggested an inference rule named xxx (CRI for short).
- Information is the meaningful interpretation and correlation of some aggregation of data in order to allow one to make decisions.

- From a practical point of view, the computational aspects of an FLC require a simplification of the fuzzy control algorithm.
- The use of a hammer to insert screws, although partly effective, tends to distort, destroy, and generally defeat the purpose of using a screw [Kusiak AI Implications for CIM p.129]

Justification

l   We choose the so called xx in our experiment because it has received wide acceptance and can

l   Prolog was chosen because it offers a well known and flexible environment in which fuzzy reasoning may be easily implemented.

l   The rationale behind this is that it can be much easier for an estimator to rate a cost as high than to attempt to place a dollar value on the estimate.

l   This strategy has been widely used in fuzzy control applications since it is natural and easy to implement.

l   A function definition expresses the membership function of a fuzzy set in a functional form, typically a bell shaped function, etc. Such functions are used in FLC because they lead themselves to manipulation through the use of fuzzy arithmetic.

l   It should be noted that in our daily life most of the information on which our decisions are based is linguistic rather than numerical in nature. Seen in this perspective, fuzzy control rules provide a natural framework for the characterization of human behavior and decisions analysis.

l   Many experts have found that fuzzy control rules provide a convenient way to express their domain knowledge. This explains why most FLCs are based on the knowledge and experience which are expressed in the language of fuzzy "if the" rule.

Chapter 4. Examples

Example/ Data

l   The data used in the following example was taken from an experiment in which xx was measured between x and x using a xx technique.

l   The data consists of over xx measurements.

l   An example of xx is discussed and the control rules of xx are compared with a xx

l   Examples of complex processes to which this technique may be applied are xx, xx, etc.

l   The following example is constructed only for the purpose of illustrating the computational procedure discussed.

l   This example clearly demonstrates that the profile of an individual xx, or a very small group of xx, with no enough data to be studied statistically, can be meaningfully analyzed by fuzzy possibilistic methods.

l   There is no space here to go into detail on all these methods, but deserve a mention and the bibliography will point to detailed references for those wishing this level of detail.

l   Note that the golf ball spotting example is used throughout the paper.

Comparisons

l   As well, the pros and cons of these representations from a process planning point of view will be discussed.

l   The method of using xx to implement xx described by Zadeh (1973) appeared more suitable

l   As discussed [in the previous section]/[preciously],

Relation

l   We can not invert F' directly because it defines a many-to-one mapping.

l   The relationships appear very complicate

l   Lifting tasks involve complex and imprecise relationship between the task variables and the

human operator's characteristics.
- These methods are based on the relationship between ... and ...
- The fundamental concept of a fuzzy rating language is that we can establish a relationship among terms such as high, medium, and low, and then modify these relationships.
- This article will thus mention the latter as well as the former.
- The former two bear a close relation to a fuzzy Cartesian product.

Importance
- The emphasis is on an implementation of a general approach to rule based decision making.

Consideration / Attention
- Careful evaluation is necessary to ensure
- Such a formulation does not change further considerations.
- Considerable attention has been paid to
- Attention should be paid to an important finding of this investigation.
- Caution should be exercised in this process to avoid ...
- Primary consideration is given to ... components, though others can be accommodated
- After ... has been defined by ..., a carefully analysis is carried out/performed to determine
- A number of factors such as ...need to be taken into consideration before making the appropriate decision.
- It should be noted that
- It is important to point out that ...
- These considerations have heightened interest in the possibility of providing ...
- We should stress the fundamental importance of the xx

Chapter 5. Results.
Advantages / Disadvantage

- One of the major advantages of this new measure of xx is that it can be applied to the experimental study of
- One advantage of using a .. is the ease of preparing it.
- The xx system is versatile
- It has a very fast decision making process
- All the algorithms involve mostly logical operations.
- It can be easily and without additional cost implemented in a microprocessor based environment.
- It can reduce the waste of designing from scratch.
- The advantages of using a xx to represent xx are the following:
- However, xx is not without its shortcomings.
- In most cases, the xxx shows an improvement over the existing xxx.
- Compared to the existing xx, the impacts of the xx are generally reduced by 5% to 9%.
- The "best case" results shows a savings of 6% to 9%.
- Most of the existing works based on xx approach can only recognize a xx .
- Most of the above methods are computational expansive and limited to xx.
- Some other advantages of xx are the following:

- l The problem is the limitation of this method to a limited domain of parts.
- l It proved limited in application because it demanded precision in system modeling that was impossible in practice.
- l There are advantages to be gained in the structuring of costs and benefits, the use of xx,
- l The disadvantages of this method are also disadvantages of conventional xx approaches.
- l This combines the best features of both techniques
- l Hopefully, this tool can be as the reference framework of for developing a xx platform, and helping the administration, marketing, and knowledge management activities in virtual communities.

Results
- l An improvement on the result shown above can be made by based on the data provided
- l Discussion of these theories is beyond the scope of this review
- l Based on the information contained in this
- l The result can be categorized into nine classes
- l The results are illustrated by an example
- l The experimental results for each xx time are reported in Table 2.
- l From the results obtained so far, it seem that
- l Because of the inaccuracy of the ..., a conclusion cannot be drawn as
- l Although much effort has been made to., this reality is far from completion.
- l The results indicate that the total benefits are higher than the total costs.
- l Their results may then serve as guidelines for lower level models, less fuzzy and more detailed.

Chapter 6. Conclusion
- l From the discussion, one may conclude that ...
- l Form the above discussion, the conclusion can be reached that
- l The conclusions drawn are also valid
- l In conclusion to this, it becomes obvious that the problem of xx lies not only in...
- l We have attempted to introduce some concepts associated with a theory of xx based on fuzzy sets.
- l Considerable more work, hopefully, will be done in this area
- l A fuzzy set procedure is proposed to solve xx selection problems interwoven with imprecise data
- l Employing the compositional rule of inference, the assessment of the xx compatibility in achieving prescribed xx projectiles in any level of the hierarchy is made possible.
- l This paper has presented a theoretical and experimental study of the xx process and xx concept.
- l The experimental research results will hopefully serve as useful feedback information for improvements for xx work.
- l The scope of this contribution was to introduce a xx method.
- l In general, fuzzy sets theory provides an alternative foundation for xx analysis in a fuzzy environment.

Future Research
- l Thus, first extension of the approach could be,

l   Present some cues for a further approach from Fuzzy Sets Theory application to

l   Some improvements to the scheduling aspect of the model may be brought through additional levels in the hierarchy for more detailed representation of the scheduling activity.

Tables and Figures

l   Figure 7-1 sketches these relationships.

l   The graphical representation of these functions is shown in Figure 1.

l   The xx may be depicted as in Figure 1.

l   Figure x shows the schematic diagram of the

l   Figure 1 though 2 provide a ... that

l   the architecture of this expert system for .... is illustrated in Figure 2.

l   Figure 2 gives the outline of an ... system

l   Table shows the

l   as shown in Table 1 and 2

l   This concept is illustrated in Figure 2

l   At the top of Table xx are shown two blocks of data.

l   Each table or matrix has constructs xx through xx as row headings, xx through xx as column headings.

l   A table of .. is developed and significant recommendations are made.

CONJUGATION

To Indicate Addition

l   additionally, again, also, and then, as can be easily understood, besides, equally important, especially, finally, for the same reason, first, further, furthermore, in addition, last, likewise, moreover, next, second, third, too, evidently, obviously, roughly speaking, broadly speaking

To Indicate Cause and Effect

l   accordingly, as a result, consequently, for this reason, hence, in short, otherwise, then, therefore, thus, truly

To indicate Comparison

l   in a like manner, likewise, similarly , alternatively

To Indicate Concession

l   after all, although this may be true, at the same time, even though, even so , I admit, naturally, of course

To Indicate Contrast

l   and yet, at the same time, but, for all that, however, yet, in fact, in contrast, in the real life, in spite of, nevertheless, notwithstanding, normally, on the contrary, on the other hand, still, traditionally, rather, unfortunately,

To Indicate Time Relationships：

after a short time, afterwards, as indicated earlier, as long as, as soon as, at last, at length, at the moment, at that time, at the same time, before, earlier, currently, immediately, in the meantime, in recent years, lately, later, meanwhile, often, of late, presently, recently, soon, shortly, since, thereupon, temporarily, therefore, until, when, while

To Indicate Special Features or Examples：

for example, for instance, incidentally, indeed, in fact, in other words, in particular, in practice, specifically, that is, to illustrate, in this respect, theoretically, as mentioned before / above

To Indicate Summary：

in brief, in conclusion, in short, in summary, on the whole, to conclude
, in general, to summarize, to sum up, as a result, ultimately,

VERB PHASE

l   build a .. model
l   build up the key link
l   began a new era in ...
l   can be   regarded as / achieved / used to/for / found / obtained through
l   can result in
l   carries out ... tasks
l   production information in order to simultaneously
l   contains all information necessary to describe
l   do not make use of production information
l   deals with
l   end with failure
l   fetch the information from the model directly
l   has great potential / yet to be resolved / spurred the development of /
been recognized as
l   BE   aimed at / built up / carried out by / essentially concerned with / considered to be the key technology / associated with each feature of a compo
site component / cable of / currently implemented for / demonstrated by an example / finally reached / made equal to / equivalent to / more suitable to / oriented to / interpreted as / pointed out / potentially of great benefit in the complex task of / shown in / used to effectively guide the search
l   makes use of
l   make up
l   meets the needs of real life production,/ the current demands placed upon it
l   must be justified
l   point out
l   play an important role
l   relates to
l   rely on
l   satisfy the needs
l   determine the total requirements for the ...

- l   uses ... as a key to search for...
- l   without relying on
- l   will be available/ performed/ overlooked

NOUN PHASE
- l   a basic technical function of
- l   a critical need
- l   a key / principle feature of
- l   a substantial impact on
- l   an intensive review was conducted
- l   an increasing need for expanding the application of ....
- l   an important component / function / aspect / issue
- l   each rule is numbered in sequence
- l   each of these involves
- l   for this calculation, it is necessary to define
- l   in the physical environment / integration of
- l   in the reality of situations where …
- l   many aspects of
- l   most past efforts have been spent on ...
- l   common sense to a well studied and documented technical field.
- l   sources of additional information on ... are listed
- l   systematic and rationally structured format
- l   the basis on which a range of ...operations can be established is shown
- l   THE   basic philosophy / principles of / key element / general hypothesis / candidate list of / concept of ... has attracted wide interest / function is concerned with / heart / impact / nature / role / task of / kernel functions
- l   the number of parts needed to
- l   the above statement means that
- l   the output data is passed to
- l   the proposed method / underlying principle
- l   the recommendations made in this report, if implemented, should
- l   this information resides in
- l   this process is composed of ... different ... operation
- l   along with the use of
- l   concerning general aspects of
- l   due to
- l   for later use in generating...,
- l   in turn,
- l   IT IS   believed / noted / assumed / suggested / shown / quite evident / appears / implies that / intended for / of no important to
- l   it can be claimed/concluded that
- l   it demonstrates the decisions required of
- l   it also provides information to ..
- l   it becomes essential to

l let ... be the probability that

l once... is written, it is compiled into...

l suppose it is observed that

l this is because

l this results in a

l upon completion of the ... analysis,

l when the knowledge is of mathematics or quantum physics, it will also be
recorded in books and papers

l selection of rules for using the tools, for generating operation plans,
is another matter of preference, since practice varies greatly.

l for the sake of convenience

l correct decision to be reach

l keeping the number of rules to a minimum.

l a good process plan will result exhibiting several characteristics:

l practical solutions

l because of rather small job lot sizes

l Backward reasoning can be used to answer the question "should milling tool be select"
different level of knowledge in the realm of process planning